

Department for International Development India

Western India Rainfed Farming Project
CNTR 04 5752

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ADDRESS

Enterplan Limited
1 Northfield Road
Reading RG1 8AH, UK

TELEPHONE

+44 (0) 118 956 6066

FACSIMILE

+44 (0) 118 957 6066

EMAIL

enterplan@enterplan.co.uk

WEBSITE

www.enterplan.co.uk

Abbreviations and Acronyms

CBA	Cost Benefit Analysis
DFID	Department for International Development
DR	Drudgery Reduction Activities
EIRR	Economic Internal Rate of Return
FIRR	Financial Internal Rate of Return
GOI	Government of India
GVT	Gramin Vikas Trust
HH	Household
IFFDC	Indian Farm Forestry Development Cooperative
IGA	Income Generating Activity
JFM	Joint Forest Management
MLSP	Migration Labour Support Programme
NABARD	National Bank for Agriculture and Rural Development
NHIS	Net Household Income Study
NPC	National Planning Commission
NPV	Net Present Value
OCC	Opportunity Cost of Capital
PPGF	Participatory Planning and Group Formation
SC	State coordinator (at District HQ)
SCF	Standard Conversion factor
SHG	Self Help Group
SWC	Soil and Water Conservation
VOD	Village Organisation and Development
WB	The world Bank
WBR	Well-Being Rank (or class)
WIRFP	Western India Rainfed Farming Project
WRD	Water Resource Development
WUA	Water Users Association

This report has been prepared by Enterplan Limited for the Department for International Development (DFID) by Dermot Shields and Michael Blandy, through the DFID Economist Resource Centre framework. The views expressed herein are those of the author and do not necessarily represent the views of DFID.

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1 | Executive Summary

Executive Summary

Background

1 The Western India Rainfed Farming Project (WIRFP) is a complex and innovative project whose objective is to "enhance the livelihoods of 675,000 poor rural people" in west central India. The indicators of success, for the end of the project, are that:

- all households should have sustainably enhanced their livelihoods; and,
- effective community organisations should be in place to allow an exit from the villages.

2 The project builds on the success of Phase I, which was implemented by an NGO, GVT, set up by a public fertiliser company (KHRIBCO). In Phase II, which started in 2000, operations were scaled up with the introduction of additional districts and villages as well as a second implementing agency, IFFDC.

3 The project is located in one of the poorest regions in India, with poor soils and limited markets. In recent times, the main livelihood option for the almost exclusively tribal population is out migration for wage employment. Project villages were selected on the grounds of poverty and inaccessibility.

4 The cost benefit analysis (CBA) study is limited to the main component of the project (development in core villages) and does not address changes in nearby or "prasaar" villages (included under Component "B") or in crop participatory technology development (Component "C").

5 The CBA study addresses three issues:

- What are the economic returns to activities in the core villages (Component "A")?
- What are the financial returns and viability to key stakeholders of project activities, including on-farm development, wage employment, Income generating activities and the operations of the main community institution involved in project implementation, the self-help group (SHG)?
- What is the effectiveness of the institutional and social arrangements in sustaining group and community activities after the project?

Economic Analysis

6 The overall economic returns for component "A" of the project, over 20 years using the assumptions set out in the report and annexes, was 10 percent. Although this is lower than the test discount rate generally used for project appraisal in India

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this is highly commendable given the poor resource base, infrastructure and access to markets in the project area. Furthermore, it is clear that the project targeted and, therefore, benefited the poorest and least accessible villages in the one of the poorest areas of India.

7 The economic analysis is sensitive to four key assumptions:

- the period over which incremental benefits are assumed to continue. If this period was reduced from 20 to 12 years, the economic returns would fall to zero percent. The subsequent financial and institutional analysis suggests that 20 years may be an over-optimistic assumption;
- the incremental crop net margin was based on the results of the Net Household Income Study (NHIS) carried out in 2003. Although the study was carefully conducted, the sample size was relatively small and therefore care must be taken when interpreting disaggregated results. However, an overall increase of 20 percent in crop incremental benefits is required to achieve an economic return of 12 percent;
- the economic wage rate used to determine the opportunity cost of unskilled agricultural labour. This was estimated to be 75 percent of the official government wage rate. The migration labour study should provide additional information with which to test this assumption; and
- recurrent costs have not been factored into either project or activity budgets, and, therefore, the CBA team estimated recurrent cost post-project on the percent basis of investment or activity costs. If these initial base assumptions, by the CBA team, were further increased by 20 percent, overall economic returns would fall to eight percent.

8 Many of the cost norms used by the project are based on government standards and, therefore, are similar to other projects. As a result, the realisation of the surprisingly high estimated economic returns depends critically on the incentives for stakeholders to continue new practices and the arrangements put in place to secure these benefits in the post project period.

Financial Analysis

9 The financial analysis focused on the viability and sustainability of project activities for specific stakeholders, including farmers, labourers, SHGs, IGAs and, by extension, the jankar system. The financial analysis is critical to understanding the incentives for key stakeholders to participate and sustain new activities into the future. Generally speaking, where activities are not financially viable (i.e. activities which are a cost rather than a benefit) to stakeholders, it is highly unlikely that activities will be sustained.

10 The analysis suggests that the bulk of the sustainable project benefits are due to on-farm activities. The NHIS results show substantial returns for both crops and livestock investments. For all farmers this will have resulted in increased production, better nutrition and reduced out-migration.

11 Wage employment from project works was for many, if not most, people the main project benefit. Access to wage employment was through membership of a self-selected community group, called a self-help group (SHG). However, wage employment only provides benefits in a limited number of years during the life of the project.

12 Although some income-generating activities (IGAs) are clearly viable, especially when considered as supplementary income, most require further subsidies to ensure viability. This is not altogether surprising given local purchasing power. However, the low returns to specific enterprises raise doubts as to whether the associated jankars will continue as viable agents supporting project activities into the future.

13 The sustainability of most community based activities is dependant of the viability of the SHGs. Although many of these groups already hold considerable assets in cash and equipment, their continued functioning after the end of the project is not certain since they are still heavily dependant on project inputs including support from group jankars, who receive a project honorarium. Although some groups will maintain a sense of purpose beyond project activities, for others, the motivation to continue participation will wane after the project finishes and project promoted wage-labour activities finish.

14 The exit strategy for the programme is critical to both the continuation of the programmes and, where programmes cease, the distribution of private and group assets. In the case of IFFDC supported villages, the future of SHGs appears more secure under the umbrella of the cooperative movement and with the benefit of more focused group development during the project. GVT-supported villages have a less certain future, as a result of less attention being paid to developing SHG management and accounting systems.

15 The SHGs are responsible both for accounting for project activities and for operating a savings and credit programme. However, the role of the SHGs was perceived very differently by the implementing agencies, with the result that different levels of information were available for SHGs supported by IFFDC and GVT. Both implementing agencies maintain transactional records (such as passbooks and so on) at SHG level. In IFFDC-supported SHGs, SHG level accounts are also prepared and there is generally greater financial discipline in terms of clarity of "loan terms" and a better overall understanding of the financial status of each SHG. Apart from the transactional records, there were no summary accounts and much less financial discipline in GVT-supported communities.

16 The consequences of SHGs stopping depend on the nature of the SHG. Some of the SHGs are based around large WRD and JFM programmes which have their own identity and oversight, with their own incentives and financial rigour. Other project activities, such as on-farm activities will continue without the need for external or group support. Other groups are based around specific enterprises, whose sustainability is closely linked to the sustainability of the SHG. For groups based around employment-related activities, such as the soil and water conservation (SWC), the incentive to continue will fall once project activities cease and regular savings are no longer seen as a means to accessing wage labour.

17 However, the nature of the project design has resulted in nearly all SHGs building up substantial cash balances and acquiring assets. These could provide an incentive to continue operation after the project period, although in many cases members appear to have a weak and uncertain sense of ownership of balances in their own name, and an even weaker sense of ownership over group balances.

Institutional and Social Factors

18 Institutional and social arrangements, not all of which are under the control of the project, determine the overall returns as much as the financial and economic incentives. In particular, the sustainability of activities, including post-project operation and maintenance of the assets created by the project, depends on the continuation of effective institutional arrangements. The most critical social institution to sustain group and community activities after the end of the project and to determine the distribution of project assets and benefits is the SHG.

19 Clearly, strong personal relationships have been developed between project staff and SHG leaders, members and jankars. This people-friendly approach has assisted project implementation at all stages and resulted in positive feedback.

20 However, there are concerns about the capability of the SHGs to sustain project activities in the future. This is evidenced by the lack of “control and ownership” which SHGs exercise over the savings and credit arrangements, where there is both a lack of clarity over the loan and repayment conditions and, in the case of GVT supported SHGs, the absence of village summary accounts, which can be used to determine progress. The reasons for the ambiguity over the role of SHGs relate to the governance arrangements associated with the initial project approach (i.e. the distribution of power and voice between project, village and SHG) and the rigid accounting rules of the implementing agencies.

21 Conceptually, the project is still seen, at different times and by different people, as being about different objectives:

- investment in productivity;
- public works and employment generation, and
- a savings and credit programme.

22 Although these are not mutually exclusive perceptions, overhead expenditure can only be justified in terms of the priority assigned to each of these objectives. Clearly, the relationship between investment in productive assets and employment generation is positively related. However, justification for the development of a savings and credit programme and even the promotion of participatory planning and group formation is not so clearly made, given the role of these institutions in project implementation processes. These conceptual uncertainties, in turn, affect project systems and, therefore, project outcomes.

23 There was a clear perception that the main project benefit had been wage employment leading to reduced out-migration and debt repayment. This perception is supported by the analysis of the purposeful sub-sample, which shows that an average of between 40 and 145 workdays per household were generated per year during the project period.

24 Voluntary labour contributions are required from communities for work on both private land and public land. Even with these contributions, the primary economic benefit for many people will have been wage employment. This conclusion is supported by the lack of concern exhibited in the community and amongst project staff about the use of public works (where half of the labour contribution is provided freely by the labourer) to create a private benefit in the form, for example, of SWC structures on private land. In theory and often in practice, SWC activities rotational through all SHG members, but inevitably farms differ in both their size and need for SWC works.

25 The lack of clarity in the contractual arrangements (agreements) over the terms of loans for borrowers or responsibility for repairs and replacement of IGAs has resulted in recurrent costs not being considered and allowing for non-repayers to capture an unfair share of benefits.

26 The viability and sustainability of the jankar system depends on the institutions, such as SHGs, remaining in place. The group jankars are also dependent on the savings and credit arrangements continuing at the end of the project. Livestock jankars may have more scope to become self-funding from fee income and, although there are few government vets in the area, they will have to compete with more qualified government staff with subsidised drugs.

Conclusion

27 The project has had considerable success in delivering benefits to some of the poorest people in central India. However, the analysis has shown that the overall returns depend heavily on the viability and sustainability of key institutions and enterprises. The proposals for post-project support may ensure longer sustainability. However, given the resource base and limited demand, it is unlikely that many of these interventions would be viable without external technical and financial support.

28 In addition, the financial and institutional arrangements required to ensure the success and continuation of the unique features associated with the project (viz., participation, SHGs and the Jankar system, the link between savings and credit programmes and investments) remain uncertain.



1 | Background

1 | Background

C.1 Introduction

1 The Western India Rainfed Farming Project (WIRFP) is a complex and innovative project whose objective is “to enhance the livelihoods of 675,000 poor rural people”. The project memorandum states that, by the end of the project:

- “all households should have sustainably enhanced their livelihoods”, and
- “effective community organisations will enable an ‘exit’ from the villages”.

2 Phase II of the project, which started in 2000, replicates and broadens the experience of the Phase I approach. The key features of the WIRFP approach are to:

- target the very poorest areas and people,
- plan using a participatory planning process,
- implement through Self Help Groups (SHGs),
- require contributions through labour and compulsory savings, and
- use local para-professionals (jankars) to support activities.

3 The “cost-benefit analysis” (CBA) study, undertaken by a team of three external consultants and eleven project staff, was commissioned to determine the economic impact of the programme on people’s livelihoods and to better inform priorities during the exit phase (Annex 1). A secondary objective was to provide training in economic analysis to project staff.

4 The key issues for the Cost-benefit analysis (CBA) study, derived from the project objectives, are to determine whether:

- incremental benefits (current and projected, direct and indirect) exceed project costs; and,
- community organisations are able to ensure the sustainability of the incremental benefits after the end of the project.

5 The three main questions that the study addressed were:

- What are **financial returns and viability** from the perspective of different stakeholders, for example, SHGs, Jankars, borrowers, land and livestock owners? The financial analysis determines whether there is an incentive for key stakeholders to continue after the end of the project period.
- What are the expected **economic returns** to the project and the main programmes from society’s perspective (i.e. in a holistic sense)? The economic analysis determines whether the project costs were justified in terms of the impact on beneficiaries and stakeholders.

- What is the likely **effectiveness of the institutional and social arrangements** to sustain group and community activities, after the end of the project. The effectiveness of institutional arrangements depends on the sense of community empowerment (ownership, control and voice, inclusion, leadership), sense of fairness (in the distribution of benefits), capability to maintain management systems and processes. These institutional and social arrangements, not all of which are under the control of the project, determine the overall returns as much as the financial and economic incentives. In particular, the sustainability of activities, including post-project operation and maintenance of the assets created by the project, depends on the continuation of effective institutional arrangements.

6 The report is broken into five Sections: Section I provides background to the project, project activities and to the study; Section II focuses on a financial analysis of the SHGs and IGAs from a private perspective. Section III is the economic analysis from a societal perspective of the crop, livestock and forestry activities and of the project as whole. Section IV, examines the institutional and social factors which underlie both the distribution of benefits and the sustainability of the benefit flows. Finally, Section V provides overall conclusions and recommendations.

7 The annexes to the report should be treated as an integral part of the study. Annexes 1 to 3 provide additional background information for the study and to the analytical framework. Annexes 4 to 7 set out the case study material for the four villages selected for more in-depth study including institutional and social issues, while Annexes 8 to 13 provide a more detailed description of the assumptions and models from the 20 sample villages from which the financial and economic analysis is derived.

C.2 The Project Area

8 The project is located in seven contiguous districts of three states in West central India: Jhabua, Dhar and Ratlam along the western border of MP; Banswara and Pratapgarh along the southern border of Rajasthan and Dahod and Panchmahals Districts in eastern Gujarat.

9 The project area is one of the poorest in India. The natural resource base is characterised by poor soils, low and erratic rainfall and low productivity. The whole region can be considered as ecologically fragile.

10 Economically, the area suffers from being physically inaccessible with poorly developed infrastructure and limited access to markets. Migration has long been a major element of local livelihoods for the predominantly tribal population (80 percent of the total population in the eight districts). Little government funding has reached the area and there are few experienced NGOs operating the area.

11 The majority of the population are classified as "Schedule tribes". Literacy levels are low and although the area benefits from additional tribal development funding, people have less access to public services such as roads, clinics and schools when compared to more developed areas.

C.3 Implementing agencies

12 The project is implemented by two separate implementing agencies operating in different villages (Table 1):

- **Gramin Vikas Trust (GVT)** operates in 202 core villages covering three states of Gujarat, MP and Rajasthan. GVT is an NGO established by KHRIBCO, a Government fertiliser company, and retains many of the procedures (including financial systems) used by the parent company. GVT were the sole implementing agency in Phase I of the project and were therefore able to start implementation from the beginning of Phase II;
- **Indian Farm Forestry Development Cooperative (IFFDC)** were not involved in Phase I of the project. They started initially (1999/00) in one district in Rajasthan and slowly and carefully built up experience in 25 villages. Since 2002/03, IFFDC have expanded into a further 50 villages in Madhya Pradesh.

13 In general, the study findings apply to villages supported by both agencies. However, in some instances there were significant differences in either practice or results and, in these cases, comparison between the agencies has been made.

C.4 Methodology^{1/}

14 The analysis is villages only.

15 The study consisted of three main data collection components carried out in Phase II villages:

- Main village sample (random),
- Case study sample (selected), and
- Enterprise sample (selected IGAs).

16 The **main village sample** consisted of 20 project villages drawn randomly from the population of 90 villages, which started in 2000/01, the second year of the project. The reason for focusing on the second year was to exclude both the first, start-up, year villages and the later villages for which there was less data. About one third of all project villages were started in this year (Table 1).

17 The village data from the random sample, together with the project investment costs was used to build the financial and economic models. For each of these villages, data was collected on project development activities and the associated costs and benefits.

18 The study made use of the findings of the Net Household Income Study (NHIS), which had been undertaken in 2004 to estimate benefits. The NHIS provided critical information about incremental income due to on-farm crop, livestock and forestry activities. The NHIS study provides results aggregated at a village level and broken down by “well-being” (or poverty) class. Although village and households

^{1/} The methodology was agreed at a planning workshop held in Ratlam (July 2004).

were randomly selected, the study suffers from a small sample size – particularly at the level of well-being classes. However, the study was carefully and fully conducted and was, therefore, used in the analysis.

19 The main implication of this approach is that “households”, rather than “areas”, are used as the basis for aggregation. The alternative of using “areas” was not possible because of the difficulty in obtaining area data for different investments from project records. Although planned (command) areas were available for some, but not all, project investments, information on actual areas covered is not readily available and does not include information on areas where different activities overlap. As a result, the assumptions required to aggregate by “area” are likely to be greater than those, which underlay the NHIS and aggregation by household. Nonetheless because of the small sample size in some well-being classes, the results are likely to be more robust at higher levels of aggregation (i.e. district results will be more robust than village results and project results more robust than district results).

20 Consideration was also given to replicating the NHIS in additional villages, i.e. effectively expanding the sample size and therefore the reliability of the results. However, given the difficulties the NHIS team had in data collection, this was not possible given the CBA resources. Another alternative was to reduce the CBA sample and to map areas, including overlapping areas, in a limited number of villages. However, this was not acceptable given the variation in activities across the project.

21 The **case study sample** was based on a purposeful selection, based on discussion with field staff, of 4 “representative” villages from the 20 random sample villages, for a more in-depth study of both the social and institutional arrangements in a village and the impact of the project on them. The qualitative information, available from the social and institutional sample, provided additional insights into project operations and was especially useful in the analysis of sustainability and the distribution of benefits. These villages were also used to derive the financial analysis of the Self-Help Groups (SHGs); and

22 **Enterprise “sample”** was based on a purposeful selection of 12 key Income Generating Activities (IGAs) out of the many and diverse IGAs found in the project. Data on these IGAs were purposively sought, both inside and outside study villages, since not all IGAs were found in project villages. The data was used, together with a number of common assumptions, to develop 12 stand-alone IGA models which were then used for the financial analysis of each IGA. The standalone models were then incorporated into the overall village models used for the economic analysis.

Table 1: Core Village Entry by Year

Implementing Agent State / District	1990/1	2000/1	2001/2	2002/3	2003/4	Total
GVT						
1 Gujarat						
Dahod	5	15	-	-	-	20
2 Madhya Pradesh						
Jhabua	22	19	6	25	-	72
Ratlam	-	-	18	32	-	50
3 Rajasthan						
Banswara	-	37	14	9	-	60
Subtotal	27	71	38	66		202
IFFDC						
1 Rajasthan						
Pratapgarh	6	19	-	-	-	25
2 Madhya Pradesh						
Ratlam	-	-	-	50	-	50
Subtotal	6	19	-	50	-	75
Totals	33	90	38	116	-	277
Source: GVT / IFFDC Coordination Office Ratlam, Madhya Pradesh.						
GVT = Gramin Vikas Trust, IFFDC = Indian Farm Forestry Development Cooperative.						

C.5 Project Structure and Analytical Framework

23 The first step in constructing an economic model or analytical framework is to describe the benefits (or outcomes) and costs (or activities) and to ensure a causal link between them. As well as identifying relevant costs and incremental benefits (Figure 1), the analytical framework represents our understanding of the project structure (Annex 2).

24 The project consists of two main costs elements:

- **Administrative overheads** at HQ and State coordinator (SC) level, plus technical assistance (TA) including international consultancies; and
- **Developmental costs** consisting of three Components:
 - Core villages;
 - Prasaar (or low-intensity nearby) villages and the Challenge Fund; and
 - Crop participatory technology development.

25 The CBA analysis relates only to Component "A" (core village development) and, as a result, administrative costs have been apportioned between these three Components.

26 Component "A" development costs have been further disaggregated into:

- **Village organisation and development (VOD)** costs which relate to participatory planning and group formation; and
- **Field investment costs**, relating to different activities.

27 The analytical framework reorganises costs and activities to present the budget in terms of impact and benefits to beneficiaries. As a result, the field activities are grouped in terms of impact on:

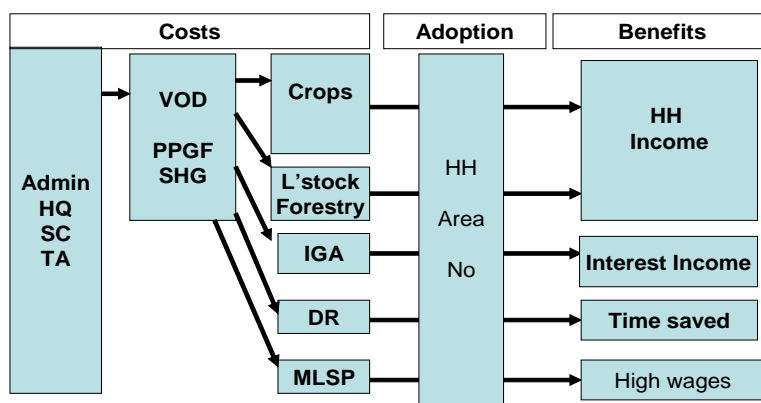
- Household income (from crop, livestock and forestry activities),
- Interest income from IGAs,
- Time savings from drudgery reduction, and
- Increased and additional wages for MLSP.

28 This framework includes household benefits from increased production (such as improved nutrition) and, where debt has been reduced or savings acquired, from reduced vulnerability as measured in terms of income. However, the framework excludes “externalities” such as improved environmental protection which are difficult to measure and are discussed in the final section.

29 The overall returns depend not only on costs and benefits, but on the extent to which the investments are used and continued to be used into the future. Assumptions about sustainability and long-term adoption of project investments are therefore critical.

30 In summary, costs are split between administration, VOD and development. Adoption or uptake of new technologies and use of new assets have been estimated in terms of numbers of households or IGAs promoted. Finally, unit benefits for land-based activities are derived from the NHIS study and study estimates have been prepared of interest income, time saved (drudgery reduction) and increased employment and higher wages. These have been aggregated by the uptake rates to estimate total benefits.

Figure 1: Analytical Framework (not drawn to scale)



31 The analytical framework for the study (Figure 1) provides an overview of the analysis. The project structure and project processes show the underlying causal links and relationships.

32 **Project Processes** – The project approach emphasises the importance of people’s participation. A key strategy of Phase II was “to enhance group’s capacity to

function independently of the project with more attention to savings and credit and federations, cooperatives and other formal group structures” (Figure 2). Further a specific aim of the project is to create effective and empowered community organisations.

33 Planning through participatory processes – The starting point for all project activities is a participatory planning exercise carried out at village level, including both wealth ranking and the development of a village resource map. The output of this exercise is a village development plan with a prioritised list of “wants” which determines demand. However, this planning process is formally disconnected from implementation, monitoring and evaluation, which are the responsibility of the SHG or other appropriate committees.^{2/} No village level committee is established.

34 Implementation through formation of Self Help Groups (SHGs) – The SHGs are self-formed (i.e. not formed by the project) and therefore based on “natural affinities”, often around hamlets (falias), patrilineal decent groups, gender or a particular activity follow on from village development planning. These groups are the hub through which the project is implemented and managed. The SHGs are the primary project-created institutions.

35 Budgeting and thematic programmes – Budgets and programmes are prepared at district level and approved by the project, based on consolidation of the village development plans. This may also involve some prioritisation especially for large “lumpy” investments such as WRD structures, to ensure that activity levels are consistent with resources and capacity.

36 Implementation is managed through agencies other than the village. These include SHGs, jankars, and different types of user association. Although the SHG is the key agency through which implementation takes place, some of the larger interventions are organised at a higher level than the SHG. Even in these cases, the SHG will be involved in organising and accounting for voluntary labour collections. These interventions include:

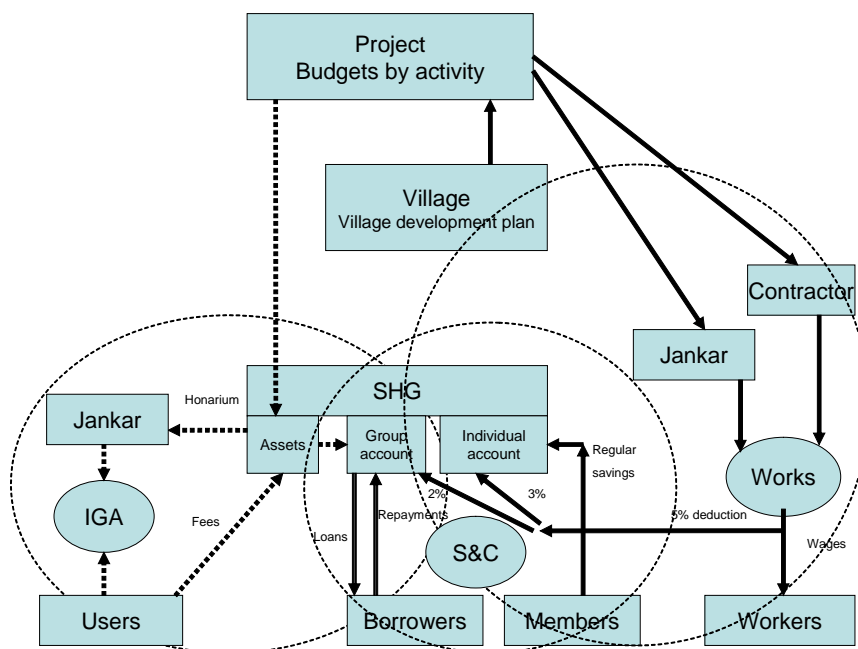
- WRD schemes which often cover several villages and many SHGs;
- Livestock (cattle) programmes which are organised at a village level, especially if government officials are involved; and
- JFM activities which are organised at village level.

^{2/} For large capital intensive investments or where the investment involves more than one SHG or village – such as WRD - the unit of management is a users association, such as Water Users Association (WUA) or a Joint Forest Management (JFM) Committee.

37 A schema of project processes is set out in Figure 2. This shows three main managerial areas:

- the management of larger lumpy investments such as WRD and JFM which tend to be centrally managed by project staff, often through contractors. The main link with the SHG is through labour which is organised through the SHG and to whom workers contribute part of their wage;
- the management of SHG related activities, including savings and credit activities and some IGA related activity;
- the management of IGAs lie with specific jankars and can be considered as an sub-enterprises of the SHG.

Figure 2: Project Processes



38 This categorisation gives rise to different types of beneficiaries: farmers from increased productivity; workers from increased employment; borrowers from improved liquidity and access to credit; entrepreneurs from returns to IGAs and, more generally, “users” of new assets brought into the area.

39 **Project activities** – Finally, the analytical framework requires an overview of project activities whether implemented through SHGs or directly by the project. SHG implemented activities are those activities which the SHG is expected to implement post project while project related activities are ones which would required external finance.

40 **Self-Help Groups** – SHGs exist as the main institutional structure around which the project is implemented and through which activities will be sustained into the future. In general, an SHG corresponds to a hamlet (or falia). In some falias there are separate SHGs for women and men. In other cases, SHGs are organised around particular enterprises or activities. Formation of an SHG is a condition of participation in the project and is integral to project implementation.

41 SHGs are responsible for the management and accounting of:

- the savings programme;
- the credit programme; and
- SHG assets and income generating activities.

42 **Savings** – The savings programme consists of two parts: individual savings and group savings. All funds are consolidated and held in a bank account from which the SHG earns (bank) interest.

43 There are two forms of individual savings, both of which are entered in an individual's passbook:

- **regular savings** are fixed by the SHG members at a reasonable figure usually ranging from Rs 5 to Rs 40 per month. In SHGs, there is a system of fines for late payment, although most lack the financial discipline required to enforce these penalties; and
- **voluntary savings** of five percent of paid wages are automatically deducted, 3 percent of which goes to the individual members account and two percent goes to the group funds. This is on top of the voluntary labour contribution from members of 25 percent free labour for work on public land and 50 percent free labour for work on private land.

44 Group savings are kept collectively in the name of the SHG. As well as the voluntary contribution from wages, group savings includes other group income from:

- lending to individuals
- lending to individuals for IGAs;
- operation of group assets as IGAs and, finally,
- bank interest, penalties and fines.

45 Finally, project funds flow through the SHG for various activities including the IGAs. Some IGAs are managed as group assets, for which the SHG earns fee income, while others are managed as individual loans for which the SHG receives (loan) interest payments.

46 **IGA** – Although there is a wide range of IGA activities associated with each SHG, these activities broadly fall into two main categories.

- **SHG owned assets and managed enterprises.** Here the SHG appoints a Jankar to manage the activity on the SHG's behalf, either on a lease or wage basis; and

- **Individual enterprises**, with loans through the SHG, for members to set up small businesses, and so on.

47 **The SHG accounts** provide a mechanism to bring together all project activities around a particular group. Although transactional records of deposits and payments are maintained in each SHG and for each passbook holder, in GVT-supported SHGs, the accounts are not consolidated and therefore no use is made of these records. In IFFDC-supported SHGs, accounts are prepared and utilised. The result is that IFFDC considers SHGs as a key agent of project implementation while GVT treats SHGs as an instrument for project implementation.

48 **Development activities** – The project supports an enormous range of different interventions – under the principle that no reasonable proposal is rejected. It is therefore essential to categorise interventions into a meaningful and tractable set. These categories must reflect the way both cost and benefit data is presented. The categories proposed by the CBA team are as follows:

- Crop related activities, including SWC, WRD, crop technologies (crop, varieties, inputs, techniques etc) and farm forestry, the end-user benefits of which are found on private farms. The reason for treating these activities as a single programme is that ultimately the benefits of each are measured in the value of increased yields, the interactions between changes in water, soils, variety and technology are difficult to separate resulting in the danger of double counting the benefits on farmer fields.
- Water from WRD investments can be used for both crop irrigation and domestic purposes. WRD includes both large scale investments in irrigation and smaller scale construction and rehabilitation of broken wells. Data was not available as to the proportion of costs spent on different types of investments. Further, it would not be possible to partition water use between crops and domestic use. As a result, the assumption used for the calculation is that all the water has been used for crops, and that the health and other benefits from additional and improved water supplies are worth at least as much as the returns from irrigation.
- Livestock (cattle) activities, including the activities of the livestock jankar, the vaccination, de-worming, castration and general vet/med programmes. The benefits here are measured in terms of herd productivity which also includes the effect of increased fodder/grass and water where available. The Livestock Jankar charges a fee for his services and, therefore, the viability of this arrangement, with and without project support will determine the sustainability of this programme.
- Communal forest plantations, including JFM. Community plantations are self contained and support by the project, while JFM activities require no direct project funding.
- Drudgery reduction (or so-called “social development”) activities, mostly low cost inputs, often designed to assist women, which have direct benefits, but which might as be regarded as “entry-point” activities.

- Migration labour support programme (MLSP) is a relatively new development activity being limited to budget allocations for GVT operations in Gujarat, Rajasthan and Madhya Pradesh. The programme is the subject of ongoing studies in these states with very small expenditure to date.

49 The analytical framework provides a structure for the economic analysis by describing and defining what is included (and excluded). The framework is also important in identifying those elements of the project, which are critical to success and to sustainability. Before proceeding to the analytical sections of the report, we first set out project costs.

C.6 Project Costs^{3/}

50 Project investment cost data for both administration and development was provided for the four-year period 1999/2000 to 2003/04 in actual terms and for two-year period 2004/05 to 2005/06 in budgeted terms. Financial and in-kind contributions, by government and by communities were also included in the total project costs. However, project budgets do not include the projected recurrent costs required to operate and maintain project assets.

51 **Administrative costs** account for 40 percent and 50 percent of total project costs for GVT and IFFDC respectively. Administrative costs are basically all the costs which have not been allocated to specific activities, including the overhead costs of HQ, and regional administration (staff, offices and facilities, equipment) as well as consultants commissioned directly from DFID managed funds. There were small variations in co-ordination office costs.

52 **Development costs** are all costs directly attributable to development activities in core villages of which the main costs are for SWC and WRD. These activities together account for about 70 percent of the development costs, with soil and water conservation (SWC) activities comprising about half (46 percent of the total) of these costs. Water resource development (WRD) accounts for about a quarter of total costs (22 percent of development costs).

53 Village investment (overheads and development) and recurrent costs were prepared by:

- allocating **administration costs** including Project HQ and the cost of DFID hired consultants to each Coordination Office and, then, dividing total costs equally per village; and
- reconstructing **development expenditure** for component "A" on the basis of actual physical activities in the sample villages and actual unit costs. These figures show a wide range of variation when compared with overall averages. The costs of components "B" and "C" and the cost of the "challenge fund" were excluded from the analysis;
- **Estimating on-going recurrent costs** In the absence of business plans or alternative plans, recurrent costs were estimated as percentages of annual or

^{3/} See Annex 8, for details.

accumulated investment costs (see Annex 8, Table A8.4). For the purpose of the analysis, recurrent costs have been estimated and included in the total project cost, adding approximately 15 percent to the average budgeted cost for each enterprise. The assumption is that these costs would be met directly by beneficiaries.^{4/}

54 **Average village investment costs** – On the basis of the adjustments made to apportion administrative costs and include recurrent costs, estimates of average village level costs were prepared for each district (Table 2). These averages show variation in both administration and development costs between coordination offices. IFFDC costs are roughly the same as the average of GVT districts.

55 The variation across districts reflects the different areas under development. Interestingly, IFFDC investments in WRD are substantially higher than GVTs investments (approximately double) although GVT invests more in crop technology. Likewise, GVT investments are substantially greater for SWC than IFFDC (by a factor of about five). IFFDC also spend less per village on VOD than GVT

56 Although the variation between GVT districts is mostly explained by different circumstances found in the districts, expenditure on WRD and livestock development is broadly similar across each of the district.

Table 2: Average Investment Costs per Village Rs'000 (Financial)

Agency	GVT			IFFDC
	State	Gujarat	M Pradesh	Rajasthan
Office	Dahod	Jhabua	Banswara	Pratapgarh
Administration Costs				
Project HQ	383.7	383.7	383.7	432.5
DFIDI	338.6	338.6	338.6	338.6
Coordination Office	1,757.7	903.1	869.2	1,595.6
Subtotal	2,480.0	1,625.4	1,591.5	2,366.7
Development Costs Component A				
PPGF	124.7	41.6	90.4	49.4
VOD	405.7	195.3	312.3	156.0
Crop Technology	228.4	134.2	209.4	98.1
SWC	1,132.1	796.7	1,091.8	175.1
WRD	641.4	616.4	692.8	1,396.1
Livestock	178.3	118.1	122.2	60.8
Forestry	134.1	82.7	60.2	75.9
Migration Support	34.4	11.7	7.3	-
Subtotal	2,879.1	1,996.7	2,586.4	2,011.4
Totals	5,359.1	3,622.1	4,177.9	4,378.1
Source: Cost Benefit Analysis Study Jan 2005.				
GVT = Gramin Vikas Trust, IFFDC = Indian Farm Forestry Development Cooperative.				
DFIDI = Department for International Development (India).				
PPGF = Participatory Planning and Group Formation, VOD = Village Organisation and Development, SWC = Soil and Water Conservation, WRD = Water Resource Development				

^{4/} Recurrent costs extend beyond the project period in the same way as benefit flows. Without these recurrent costs being met, benefit flows would cease. If these real costs were to be excluded the net benefits would be overstated and investment returns inflated.



2 | Financial Analysis

2 | Financial Analysis

C.7 Introduction

57 The financial analysis addresses the viability and sustainability of project activities from the perspective of SHGs and private individuals. The two main issues relate to:

- the role and status of the SHG as both:
 - a savings and credit institution;
 - a conduit for the management of project activities in the post-project period; and
 - the financial viability of IGAs both for SHGs who tend to manage larger initiatives and for those individuals who have taken loans from SHGs.

58 Finally, the assumptions about the financial returns from on-farm activities are considered. These have been derived from the Net Household Income Study (NHIS) undertaken by the project in 2003/04.

C.8 Self-Help Groups (SHGs)^{1/}

59 **Introduction** – in practice, as was discussed earlier, the role of the SHG within the project varies between the two implementing agencies. For IFFDC, with a more explicit focus on institutions and their sustainability, the SHG has a more autonomous status than for GVT, which treats SHGs as a means for the implementation of activities. The analysis in the following section therefore differs in its treatment of the SHGs supported by the two implementing agencies.

60 IFFDC maintains good accounts and records for each SHG, considerably in excess of the minimum requirements suggested by NABARD. Information was available for all six-sample villages (Table 3).

- Membership
 - SHG participation was over 90 percent of participating households in the six sample villages.

^{1/} See Annex 9 for details.

- Savings
 - The average savings per group was about Rs 115,000 accumulated over four years – about Rs 1,340 per household or Rs 40 per month.
 - Roughly 60 percent of the group savings was in the form of individual deposits, the remainder being held as group savings.
- Loan portfolio
 - The average loan is small at Rs 354. The main purpose given for taking a loan is production (mainly seed and fertiliser) – accounting for 50 percent of loans followed by consumption (32 percent) and health (15 percent). IGAs (two percent) and Education (one percent) accounted for the remainder of the loan portfolio.
 - No breakdown was available on the status of the outstanding loans and no provision was made for “bad debt”. This may be due to the system of loan specification where no final date is set for capital repayment and interest payments are expressed as a fixed sum – effectively for an indefinite period.
 - Loans account for only 53 percent of total savings, with the remainder (47 percent) being held in the form of a bank deposit. These high un-disbursed balances, in the context of widespread indebtedness and with households continuing to take loans from other sources, suggests a reluctance of the SHG to make loans. The reasons behind this paradox are unclear – although the lack of financially viable IGAs being proposed is clearly one possible factor.
 - In Moti Kheri, one of the villages studied in depth, although savings levels had been maintained over a four-year period and the average size of loans had increased very modestly, the number of loans advanced had reduced significantly. (The number of loans in 2004 was 65 percent of the total advanced in 2003.) Further data is required to determine whether this reflects the market for loans and IGAs.

Table 3: IFFDC Sample Village Self Help Group Financial Indicators

Item	Chhayan	Chhota Manga	Dharis Kheri	Kachotia	Moti Kheri	S Ka Khera
SHG Membership (No)	87	51	94	106	164	15
Deposits (Rs)						
Individual	102,150	39,536	68,493	67,206	150,852	6,002
Group	45,635	30,481	22,467	32,499	127,135	727
Total	147,785	70,017	90,960	99,705	277,987	6,729
Average Deposit / Member	1,699	1,373	968	941	1,695	449
Loans Outstanding	156,560	36,950	31,803	37,180	103,038	5,000
Balance on Deposit	(8,775)	33,067	59,157	62,525	174,949	1,732
Income						
Interest	32,307	4,379	7,315	4,270	14,889	214
Penalty Interest	295	70	62	2,535	1,077	5
Total	32,602	4,449	7,377	6,805	15,966	219
Expenditure	(6,940)	-	(334)	(277)	(48,500)	-
Income Less Expenditure	28,862	4,449	7,043	6,528	(30,334)	219
Cash (in hand and Bank)	20,087	37,516	66,200	69,053	144,615	1,951
Loan Portfolio						
Outstanding	156,560	36,950	31,803	37,180	103,038	5,000
Repaid	207,615	39,953	64,080	93,158	176,872	4,130
Total	364,175	76,903	95,883	130,338	279,910	9,130
Loan Numbers	896	199	227	533	824	23
Average Loan Size	406	389	422	245	340	397
Loan Types (%)						
Consumption	28	35	19	31	45	96
Health	25	4	2	3	11	1
Education	0	1	2	2	1	0
Micro enterprise	4	0	0	3	1	0
Production	43	60	77	61	42	3
Total	100	100	100	100	100	100
Source: IFFDC Coordination Office Pratappgarh, Rajasthan.						
IFFDC = Indian Farm Forestry Development Cooperative.						

61 **GVT** – Although GVT maintains records of deposits and payments (i.e. passbooks and ledgers) for each SHG, there was virtually no physical or financial information as to the functional status of each SHG. This finding supports the conclusion that the SHG is not seen as decision-making agency for GVT since there has been no attempt to provide information to enable the SHG to make strategic and post-project decisions.

62 The absence of summary accounts does not, of itself, make the SHG unviable and, therefore, the team undertook the time-consuming task of extracting inflows and outflows from a random sample of SHGs in the villages selected for in-depth study (Table 4). The key findings from this exercise were:

- **Membership** – The average size of each SHG was about 17 members.
- **Savings and deposits** – Average deposits for the three villages ranged from Rs 1,262 to Rs 2,134 per household over four years representing monthly savings per member of between Rs 26 and Rs 47.

- **Loan portfolio** – The total loan portfolio ranged from Rs 450 to Rs 1,980 per member. The purpose of the loans was not extracted. In Kadwapada village, where the deposits were also significantly higher, the outstanding loans accounted for 73 percent of the accumulated cashflow. Elsewhere, this figure was similar to the 50 percent found in the IFFDC villages and ranged from 49 percent to 58 percent of accumulated savings.

63 More generally, SHGs, supported by both agencies, appear to maintain relatively high cash balances given the indebtedness found in the villages. Possible reasons for this paradox, all of which require further investigation, include:

- a cautious, low-risk approach to lending on the part of the SHG and/or project staff;
- limited viable investment opportunities; and
- non-financial benefits or pressures (social reciprocity) from money lenders, which are not included in the SHG loans.

64 **Summary** – The two implementing agencies have held different concepts about the role of SHGs and this has resulted in different approaches:

- For IFFDC, SHGs are treated as agencies within the project. There is information available on the status and progress of each SHG. There is vision and plan for incorporating SHGs as cooperatives under a federated structure. Hence, there is a possibility that IFFDC-established SHGs could and will be sustainable in the post-project period.
- GVT have not conceptualised SHGs in the same way and treat SHGs as a means of working “through” communities. As a result the status of each group is unknown to GVT management, to the SHG leadership and to its individual members.

65 Effectively, SHGs are responsible for the implementation of a micro-finance programme with both savings and credit components. They hold increasing large amounts of money on behalf of very poor people. In the case of GVT-supported SHGs, the mechanisms to track and monitor performance of the savings and credit programme is missing. Such information is essential to the operation of an empowered community group.

66 An interesting question arises around the future of individual savings held in the SHG accounts. Individuals have accrued capital from voluntary savings, from compulsory contributions and have claim on a share of the assets (machinery or outstanding loans) and operating returns (interest, fees, etc) of the SHG. The arrangements for the winding up of an SHG, with positive assets, had not been developed or tested. However, the “ownership” of these assets/claims has not been tested in practice. Since for some people, voluntary monthly savings are regarded as the entry fee to employment opportunities, even these (substantial) amounts may not be fully appreciated as assets with a private claim. For some people, withdrawal of

these assets (often in excess of Rs 2,000) might be more rational than acquiring further debt.

67 Closely connected to the role of SHGs is the promotion and operation of Income generating activities (IGAs) and the role of Jankars.

Table 4: GVT Self Help Group Cash Flow Analysis and Financial Indicators

Item \1	Gujarat Jadha	M Pradesh Kadwapada	Rajasthan Gara
Cash Inflow			
Deposits			
Member Savings	93,803	71,217	48,195
Group Savings	63,101	37,609	61,613
Subtotal	156,904	108,826	109,808
Group Activities (Net)	48,420	27,899	12,500
Interest Income	31,669	2,065	1,540
Total Cash Inflow	236,993	138,790	123,848
Cash Outflow			
Loans Outstanding			
Individuals	131,883	100,980	53,100
Group	5,064	-	500
Total Cash Outflow	136,947	100,890	53,600
Cash Balance	100,046	37,810	70,248
Key Financial Indicators			
Membership	99	51	87
Average Savings / Member	1,585	2,134	1,262
Annual Increase	259	547	451
Outstanding Loans			
As Percent of Cash Inflow	58%	73%	49%
Average Loan Size	1,383	1,980	616
Interest Income			
As percent of Average Loans	7%	1%	4%
Source: Cost Benefit Analysis Study, Jan 2005 based on field interviews.			
1 Field data as at March 2004.			

C.9 Income-Generating Activities (IGAs)^{2/}

68 **Background** – The project has promoted a wide range of IGAs – too many to subject to individual analysis. In this chapter, we analyse 12 typical, but different IGAs of which nine were individual loans and the remaining three group IGAs. In general, the individual IGAs were for smaller items (less than Rs 5,000) while the

^{2/} See Annex 10 for details.

group IGAs were for significantly larger enterprises ranging from Rs 20,000 to Rs 25,000

69 **Methodology** – For each of the representative IGAs, a financial plan (model or business plan) was developed based on data provided by key informants. Some of the models were owned by individual entrepreneurs while others were group owned and managed. Each model consisted of:

- capital investment costs, and the associated financing plan consisting of equity, subsidies and loans, and a residual asset value at the end of 12 months, showing increases or decreases in capital;
- the operating costs required to run the enterprise; and,
- sales and returns - based on actual 12 month records.

70 In practice, the financing arrangements (monthly interest payments, grace periods and loan period) were varied. In many cases, they were not clearly defined and, in some cases, neither borrower nor lender knew the terms of the loan! In order to compare IGAs, using a common basis, two assumptions were used:

- fixed interest rate of 1.5 percent per month on the outstanding balance was used for all IGAs. This was at the lower end of current SHG interest rates which varied from one percent to five percent per month, and
- principal repayments were only made in months when a positive cash flow was generated, effectively allowing for a loan extension.

71 Where IGAs were managed by an SHG, the project advanced money to the SHG bank account for capital purchase. A fee was charged by the SHG to users to cover running costs and remuneration of the Jankar. There was no charge for capital and no “sinking fund” built up to cover the replacement costs at the end of the life of the asset. Again, in order to determine the viability of these enterprises, capital and financing costs (equivalent to a sinking fund or the taking of new loan at the end of the life of the equipment) were included in the model.^{3/}

72 **Results** – the analysis shows financial returns ranged from zero percent to 18 percent (Table 5). Since the cost of borrowing is 1.5 percent per month (approximately 18 percent per annum), this suggest that these enterprises are not viable at full cost. However, as well as the financial returns, or returns to capital, the IGAs also provide a return to labour which ranges from Rs 41 to Rs 82. This is slightly better than the prevailing wage labour rates in Kharif (Rs 40-50) and considerably better in Rabi (Rs 20 – 30) and hence provides an incentive for entrepreneurs to consider an IGA as an alternative or supplementary source of wage

^{3/} Without considering capital costs, the issue of viability becomes irrelevant since the operation depends on external subsidies. Since the fee does not include repayment of the capital cost, neither the lender (the SHG) nor the borrower is in a position to recycle the capital in the future. In practice, however, it is unlikely that a “sinking fund” would be build up to cover replacement at the end of the useful life of the equipment/asset.

labour. However, it should be remembered that most of the IGAs do not provide full time employment throughout the year.

73 Although most of the individual IGAs are marginally financially viable, they provide additional family income at times when alternative employment is scarce. However, the scope to expand IGA activities remains constrained by the **limited markets** for products. This finding was especially true for service IGAs, such as sewing machines and village stores.

74 Surprisingly, most of the group IGAs were not financially viable. In the case of large equipment such as irrigation pumps, this appears to reflect high **overhead costs** including the costs of capital and financing, which are not covered by hire charges. High overhead costs are also due to relatively low levels of usage. Given the priority given to crop technology and the apparent increase in land coming under cultivation, it remains surprising that water augmenting technologies do not have higher returns.

75 In livestock rearing, the problem appears to be **insecure input supply**. Although the sale of livestock products is less dependant on local demand, there is a requirement for secure sources of fodder, water and veterinary support and, especially in the case of poultry IGAs, technical support to reduce the risks of disease.

76 **Summary** – The analysis shows that some of the smaller, private IGAs are viable. However, this fact does not mean that these enterprises will be viable in all villages and, therefore, can be promoted with consideration of local markets. In those (many) cases, where demand is only sufficient to make a single local unit profitable, additional units will result in all units becoming unprofitable.^{4/}

77 The larger IGAs have not been so successful and also require careful analysis before being actively promoted by the project. Further investigation of the low returns to irrigation pumps is required to explore the institutional arrangements around operations and to ensure that demand has not met by other project related activities.

^{4/}

The CBA team provided training to project staff on the use of the methodology to analyse the financial viability of individual enterprises

Table 5: Income Generating Activities: Summary of Key Financial Indicators

IGA Activity	IGA	Financing Plan			Cash Flow (before finance)			Finance	Net	Return to Labour		Financial returns
		Status	Equity	Loan	Total	Income	Expend	Cash	Charge	Cash	P/Days	Return
		Rs'000			Rs'000			Rs'000	Rs'000	No/Yr	Rs/day	%
Service												
Electric Motor Repairs	Individual	4.0	3.0	7.0	12.7	6.8	5.9	1.7	4.2	60	70	8%
Grocery Shop	Individual	1.5	3.0	4.5	23.3	14.0	9.3	3.1	6.2	120	52	17%
Irrigation Pump (A)	Individual	12.0	4.0	16.0	9.0	3.0	6.0	2.5	3.5	50	70	2%
Sewing Machine	Individual	0.7	2.5	3.2	8.0	1.3	6.7	2.7	4.0	80	50	18%
Tailoring	Individual	1.2	2.0	3.2	4.1	1.1	3.0	1.3	1.7	69	25	8%
Vegetable Marketing	Individual	1.5	3.5	5.0	18.7	14.6	4.1	1.6	2.5	108	23	8%
Livestock Production												
Buffalo Rearing	Individual	1.0	5.0	6.0	10.8	6.4	4.4	3.2	1.2	60	20	6%
Goat Rearing	Individual	1.0	1.0	2.0	1.4	0.1	1.3	0.6	0.7	60	12	9%
Poultry Production	Individual	0.1	0.9	1.0	6.5	2.2	4.3	1.1	3.2	60	53	13%
Crop Production												
Irrigation Pump (B)	Group	2.0	20.0	22.0	9.3	5.0	4.3	7.3	(3.0)	N/A	N/A	0%
Irrigation Pump (C)	Group	3.0	25.0	28.0	6.0	2.0	4.0	7.1	(3.1)	N/A	N/A	0%
Service												
Flour Mill	Private	16.5	20.0	36.5	127.2	98.2	29.0	8.2	20.8	240	87	7%
Source: Cost Benefit Analysis (CBA) Study Estimates Jan 2005.												
FIRR = Financial Internal Rate of Return. N/A = Not analysed, Jankar allowance covered under expenditure.												

C.10 On-farm Returns

78 The crop, livestock and on-farm forestry benefits are due to a range of project investments in WRD, SWC, crop technology, livestock development, and so on. The CBA study uses the findings of the 2003 Net Household Income study (NHIS) which was conducted in both Phase I and Phase II villages to estimate the returns to on-farm activities.^{5/}

79 The NHIS estimated the incremental income from both crops and livestock activities in a limited number of villages, broken down into four “well-being classes”, viz. Very poor, Poor, Moderate and Better off (Table 6). The overall incremental benefit was about Rs 5,500 per household per year, with “very poor” households benefit by roughly 50 percent of the overall average and “better off” households gaining nearly twice the overall average. Surprisingly, the overall incremental benefits to all Phase II villages was about 50 percent of those estimated in Phase I villages (Rs 10,100 per household per year). The reasons for this are unclear and may be due to the very small Phase I sample. More likely, the difference is due to the substantially poorer and more remote villages selected for Phase II of the project. However, there may also be a learning effect whereby, over time, farmers have increased the flow of benefits from project investments and new crop technologies.

80 The overall pattern of incremental increases differs across sample villages, with the main difference being in the Rajasthan villages (Rs 2,565 per household per annum), where the overall incremental income is less than 40 percent of the incremental income in the villages in Gujarat (Rs 6,475 per household per annum) and MP (Rs 6,796 per household per year). The main reason for this is that the sizeable better-off group in the Rajasthan sample gained very little – in fact, less than the very poor group - from project activities. Given the small, albeit randomly selected, sample used by NHIS, care should be exercised in interpreting the results, especially at a disaggregated level.

81 The crops returns from the NHIS suggest relatively high financial returns. The overall average of Rs 5,500 per household per year is equivalent of about 140 days of labour per household per year (at a wage rate of Rs 40 per day). Clearly, in general, better-off farmers gained proportionally more due to their larger land holdings.

82 As well as crop benefits, the NHIS estimated the net incremental income from livestock activities to be Rs 2,000 per household per annum (Table 7). This represents an additional 40 percent of the returns from crop investments. Again, the better off gained most – 165 percent of the overall average, while the very poor only gained 65 percent of the overall average.

83 There was less difference between districts than for crop-related increases, although, again, because of the sample size, the pattern across well-being classes and districts was not always consistent. However, since there is some evidence of a specialisation, with low crop increments being associated with high livestock returns, the overall aggregated net returns from all on-farm related activities will be more robust than individual results. For example, in Morena district, although the

^{5/} IFFDC supported villages were not included in this study.

incremental net income to livestock is negative for the very poor, this is offset by a positive increase in incremental crop income.

84 Interventions, such as breed improvement and better animal treatment result not just in improved annual productivity, but also in a substantial increase in the residual value of the animal and its offspring. In practice, the annual increase cannot be assumed to continue indefinitely. As an approximation, for calculation purposes, an annual increase in productivity over five years has been assumed, but without any increase in the final value of the herd.

Table 6: Incremental Crop Net Margin per Household (Rs per year)

Phase	Gujarat		M Pradesh		Rajasthan		Average
	(%)	(Rs/HH)	(%)	(Rs/HH)	(%)	(Rs/HH)	
Phase I Village			Naganwot Choti				
WBR - Weighted				10,102			10,102
Phase II Villages	Lakhana		Bagoli		Merana		Average
WBR - Very Poor	12	3,380	25	2,434	12	3,286	2,193
	12	515		-	12	1,351	
WBR - Poor	25	6,479	25	2,824	38	3,367	4,223
WBR - Moderate	25	4,955	25	5,319	-	-	5,136
WBR - Better Off	25	12,359	25	16,608	38	1,927	10,298
WBR - Weighted	100	6,435	100	6,796	100	2,565	5,463
Source: Cost Benefit Analysis Study Jan 2005 estimates (based on primary data collected for the NHIS. WBR = Well Being Ranking)							

Table 7: Incremental Livestock Net Margin per Household (Rs/year)

Phase	Gujarat		M Pradesh		Rajasthan		Average
	(%)	(Rs/HH)	(%)	(Rs/HH)	(%)	(Rs/HH)	
Phase I Village			Naganwot Choti				
WBR - Weighted				1,409			1,409
Phase II Villages	Lakhana		Bagoli		Merana		Average
WBR - Very Poor	12	2,316	25	3,185	12	(1,325)	1,297
	13	795		-	12	1,515	
WBR - Poor	12	1,950	25	2,695	38	542	2,157
	13	3,440					
WBR - Moderate	25	1,140	25	1,289	-	-	1,214
WBR - Better Off	25	4,955	25	440	38	4,670	3,355
WBR - Weighted	100	2,586	100	1,902	100	1,978	2,006
Source: Cost Benefit Analysis Study Jan 2005 estimates (based on primary data collected for the NHIS WBR = Well Being Ranking)							

C.11 Employment Generated

85 The analytical framework focuses on the project as a means to improve livelihoods through productivity increases because of building new assets and income-generating enterprises. However, it is clear that in practice, a major benefit of the project has been the generation of additional wage employment opportunities during the project implementation period.

86 The employment generation, in terms of household income and person days of work, created in the four sample villages during the assumed five year implementation period was calculated (Table 8).^{6/} This suggests that a typical household has benefited by an average annual increase in income from wage labour from SWC and WRD development activities ranging from a low of Rs 1,700 to a high of Rs 5,800.

87 This represents an average of between 43 person days and 145 person days of employment per household per year, most of which will have been available in the *rabi* season when alternative income sources necessitate migration.

88 The importance of wage employment was supported by the social investigation, where it was clear that for many people the main benefit of the project was the wage employment from project works. With the tapering of employment related project activities, the assumption was that migration would increase.

Table 8: Employment Generation of Four Villages

Agency	GVT			IFFDC
State	Gujarat	M Pradesh	Rajasthan	Rajasthan
Office	Dahod	Jhabua	Banswara	Pratapgarh
Sample Village \1	Jadha	Kadwapada	Gara	Moti Kheri
Administration Costs				
Subtotal	2,480.0	1,625.4	1,591.5	2,366.7
Development Costs				
Component A				
SWC	3,003.4	531.1	2,482.6	645.1
WRD	2,778.8	515.6	2,471.4	2,745.2
All Other Activities	1,601.9	1,296.0	947.0	1,551.9
Subtotal	7,384.1	2,342.7	5,901.0	4,942.2
Total Costs	9,864.1	3,968.1	7,492.5	7,308.9
Employment Generation				
Wages -SWC \2	2,402.7	424.9	1,986.1	516.1
Wages – WRD \3	1,667.3	309.4	1,482.8	1,647.1
Total Wage Costs	4,070.0	734.3	3,468.9	2,163.2
Household Employment				
HHs / Village (No)	363	86	120	112
Income / HH / Year \4	2,242.4	1,707.7	5,781.5	3,862.9
Days / HH / Year \5	56	43	145	97
Source: Cost Benefit Analysis Study Jan 2005.				
1\ Villages selected for in-depth social analysis.				
2\ SWC wage labour estimated at 80 percent.				
3\ WRD wage labour estimated at 60 percent.				
4\ Average period of construction estimated at five years.				
5\ Average daily wage rate estimated at Rs 40 per day				
GVT = Gramin Vikas Trust, IFFDC = Indian Farm Forestry Development Cooperative.				
PPGF = Participatory Planning and Group Formation, VOD = Village Organisation and Development, SWC = Soil and Water Conservation, WRD = Water Resource Development				

^{6/}

See Annex 8 for details

C.12 Conclusions

89 The financial analysis is critical to understanding the incentives for key stakeholders to participate and to continue to participate post-project. Where activities are not financially viable (i.e. activities which are a cost rather than a benefit) to stakeholders, it is highly unlikely that activities will be sustained.

90 The analysis, therefore, suggests that the bulk of the sustainable project benefits are due to on-farm activities. The NHIS results show substantial returns for both crops and livestock investments. For all farmers this will have resulted in increased production, better nutrition and reduced out-migration.

91 Wage employment from project works was for many, if not most, people the main project benefit. Access to wage employment was through membership of the SHG. However, wage employment only provides benefits in a limited number of years during the life of the project.

92 Although some IGAs are clearly viable, especially when considered as supplementary income, most require further subsidies to ensure viability. This is not altogether surprising given local purchasing power. However, the low returns to specific enterprises raise doubts as to whether the associated jankars will continue as viable agents supporting project activities into the future.

93 The viability of the SHGs is of even greater concern since they already hold considerable assets in cash and equipment. The continued functioning of these community groups is not certain; they are still heavily dependant on project inputs including support from group jankars, who receive a project honorarium. Although some groups will maintain a sense of purpose beyond project activities, for others, the motivation to continue participation will wane after the project finishes and project promoted wage-labour activities finish.

94 The exit strategy for the programme is critical to both the continuation of the programmes and, where programmes cease, the distribution of private and group assets. In the case of IFFDC supported villages, the future of SHGs appears more secure under the umbrella of the cooperative movement and with the benefit of more focused group development during the project. GVT-supported villages have less certain future, as result of less attention being paid to developing SHG management and accounting systems.

95 The nature of project design, with village-level planning and group-level implementation, has limited the scope for the project to promote autonomous community empowerment. This is despite the obviously good relationships which have been built up between project staff in both implementing agencies and villagers. As result the sustainability of project interventions remains uncertain and in some cases unlikely, without further external inputs.



3 | Economic Analysis

3 Economic Analysis

C.13 Introduction

96 The economic analysis, differs from financial analysis, in that it considers project activities from the perspective of society as whole, by considering whether benefits to society as whole, rather than to specific stakeholders. The financial prices used for the financial analysis are the prices actually paid, in the market, by stakeholders. The economic analysis includes the same costs and benefits, but adjusts the prices to reflect their real or economic values. This is done by adjusting inputs and outputs to:

- remove taxes, subsidies and any other distortions to market prices which are regarded as transfers between sections of society rather than as overall benefits, and,
- value “unemployed and underemployed” resources, such as unskilled labour, in terms of its the contribution to increased productivity (i.e. its opportunity cost to society) rather than at the financial or market wage.

97 The first part of this section (C.10) sets out the assumptions used to convert financial to economic values, followed (C.11) by a description of the methodology and an analysis of the results for each type of incremental benefit. The next section (C.12), brings together incremental benefits and costs to estimate village returns and the overall economic returns and, finally (C.13), the effects of changes in the underlying assumptions analysed.

C.14 Economic Parameters

98 The following economic parameters have been used in the analysis:

- an **analysis period** of twenty years for costs and benefits;
- the **Standard Conversion Factor (SCF)**^{1/} for India of 0.9 was applied to allow for market and exchange rate distortions and to convert all cost and benefits to a common numeraire (viz. border equivalent Rupees); and
- an **opportunity cost of capital (OCC)**^{2/} of 12 percent has been used, where necessary, to estimate the present value of both costs and benefits.

^{1/}

A conversion factor (CF) is used by economists to calculate the true economic value of resources by adjusting market prices to remove the effects of transfers (taxes and subsidies) and other market distortions. The SCF is used for all resources for which resource-specific conversion factors are not available to ensure that all resources are valued on the same basis. The SCF used is a standard figure prepared by the World Bank, based on sector work by the Bank and Government agencies.

99 **Economic wage rate** – Unskilled labour is a major element of both project investment costs and farm incomes and, for financial purposes, the project uses government-set wage rates for unskilled labour. However, clearly, in the project area, characterised by out migration, labour is both structurally and seasonally unemployed and underemployed. As a result, neither the government fixed rate nor the market wage rate will reflect the opportunity cost (i.e. the true cost to society) of employment generated by the project.

100 We would expect the economic wage rate to be lower than the financial wage rate because of:

- evidence of out-migration assumes the existence of both unemployed and underemployed unskilled labour;
- reports that out-migration has dropped during the project period as a result of work generated by the project;
- evidence that people have been happy receiving 50 percent or 75 percent of the government rate since this is, effectively, the implication of the voluntary labour contribution;
- data on agricultural market wage rates vary by season from Rs40-Rs60 in Kharif to Rs20- Rs40 in Rabi. A weighted average of the days worked suggests an average annual figure of about Rs45 or 75 percent of the Government fixed rate of Rs60 per day.

101 This conclusion is supported by evidence from the social and institutional case studies and field staff that, for most people, wage employment has been significantly more important to them than the investment in assets.

102 However, in the absence of full scale study of the labour market both locally and elsewhere, it is not possible to determine a true economic wage rate. A more accurate assessment of the true value of labour will be available following the migration study scheduled for 2005.

103 On the basis of the above arguments we have assumed an economic wage rate of 75 percent of the official wage rate which has been applied to the costs of the SWC and WRD. Actual seasonal market rates were used for the incremental benefit models. For the livestock analysis, a wage rate of Rs25 per day was assumed, reflecting the lower opportunity cost of labour used on many livestock activities.

2/

The Opportunity cost of capital (OCC) is estimated by the National Planning Commission and the World Bank. The simplest way to regard the OCC is as the rate at which a country borrows money on the international markets. However, since countries have other ways of raising capital (through tax, for example), a more useful way is to see the OCC as the rate of interest which allocates all the government budget while ensuring that only investments with the highest returns are included. The effect of applying the OCC rate is to set a "time preference rate" which gives preference (higher values) to earlier benefits over later benefits. Since poor people tend to have higher time preference rates than wealthier people (who can afford to wait longer for returns), there is an argument for using a higher OCC in poorer areas such as those found in WIRFP villages. However, for pragmatic reasons, the standard OCC of 12 percent is used for all projects in India since it allows comparisons to be made between projects.

26

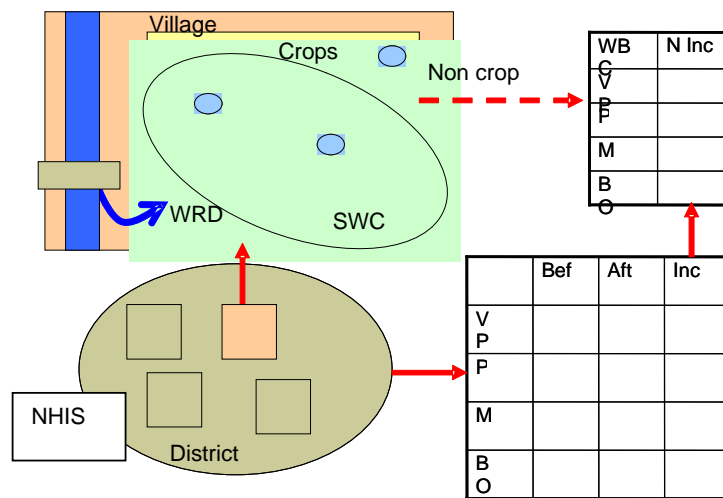
C.15 Economic Project Costs

104 Project costs were converted from financial to economic values using the SCF of 0.9. The major component of all project activities and, therefore, costs is labour, which was adjusted using the economic wage rate. Other construction materials, such as cement, which although subject to market restrictions in India account for only a small proportion of costs and, therefore, no further adjustments have been made.

C.16 Incremental Crop and Livestock Benefits^{3/}

105 Economic incremental crop and livestock benefits were estimated using the results of the Net Household Income Study (NHIS) discussed earlier. However, since the NHIS sample was small and not drawn from the CBA sample villages, the results of the NHIS are more applicable at a district or project level than at an individual village level. Further, since WDR, SWC and crop technology activities all result in crop increases, it is not possible to separate out the returns to each activity (Figure 3).

Figure 3: Link between NHIS (district level) and CBA Study (village level)



106 The individual household results from the NHIS for each “well-being” class have been applied to the proportion of households in each well-being class in each of the sample village. The implicit assumption captured here is that well-being classes will have different incremental net margins because of larger farm sizes, greater access to assets and less exposure to risk.

107 Benefits and costs are, therefore, related in terms of the number of households in each village rather than the more usual method of linking areas treated. This ensures that the synergies between the different interventions are

^{3/} See Annex 10 for details.

captured in the analysis and avoids the problem of overlapping areas with its associated data problems.^{4/}

108 Incremental crop and livestock net margins for the CBA study reflect the underlying variability of the NHIS. This shows substantially lower margins in Rajasthan compared to the other two states. Since the main reason for this variability relates to the lower returns to one of the disaggregated categories, the better-off in one village, the CBA used the overall average net margins weighted by WBR.

109 The increases in economic household income are based on increases in crop and livestock productivity. The economic value of these crops and livestock products were derived by adjusting market prices by the SCF.

110 Given that migration is key policy issue for the region and the project, there is an argument that the economic analysis should be prepared from the perspective of the sub-region rather than the nation as whole. This argument is supported by the policy of preserving a way of life – and a tribal culture - in these regions rather than maximising economic returns within India as whole. If this argument was accepted, then economic parity prices would need to be estimated for crops and livestock products.

C.17 Forestry Benefits on State or Communal Land^{5/}

111 The forestry investment programmes includes the promotion of existing and the establishment of new, joint forestry management (JFM) schemes on common property resource land, in association with the forestry department. Other initiatives comprise the purchase and distribution of young fruit tree seedlings in association with the establishment of a village nursery programme using both grafting and budding skills. The average investment costs, in the forestry programme, account for four percent respectively of both GVT and IFFDC development activity expenditure.

112 The quantified benefits of the forestry programme are measured in terms of the potential incremental household net margin derived from primarily fruit production to obtain a positive return. For the sample villages, this net margin ranged from Rs 200 to 600 per household and falls within the levels identified in the NHIS. No significant expenditure was identified for JFM development in the sample villages.

C.18 Incremental Benefits from IGAs^{6/}

113 Individual IGAs appear attractive but very limited in scope for replication, because of the limited market for such goods and services. However group IGAs are generally less financially viable. Loan repayment terms (monthly interest rate, capital grace periods, the period for capital repayment, and so on) remain ill defined. Individual IGAs can justify an interest rate of two percent per month (24 percent per year) but repayment of principle is more problematic owing to the seasonality of crop production and migration income.

^{4/} A framework to validate this approach - using area measurements - in the selected sample of four core villages is set out in Appendix 1.

^{5/} See Annex 10 for details

^{6/} See Annex 10 for details

114 Potential interest income is assessed on the percentage of individual / group deposits held by the individual SHG / village that it is lent for IGAs to individual members of an SHG. Interest income charges are highly variable between SHGs and are reported to vary from 12 percent to 24 percent per year (equivalent to one percent to two percent per month) with penalties applied for non-payment. In quantifying the benefits, namely the interest income derived from the volume of deposits lent to members, use has been made of both field verification data and implementing agency SHG records.

C.19 Drudgery Reduction Benefits^{7/}

115 Quantified benefits, resulting from drudgery reduction for household activities (ball bearings, access to water and so on), are measured as hours / days savings per household / village valued at the economic shadow wage rate. This assumes that such time saved will be gainfully employed in alternative productive activities.

116 Potential productive drudgery reduction benefits per household are assessed at an average of one hour per day per household for 200 days per year assuming an average eight hour day (the equivalent of 25 days per year per household) valued at an economic wage rate of Rs 25 per day to reflect the assumption that only 50 percent of the time saved will be devoted to economically productive activities.

117 These assumptions have little effect on the overall returns. Nonetheless, they have been applied to all villages through the 20-year analysis period even though it appears that in most villages provision for replacing the drudgery reduction items has not been made.

C.20 Migration Labour Support Programme (MSLP)^{8/}

118 The quantified benefits of the MLSP programme are measured in terms of the potential incremental household income from migration labour. These benefits result from the incremental household income derived from migration labour, for both the 'before' and 'after' project situation and are based on estimates of:

- the average increase in the daily wage rate secured,
- the increase in the average number of days of work obtained, and
- the number of households, within the village, engaged in migration labour.

119 These initial estimates are set at levels to obtain a positive contribution to returns. They are based on limited discussions during the field verification process and will need to be further adjusted as a result of the ongoing migration survey and when projected investment expenditure is more clearly identified.

C.21 Project Returns and Analysis

120 The economic costs and incremental benefits were prepared for each sample village (Annex 12) and then aggregated to give an overall rate of return for the whole project (Annex 13). The overall incremental benefits include the increases in:

^{7/} See Annex 10 for details

^{8/} See Annex 10 for details

- On-farm crop and tree productivity caused by three project activities: viz. WRD, SWC and crop technology (new varieties and practices);
- Livestock production arising from new breeds, the increased availability of fodder, water and veterinary services;
- Forestry production on common or state land which is the result of new management arrangements which permit and encourage investment and protection;
- Income from successful IGA operations, which accrues to the SHGs;^{9/}
- Drudgery reduction interventions in terms of time saved; and
- Additional employment and higher wages because of the migration labour support programme.

121 As well as these direct benefits, improved productivity and increases incomes will have indirect benefits in terms of health and general well being. Some of these benefits are captured in the overall returns, but direct measurement of such indirect benefits would require a separate study.

122 The estimated overall economic returns^{10/} based on the 20 sample villages, over a period of 20 years and using the assumptions outlined in this report, is 10 percent. Although this is less than the 12 percent opportunity costs of capital used for projects in India, this is a surprisingly high and commendable result given the exceedingly poor resource base and the targeted selection of the poorest and most inaccessible villages within the area.

123 Of the twenty sample villages, only six villages (Gujarat 2, Madhya Pradesh 2 and Rajasthan 2) achieved returns in excess of the 12 percent OCC (Table 9).

^{9/} The income accruing to the lender (SHG) is a proxy for the overall returns to all individual borrowers.
^{10/} As measured by the Economic internal rate of return (EIRR)

Table 9: Cost Benefit Analysis – Individual Village Results

Implementing Agency		HHs	Economic Costs			Cost Benefit Analysis		
District / State			Admin	Dev	Total	NPV	EIRR	Village
Sample Village		(No)	(Rs M)			(Rs M)	(%)	(No) 1
Gramin Vikas Trust (GVT)								
Dahod – Gujarat			2.3	2.2	2.5	6.5	23%	2
1	Jadha	363	2.3	5.3	7.6	4.4	28%	*
2	Kasotia	193	2.3	2.3	4.6	2.3	27%	*
3	Poyali	120	2.3	2.9	5.2	(0.2)	11%	
Jhabua - M Pradesh			1.5	1.5	3.0	(3.9)	6%	2
1	Bagoli	86	1.5	2.9	4.4	(1.4)	3%	
2	Borwa	36	1.5	1.0	2.5	(0.5)	5%	
3	Chamjar	79	1.5	2.7	4.2	(1.9)	N/A	
4	Chenpura	160	1.5	2.9	4.4	1.0	18%	*
5	Kadwapada	86	1.5	1.9	3.4	0.2	14%	*
6	Padabanda	37	1.5	2.1	3.6	(1.6)	N/A	
Banswara - Rajasthan			1.5	1.9	3.4	1.5	15%	2
1	Bakaner	90	1.5	2.6	4.1	(0.9)	4%	
2	Bhuripada	160	1.5	2.8	4.3	0.3	14%	*
3	Gara	120	1.5	4.2	5.7	(0.6)	4%	
4	Merana	147	1.5	1.8	3.3	2.9	32%	*
5	Sundripada	80	1.5	2.2	3.7	(0.1)	11%	
Indian Farm Forestry Development Cooperative (IFFDC)								
Pratapgarh – Rajasthan			2.2	1.4	3.6	(8.8)	-1%	0
1	Chhayan	60	2.2	2.7	4.9	(2.4)	N/A	
2	Chhota Mayanga	49	2.2	1.7	3.9	(1.6)	N/A	
3	Dharis Kheri	80	2.2	1.7	3.9	(1.1)	1%	
4	Kachotia	108	2.2	2.2	4.4	(0.5)	8%	
5	Moti Kheri	112	2.2	3.6	5.8	(1.5)	2%	
6	S Ka Khera	42	2.2	1.5	3.7	(1.5)	N/A	
Overall Cost Benefit						(4.6)	10%	6
Source: Cost Benefit Analysis Study, Jan 2005.								
1	Number of individual villages achieving an EIRR in excess of 12 percent (the opportunity cost of capital for rural development projects in India)							
EIRR = Economic Internal Rate of Return, NPV = Net Present Value at 12% interest HHs = Participating households per sample village, N/A = Not analysed as EIRR negative.								

C.22 Sustainability of Benefit Assumptions

124 Incremental benefits are expected to continue well after project funding has ceased. The base assumption is that benefits will be sustained at final levels for a period of 20 years. The base returns are not very sensitive to extensions in the benefit period: if benefits were sustained for 25 years, the economic returns would only rise to 12 percent, while a further extension to 30 years would leave the economic returns unaltered at 12 percent (Table 9).

125 However, the returns are very sensitive to a shortening of the benefit flow period. If benefits were only sustainable for 12 years, the economic returns would fall to zero and the net worth of the project investments would show a very substantial loss of Rs – 17.6 million.

126 Given the earlier discussion about the institutional arrangements and the provisions for funding replacement assets, the danger of benefits not being sustained

for this length of time is of great concern. As the financial analysis shows many of the IGAs cannot physically last this length of time without replacement. Further, the livestock benefits are dependant on veterinary support. The switch in crop technology, especially where it is not dependant on group managed water sources are more likely to be irreversible and sustainable.

Table 10: Effect of Changes in Assumption about Period of Analysis

	20 Years	12 Years	25 Years	30 Years
	Base case			
Overall Sample EIRR (%)	10%	0%	12%	12%
Change from Base Case (%)	-	-10%	+2%	+2%
Overall Sample NVP (Rs M)	(4.6)	(17.6)	(0.8)	1.3
Change from Base Case (Rs M)	-	(13.0)	3.8	5.9
Number of Villages (No)	6	3	7	8
Change from Base Case (No)	-	-3	+1	+2

C.23 Changes in Cost and Benefit Assumptions

127 The usual sensitivity analyses was carried out, looking at the effect on overall returns of a 20 percent change in both costs and benefits (Table 11):

- Increase in crop benefits (Test 1)** – Assumptions about incremental benefits are critical to the estimation of overall returns, especially given that crop development costs represent 70 percent of all development costs. A 20 percent increase in the base assumption would increase the net worth (12 percent, 20 years) to Rs + 5.2 million and the associated economic return would arise to 14 percent. A further three villages, bringing the total to nine villages would achieve a positive rate or return. Such an increase in crop benefits is possible since it would still represent a smaller incremental increase than was assumed, in the NHIS, for phase I villages.
- Increase in livestock benefits (Test 2)** – Incremental livestock benefits are substantial in all villages due to the relatively low development costs (five percent of the total development costs). A 20 percent increase in incremental livestock benefits, would increase the net worth to Rs -0.9 million and raise the associated economic returns to 12 percent. One more village would achieve an economic return greater than 12 percent.
- Reduced administration costs (Test 3)** – Overheads costs were allocated in proportion to development costs and may have overstated overheads costs with respect to component "A". A 20 percent reduction in overhead costs would increase the net worth to zero and the associated economic returns to 12 percent. Twelve out of the 20 sample villages would have economic returns greater than 12 percent.
- Increased recurrent costs (Test 4)** – In the absence of business plans or arrangements, the assumptions about recurrent costs were based on percentages of investment costs. Further, even if the requirement was

known, there is no village funding source^{11/} to provide these costs post-project. As result there is a possibility that recurrent costs are underestimated. A 20 percent increase in recurrent costs would result in a negative net worth of Rs – 9.5 million and an associated economic return of eight percent. Only six of the sample villages would have economic returns above 12 percent.

Table 11: Effect of Changes to Cost and Benefit Assumptions

	Test 1 Household crop net margins	Test 2 Household livestock net margins	Test 3 Admin Costs	Test 4 Recurrent costs
	increased by 20%	Increased by 20%	reduced by 20%	increased by 20%
Overall Sample EIRR (%)	14%	12%	12%	8%
Change from Base Case (%)	+6%	+4%	+2%	-2%
Overall Sample NVP (Rs M)	5.2	(0.9)	(0.1)	(9.5)
Change from Base Case (Rs M)	9.8	3.7	3.5	(4.9)
Number of Villages with positive economic returns (No)	9	7	7	6
Change from Base Case (No)	+3	+1	+1	-
Source: Cost Benefit Analysis Study, Jan 2005.				
1/	Number of villages achieving an economic internal rate of return (EIRR) greater than 12 percent (taken as the opportunity cost of capital for rural development projects in India).			
	EIRR = Economic Internal Rate of Return, NPV = Net Present Value at 12% interest rate.			

C.24 Incremental Household Crop net Margins.

128 Only six of the 20 sample villages achieved economic returns in excess of 12 percent, using the base case assumptions for incremental household net crop margin. After weighting for WBR, this ranged from a low of Rs 2,880 to a high of Rs 7,060 per household (Annex 12).

129 Given the significance of the net incremental household income to the overall returns, we calculated the breakeven increment required to achieve an economic return of 12 percent. These ranged from a low of Rs 7,230 to a high of Rs 12,700 suggesting that incremental incomes would have to roughly double in the remaining 12 sample villages – to achieve an economic return of 12 percent.

130 A comparison of the results of the Phase I and Phase II villages in the Net incremental income study shows that Phase II villages had significantly lower (30 percent to 50 percent) incremental incomes than Phase I villages. This may reflect the small sample used for Phase I villages, but could also reflect a learning process in phase I villages whereby new technologies and methods have resulted in subsequent productivity growth. If a similar learning curve applied in Phase II villages, the base assumptions used in the analysis would underestimate final incremental benefits.

^{11/}

Alternative funding sources, from user contributions or other government sources may be possible after the end of the project. However, as demonstrated by project investments in rehabilitating previously constructed infrastructure, there is little historical evidence of locally generated funds being found for recurrent costs.

131 Using the Phase I incremental income levels, a further nine villages (giving a total of 15 villages) would achieve an economic return of 12 percent. The remaining five villages would require incremental income levels significantly above the phase I sample.

C.25 Conclusions

132 The main component of the project has achieved surprisingly high economic returns of 10 percent especially given the physical and economic condition of the project area. However, the base estimate depends most critically on the estimates returns being sustained well into the future.

133 In the following section, we consider an analysis of the institutional and social arrangements, which determine the sustainability of project outcomes.



4 | **Social and Institutional Factors**

4 Social and Institutional Factors

C.26 Introduction

134 The realisation of estimated economic returns depends not just on relationship between returns and costs but also crucially on social, institutional, and managerial factors.

135 The CBA team studied a sub-sample of four purposively selected villages in order to better understand the project processes and the social conditions within which the project operated. The villages chosen for in-depth study were:

- Jada village, Dahod district of Gujarat (Annex 4)
- Kawadapada village, Jhabua district, Madhya Pradesh (Annex 5)
- Gara village, Banswara district, Rajasthan (Annex 6)
- Moti Kheri village, Pratapgarh District, Rajasthan (Annex 7)

136 In this section, we bring together some of the themes from these case study villages. Firstly, we discuss the issue of benefit distribution and then we examine some of the key institutional and managerial factors, which contribute to the degree of confidence, which can be placed on the economic analysis.

C.27 Distribution of Benefits

137 **Village selection** – Prior to project start-up, the procedures and criteria for village selection were clearly rigorously followed, based on knowledge of the area and experience from Phase I. As a result, the GVT supported villages are without exception some of the poorest and least accessible villages in the area. Livelihood strategies, pre-project, included both head-loading and out-migration both characteristics of areas which have not been affected by India's recent overall growth. As a result, implementation has been more difficult than it would have been in better off villages with greater access to markets. The overall economic returns are impressive when interpreted in this context.

138 IFFDC, who were not been involved in the Phase I programme, started activities one year later than GVT. Although the IFFDC villages are also poor, by any standard, they tend to be more accessible than the GVT villages. This, together with IFFDC's approach to institution building, suggests that there is a greater chance of post-project sustainability.

139 **Participation inclusiveness** – Generally, all households in the falia join the SHG and participate in the programme. However, there are exceptions, with either individuals or falias who have been excluded. SHGs who were unable to form before the programme budgets were finalised have sometimes found it difficult to join at a later stage. There has also been some cases on initial suspicion of the programme – sometimes as result of previous experiences and sometimes a fear that the

programme was the “front end” for proselytising campaigns by either Christian or Hindu groups. In one case, there was competition from SHGs which had been formed by a church group which had similar programmes.

140 **Nature of programme** – The choice of activities supported under the programme has a major impact on the distribution of benefits. Benefits from the programme include:

- employment generation;
- asset restoration;
- entrepreneurial options and
- institution building.

141 For most people, the main benefit has come from employment generation. People are generally happy to work for the wage rates provided. There was some reports that broken SWC bunding would not be repaired without project support suggesting that for many wage employment was more important than asset building.

142 The IGAs are dependent on identification of entrepreneurs, most of which will be the younger and better educated. Little employment is generated from these enterprises compared to other activities.

143 Increased agricultural productivity, as result of the increased availability of water, will also generate additional employment for land preparation and harvesting.

144 Another aspect of the distribution of benefits occurs where public works give rise to private benefits. The project expects labour contributions of 25 percent for work carried out on public land and 50 percent for work carried out on private land. These rates are accepted as “offers of employment” – work on public land is preferred but less available than work on private land. In some cases, work will be undertaken on everyone’s land – so that over time everyone gains from enhanced productive assets. In other cases, clearly programme activities produce private gains for specific individuals from both public and private work over and above wage employment.

145 Although the effective wage rate is 50 percent or 75 percent of the government rate, there has been little recognition, and no protest, about this problem. This suggests that the paid wage rates are above expectations and that the unequal (and unfair) asset gains are of limited significance.

146 **Summary** – The main source of benefit for most people, and especially for the very poorest, has been wage employment from SWC and WRD activities. This conclusion is consistent with the economy of the area. Further, the lack of serious concern about the employment conditions and the apparently favourable advantages some landowners will have gained, all suggest that the primary concern has been wage employment.

C.28 Sustainability of Activities and Benefits

147 The economic analysis assumes that incremental benefits will continue through out the 20-year period of analysis. This assumption rests on a number of factors:

- the viability of the enterprise and, in particular, the provision for replacing assets at the end of their productive life. This assumption is generally valid for the WRD works and, less certainly, for most of the SWC works carried out on private land.
- the institutional arrangements for collective decision-making. As was argued earlier, there are concerns that SHGs will continue as decision-making bodies or that activity Jankars will be viable in the long run. As a result, we have limited confidence that SWC structures on public land will be maintained or that many of the IGAs will be replaced at the end of their working lives.

148 **Summary** – The assumed benefit period of 20 years may be overoptimistic for the reasons set out here and in the economic analysis. The programme is currently focusing on an exit strategy, which will leave behind working institutions and viable support arrangements.

149 IFFDC are further ahead with the establishment of federation of cooperatives, which would fit into the wider cooperative movement in India.

150 GVT are proposing a “maha mandal”, but without the umbrella of a movement and the associated systems and networks available to IFFDC.

151 These are important steps although sustainability will be much harder to achieve after project investments than if the issue had been addressed at the time of group formation.

C.29 Institutional and Contractual Agreements

152 A major issue which affects both the distribution of benefits and the sustainability of the programme is the apparent lack of clarity over contractual arrangements throughout the programme. This lack of clarity applies to relationships between the implementing agencies and the communities as well as between the SHGs and individual members.

153 In terms of the relationships between the implementing agencies and community, there are significant differences in approach (although not necessarily in terms of actual personal relationships) between GVT and IFFDC. IFDDC have a much stronger institutional focus in their approach. Nonetheless, because of common project processes, the following observations apply to both agencies:

- **GVT/IFFDC and the village** – The village was the main institution for developing demand. The PRA and initial planning activities leading to the development of village development plan were undertaken at the village level. However, no village structure was established to oversee and monitor implementation. For implementation, the focus has been on the SHG (Falia).

Effectively this breaks a key “good governance” principle behind community empowerment - to bring together design, planning, implementation, monitoring and evaluation at a single community level in order to make planners and implementers directly responsible for their actions.

- **GVT/IFFDC and the SHG** – All fund management and procurement has been channelled through the SHG, rather than the village. SHGs are formed around “natural groupings”. These usually relate to a hamlet, a group of small hamlets or part of a large hamlet. Some SHGs are formed around a particular venture or set of activities. The SHGs are encouraged and supported by project staff to implement their part of the village development plan. There is no SHG or falia development plan. There are no SHG accounts which would enable members to track SHG progress or use this information to inform their strategy for decision-making.

154 Although the arrangements may be known to some SHG members, in most cases, this is not sufficient to ensure that the SHG is the “owner” of the activity. A critical test for this is to take responsibility for maintenance and replacement.

155 Another key governance principle – again promoting the sense of empowerment and ownership - is around the concept of “trade-offs, loss and risk”. This prevents the emergence of a bottom-up “wish list” - by more explicitly allocating SHGs a budget - which they can then decide how to allocate and use.

156 In practice, budgets are maintained and accounted for by “specialist” rather than by village or SHG. Once included in the village development plan, an activity is consolidated into a plan and budget and then implemented through an SHG. Although the project starts with a bottom-up participatory approach, control moves to the implementing agencies and is, effectively, driven through the technical divisions of their budgets. This is not to suggest the whole approach is top down; field staff and Jankars play an important role in negotiating and communicating between both project specialists and the community and within the communities.

157 It is important to recognise that many SHGs are functioning well. Clearly, in many cases, as the case studies show, project staff have established strong working relationships with SHGs and their members. In many cases, where there is strong leadership and an incentive to work with the project, the formation of a SHG will allow the group to continue working together and to access other finding sources.

158 However, the same lack of clarity and ambiguity as exists between the project and SHGs can be found in the relationship between the SHGs and the IGA entrepreneur or manager. As was noted in Section II, this is particularly a problem in GVT-supported villages where, in general, less financial discipline has been required of the SHGs and little or no aggregated information or accounts is available at decision-making levels.

159 **SHG and IGA manager** – Responsibility for management is often shared between the group and the Jankar, with respect to setting of fees, responsibility for repairs, etc. In the GVT supported case study villages, there is little expectation or likelihood of repayment of many assets.

160 **SHG and borrower** – The terms of the loan are rarely set out clearly in terms of responsibilities, schedules and repayment regimes. In IFFDC supported SHGs repayments regimes have been rigorously maintained.

161 **SHG and members (savers)** – In several cases, there was evidence of uncertainty as the purpose of the regular savings. Members appear to be unsure about the ownership of the SHG deposits with some treating the “monthly deposits” and “compulsory wage deductions” as entry fees to wage employment. Further, this ambiguity is further evidenced by the lack of concern by members as to some of the decisions made about the SHG.

162 The result of this lack of clarity around relationships and contractual arrangements is that there is a danger that, post-project, some of the (contractual) relationships currently supported by the implementing agencies will be contested and this will allow individuals to default or otherwise capture project assets.

C.30 Sustainability and Viability of the Jankar System

163 An innovative feature of the project, developed during Phase I and emphasised in Phase II, is the use of the jankar system. Jankars are local people either with prior expertise or trained by the project to support project activities. The advantages of the Jankars are threefold - they:

- provide on-the-spot support;
- should provide continuity in the post-project period; and
- cost-effective since they are paid local wages. This also opens up the possibility that the jankar system could be funded from locally generated fees and contributions.

164 The sustainability of the Jankar system is connected to both the sustainability of the SHGs and to the viability of the IGAs. In both cases, there is evidence that many IGAs will not be replaced or repaired and that entrepreneurs cannot afford the costs of support. In the case of the livestock Jankars, where the returns were relatively high, the Jankars will need to compete with Government veterinary staff, which will be difficult without the incentive of free drugs and medicine. Doubts were also raised, by some group members interviewed, over the skill levels of some jankars especially when required to treat valuable assets such as large ruminants.

C.31 Conclusions

165 The institutional and social analysis recognises the positive relationships which have been formed between project staff and local communities especially in poor, marginalised and inaccessible area.

166 The main concerns raised by the institutional analysis relate to the way the project is perceived by both communities and project staff, Some of these issues, relating to the role of the SHG and more widely to project governance, were raised in the earlier section. However, there is still a huge range of different understanding of the project purpose.

167 The sustainability of project institutions varies in significance: in some cases, benefits are largely on-farm and these can be continued with community or external support, while in other cases, sustainability is totally dependent on community institutions and organisation. This, in turn, depends on the sense of ownership and affiliation that members develop towards their SHGs. Although people were generally very positive, the analysis was concerned by the some of the perceptions encountered (such as membership of the SHG as a means to wage employment opportunities) and the practices observed (such as the lack of clarity around loans/IGAs and, in the case of GVT, the lack of summary accounts for each SHG).



5 | Conclusions and Recommendations

5 Conclusions and Recommendations

C.32 Introduction

168 In this final section of the main CBA report, we first set out our overall conclusions by bringing together the financial, economic and institutional analysis and addressing each of the initial questions posed for the CBA study in Section I (paragraph 4). This is followed by a list of specific recommendations which have come out of the analysis. The exercise of undertaking a CBA study throws up new or different perceptions and insights on the project and as a result we have a number of recommendations which are set out for consideration during the remainder of the project period.

C.33 Conclusions

169 **Financial returns and sustainability** – The first issue for the CBA study to address was to estimate the financial returns and viability of project activities for different stakeholders in order to assess their incentive to continue after the project finishes. This, in turn, partially determines the overall sustainability of the benefit flows.

170 **Land owners** – The financial returns to farmers were based on the NHIS study, which shown positive returns. An increase in water supply and/or more accessible water sources almost universally results in increased and more regular crop production. Furthermore, since the project pays all the investment costs, the risk to farmers relates largely to increases in their operating costs and any additional risk of crop failure. The additional crop failure risks associated with the new varieties promoted by the project are thought to be low; the new varieties and technologies have been tested in farmer's fields - under component "C" of the project. However, the institutional arrangements around the management of communal assets, such as anicuts, will determine the maintenance and regularity of the additional water supply on which the increased productivity depends. These, in turn, depend on the SHG or WUA ensuring the strict financial discipline needed to operate, repair and, eventually, to replace these assets. Given the apparent financial benefits (and assuming that the relative returns to migration over local production do not increase substantially), there is likely to be direct pressure from beneficiaries for good asset management. Overall, therefore, the prospects for continued incremental crop benefits from additional water and new varieties and crop technologies are considered reasonably positive – provided the institutional arrangements remain in place. Incremental crop benefits are the major source of the overall economic returns.

171 **Livestock owners** – The introduction of new breeds always increases the exposure of farmers to disease and risk. Some of these risks are mitigated by the project support to veterinary and other services. However, without a supply of subsidised drugs, the post-project viability of the veterinary jankars is uncertain. Animal production is also heavily dependent on fodder which is in limited supply and

on a good regular water supply. The prospects for continued increased livelihood production are probably reasonable.

172 **Wage labourers** – Official and project wage rates are attractive to many people. There is little work available and out migration is still the main alternative source of income for most people. As growth rates continue in India as whole and relative wage rates outside the area increase, the pressure for migration will also increase. Post-project it is unlikely that local employment prospects will improve.

173 **Group enterprise jankars** – Many of the group managed activities involved larger outlays and showed lower returns. Usually the reason for this was that there was insufficient demand or usage to cover full costs. Prospects for sustained use are limited because of their economic viability and their dependence on the effective continuation of the SHG.

174 **IGA borrowers and jankars** – These loans tend to be smaller than for the group enterprises and have higher financial returns than for the group enterprises. The prospects for sustained use in the medium term are positive. The main danger is of over supply of the same enterprises into limited markets.

175 **SHGs** – From a purely financial point of view, many SHGs appear to be potentially both viable and sustainable. However, institutionally, there are concerns about the capacity of SHGs to manage the savings and credit component without continued external support. Further, the role of the SHG differs between implementing agencies - as to whether it is an autonomous agency or merely an instrument through which the project delivers services. Without post-project external support, the prospects for many SHGs is limited.

176 **Savers and group members** – The security of savings depends on the quality of the SHG's loan portfolio. On average, about half of the total contribution is on loan and remainder is on deposit. There is no information availability about the quality of the loan portfolio and therefore the extent of the risk to which members are exposed. Members do not seem very concerned – perhaps as a result of the lack of information, but also because the regular payments, voluntary wage contributions and compulsory wage reductions were seen as “entry conditions” to access the wage employment. Nonetheless, many SHGs have large balances for which there are no clear mechanisms to distribute back to members if the SHG was to close. The prospects of SHGs continuing to function as savings and credit programmes are limited – except in the case of IFFDC supported villages – and this raises dangers as regards the disposal and distribution of savings balances, outstanding loans and group assets.

177 **Economic returns** – The second key question raised at the start of this report, relates to the economic returns to society as whole:

- **Investment returns** – The EIRR over 20 years was 10 percent which is just less than the 12 percent test rate used for projects in India. However, this is very commendable, given the very poor resource base, and higher than was expected. Bluntly stated, it is difficult to imagine any investments in this area which would have produced high economic returns. A key issue relates to whether the assumptions used in the analysis, especially about the

sustainability of incremental benefit streams, are valid. The EIRR falls to zero percent if incremental benefits do not extend beyond 12 years.

- **Employment generation** – The project has generated considerable wage employment opportunities which has temporarily reduced out-migration and allowed some people to reduce their debt while others will not have increased their indebtedness.

178 Another key question, not directly addressed by the CBA study, was an examination of the relative cost of WIRFP compared to other similar programmes undertaken by government and NGOs. In practice, the project uses the same rates as government for development “works” and Jankars are clearly less expensive than fully paid extension officers. Although further analysis is required to determine whether the project promotes more intensive field operations, differences in total costs are likely to relate to the purpose and use of “overhead costs”.

179 As well as producing direct economic benefits, project activities promote better environmental services, in terms of soil and water conservation and improved cropping technologies. These external benefits have not been measured and therefore are not included in the analysis.

180 **Effectiveness of the institutional and social arrangements** – The most critical social institution to sustain group and community activities after the end of the project and to determine the distribution of project assets and benefits is the SHG. These institutional and social arrangements, not all of which are under the control of the project, determine the overall returns as much as the financial and economic incentives. In particular, the sustainability of activities, including post-project operation and maintenance of the assets created by the project, depends on the continuation of effective institutional arrangements.

181 Clearly, strong personal relationships have been developed between project staff and SHG leaders, members and jankars. This people friendly approach has assisted project implementation at all stages and resulted in positive feedback.

182 However, there are concerns about the capability of the SHGs to sustain project activities in the future. This is evidenced by the lack of “control and ownership” which SHGs exercise over the savings and credit arrangements, where there is both a lack of clarity over the loan and repayment conditions and, in the case of GVT supported SHGs, the absence of village summary accounts, which can be used to determine progress. The reasons for the ambiguity over the role of SHGs relate to the governance arrangements associated with the initial project approach (i.e. the distribution of power and voice between project, village and SHG) and the rigid accounting rules of the implementing agencies.

183 Comparison with other schemes and projects requires further clarification of the conceptual framework for the project. At different times and by different people, the project is seen as:

- an investment in productivity;
- public works and employment generation and
- a savings and credit programme.

184 Although these are not mutually exclusive perceptions, overhead expenditure can only be justified in terms of the priority assigned to each of these objectives. Clearly, the relationship between investment in productive assets and employment generation is positively related. However, justification for the development of a savings and credit programme and even the promotion of participatory planning and group formation is not so clearly made - given the role of these institutions in project implementation processes.

185 Many of the cost norms for the project are based on government standards and, therefore, are similar to other projects. However, the financial and institutional arrangements required to ensure the success and continuation of the unique features associated with the project (viz., participation, SHGs and the Jankar system, the link between savings and credit programmes and investments) remain uncertain and in many cases uncertain. Realisation of the surprisingly high estimated economic returns depends critically on the arrangements put in place to secure these benefits in the post project period.

C.34 Recommendations

186 The main recommendations from the CBA study were grouped into three themes:

- **SHG savings and credit programme** – Some SHGs have relatively large balances and even own valuable (communal) assets. However, despite this there is scant recognition that this is a full grown micro-finance programme in place and therefore that there is a duty of trust towards safeguarding the savings of poor people. Loans are being made without clear terms and repayment schedules. In the case of GVT, there are no SHG level accounts.
- Even if all individual savings could be repaid from balances and outstanding loans, the danger remains that when the project finishes, group funds and group assets will either remain unclaimed or will be grabbed by local elites.
- We recommend that action is taken, largely by GVT to ensure that:
 - sound micro-finance principles and standards are adopted everywhere;
 - financial discipline is actively promoted, including the preparation of summary accounts for each SHG;
 - agreements between borrowers and SHGs are reviewed to ensure that there are clear repayment terms in place and that borrowers are fully aware of the loan conditions, including responsibility for repairs and replacement and so on;
 - workshops are conducted in all villages to inform members of their holdings and of the arrangements to access their shares, and
 - procedures are developed, and in place, to be able to close down SHGs, where minimum standards are not possible or where SHGs are unlikely to

survive post-project, and to make a “fair” distribution of any group balances and/or assets before the end of the project.

- **Results-based programming and budgeting** – organises the budget and the conceptual framework of the project around the targeted population (i.e. results) rather than around inputs (i.e. traditional line item accounting) or around activities (i.e. disciplines and organisational structures). Currently, a results-based focus sits uncomfortably with the traditional public sector corporation financial management system.
- Budget and expenditure information is maintained at state office level by activity/specialist, but is not consolidated at a village level. This means that management planning and monitoring is activity-focused rather than client focused. The budgets are prepared on the basis of the initial village PRA. However, there is no allocation for a village, no village development plan and no governance mechanism whereby a village would decide or prioritise (trade-off) between different investment options. And, consequently, there is no consideration for recurrent costs or for capital replacement.
- Results-based programming and budgeting has additional benefits as it increases the focus of the programme and encourages multi-sectoral and team working.

187 We recommend that both GVT and IFFDC explore the potential to use results-based programming and budgeting. Increasingly, state governments and some NGOs now have more flexible financial mechanisms than those used in GVT and IFFDC.

- **Business plans** – The WIRFP promotes new organisations and new activities and exposes often very poor people to new risks. Promotion of such innovation involves a “duty of care” by the promoting agencies to ensure that both the agency itself and the concerned individuals and groups have sufficient information and understanding of the risks involved to be able to make informed decisions.
- Business plans which bring together all the activities of a specific agency or stakeholder into a longer term framework including recurrent costs and residual values can contribute to this understanding.
- The business plan approach emphasises the autonomy of the agency, investor or entrepreneur for whom the plan applies and therefore provides a less project orientated perspective.

188 We recommend greater use of business plans within the project and as a means of ensuring adequate support is in place at the end of the project to secure project benefits into the future. This will require the development of internal capacity.



A1 | **Proposal to Validate net Incremental Income and Estimates using Area Measurements**

A1 | Proposal to Validate net Incremental Income Estimates using Area Measurements

Background

1 The CBA study for Component “A” depends heavily on the results of the Net Household Income Study (NHIS), which was based on careful analysis of small random study. The results of the study show considerable variation between households and between districts. The NHIS produced incremental benefits by well being class in terms of household income, which where translated in to village benefits on the basis of the number of households per well being class in the village. This approach, not unreasonably, assumes that farmsize differences are captured in differenced between well being classes.

2 In order to validate these results, an alternative approach to measuring crop incremental benefits is proposed.^{1/}

Methodology

3 The proposed approach is based on building up village incremental benefits from estimates of:

- area and cropping patterns, before and after, the project intervention and
- gross margin crop models.

4 Since the data requirements are more detailed than those required for the CBA study – comparable to the data required for the NHIS - it is proposed to limit data collection to three out of the four villages^{2/} used for the institutional and social study.

Step 1: Preparation of Cropping Pattern Tables and Maps

5 The choice of village assumes that it is possible to obtain good village-level cropping pattern data. If this is not possible, then villages from the larger random sample of 20 core villages should be used instead.

^{1/} The other issue which could be revisited in order to improve the quality of the analysis is the economic wage rate. Further thought could be given to the assumptions used in the main report, once the migration labour study has been completed.

^{2/} In one of these villages (Kadwapada) the attribution of benefits to the project is difficult since another project has been carrying out similar programmes and so it is proposed to drop this village from the sample.

Step 2: Development of Gross Margin Crop Models.

6 This should be based on a series of informal interviews in the selected villages, with key informants. This information will be compared with published farm management data for the main crops and with data from the “Participatory Crop Technology Development” component in order to develop appropriate local models.

Step 3: Re-estimating Incremental Crop Benefits

7 Using the cropping patterns and crop model data, incremental crop margins will be re-calculated on village basis.

8 The output of this exercise will be a validation (or otherwise) of the data used in the main CBA study.

9 The results can be used to rerun the sensitivity analysis presented in the main report.



A2 | Suggested Methodology to Undertake a CBA Study in “Prassar” Villages

A2 Suggested Methodology to Undertake a CBA Study in “Prasaar” Villages

Background

1 Component “B” of the project includes the costs of activities outside the core village. This includes the challenge fund, which aims to promote activities with government and NGOs and which was started towards the end of the project, as well as activities in neighbouring or “prassar” villages. These villages are situated close to the core villages covered under Component “A”. They receive less intensive and more variable, but less costly support from Jankars. The formation of SHGs and the start of a regular savings programme as well as the availability of a jankar are the main criteria for inclusion as a “prasaar” village. Benefits are expected to be significant although there may be even greater variability between incremental benefits in prasaar villages than was found in core villages

2 Ideally, the design of the prasaar CBA study should parallel the methodology used for the core village analysis, but take cognisance of important differences. These include the likelihood of:

- greater variation in incremental benefits between villages as there has been less intense and more variable input into these villages
- less reliable information and more data accessibility problems than were encountered during the core village study.

Methodology

3 In the light of these concerns, a tentative methodology is set out below:

Step 1

4 Develop a conceptual framework for interventions in the prasaar villages and identify expected benefits. This will require a qualitative analysis of several villages (perhaps around the same 4 villages as were used for the institutional and social sub-sample) and discussion with field staff.

5 The output of this step would be a conceptual framework and map.

Step 2

6 Prepare a table of all prasaar villages – showing year in which intervention started and the type of intervention.

7 The output of this stage is the population for consideration in the sample.

Step 3

8 Stratify the population in terms of the likely incremental benefits. The stratification should be based on the perception of field staff, as to the likely impact of the project in terms of both the number of people affected and the size of the impact. The criteria to be used to assess each prasaar will be developed following Step 1. The aim will be stratify each village into four roughly equal strata corresponding to the following categories:

- “successful”;
- “moderately successful”;
- “struggling”; and
- “failed or failing”.

9 This will require considerable time from project staff. Although this may also have benefits for management and planning of future support, another option would be to use a two-stage process and randomly select a number of core villages, as was done in the Component “A” CBA study from which to prepare the stratified population.

10 The output of this stage will be a stratified population list.

Step 4

Select a random sample of six prasaar villages from each of the four strata. In order to minimise travel down and reduce costs, once a core village has been selected, a number of associated prasaar villages could be selected. If this option is taken, then the sample size should be increased.

11 The output of this stage will be a stratified random sample of about 24 prasaar villages.

Step 5

12 Carry out field studies in the selected villages, focusing on prasaar activities (i.e. exclude large WRD structures), but include:

- SHGs and their functioning, and
- IGAs and the returns to jankars.

13 The output of this stage would be data on:

- **Incremental benefits** – This data should be collected in a similar format to that used for the core village study. The key issue is to determine whether the less intensive inputs have resulted in lower net increments than those assumed in the core village study (and NIHS study).
- **Coverage** – This data relates to the number of households, areas etc which have been affected by project activities.

Step 6

14 Prepare a table of project costs on prasaar interventions from discussions with field and other staff, including overheads, development and recurrent costs

15 The output of this stage would be a cost table.

Step 7

16 Prepare an economic model of the costs and benefits for each of the four categories of village. The models from each category can then be aggregated into a project-wide model by weighting the returns from each stratum by the number of villages in each category or if possible the total cost invested per stratum.

17 The output of this step, and the final output of the study, is a report, setting out the economic returns in a format which can be aggregated to the core village returns of component “A”.

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CNTR 04 5752

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ADDRESS
Enterplan Limited
1 Northfield Road
Reading RG1 8AH, UK

TELEPHONE
+44 (0) 118 956 6066

FACSIMILE
+44 (0) 118 957 6066

EMAIL
enterplan@enterplan.co.uk

WEBSITE
www.enterplan.co.uk



Annexes



Background



AN1 | **Terms of Reference**

AN1 | Terms of Reference

Terms of Reference for Cost-Benefit Analysis

Background

The Western India Rainfed Farming Project Phase two (WIRFP) is a £28 million project supported by DFID India. The project aims to sustainably enhance the livelihoods of 675,000 poor tribal people in one of the poorest, drought prone and environmentally degraded regions of India, and to disseminate the technologies and approaches developed widely in the region. It is being implemented by Gramin Vikas Trust (GVT) and the India Farm Forestry Development Cooperative (IFFDC) over a seven-year period (1999-2006).

The first phase of the project (1993-1999) cost £3.8 million. It was implemented by Krishak Bharati Cooperative Ltd (KRIBHCO) and was successful in developing and implementing an innovative, participatory approach to farming systems development and in enhancing the livelihoods of 50,000 poor women and men farmers in 75 villages. This was largely achieved with new crop varieties, minor irrigation, tree planting, joint forest management and soil and water conservation with reduced subsidies. The economic internal rate of return of the project, including international consultancy costs was about 39 percent. Phase one pioneered poverty- and gender-focused innovations, which are being used by others and have had some significant impacts on government policies and programmes. Phase two includes an innovative component for support to migrant labourers from the project area, which migrates seasonally to urban centres in the three states in search of work.

The goal and purpose of WIRFP, Phase two is:

- **Goal:** More effective policies and programmes, which reduce poverty in rainfed areas of India, implemented widely by 2010.
- **Purpose:** Livelihoods of 675,000 poor rural people in selected areas of western India sustainably enhanced and technologies and approaches used widely disseminated.

In order to achieve the purpose of the project GVT and IFFDC will deliver the following outputs:

- Component A: Livelihoods of 465,000 poor people enhanced in 275 'core' and 550 'proximal' villages [GVT and IFFDC]
 - Farmer managed groups, village specialists (jankars) and participatory planning system established and operational in core villages.

AN1-1

- Appropriate farming systems development technologies tested, adopted and implemented in core villages.
- Complimentary income generating and expenditure saving and off-farm activities for women and men promoted in core villages.
- Appropriate project technologies disseminated to farmers in 550 'dissemination villages' close to the 'core villages'.
- Component B: Project technologies and approaches disseminated through partnerships [GVT].
 - Appropriate project technologies actively promoted to a further 500 villages via GOs and NGOs and disseminated to other organisations in India.
 - Establishment of a Challenge Fund.
- Component C: Participatory Technology Development [GVT]
 - New farming systems technologies generated, tested and made available in project villages and more widely in the region.
- All components
 - Decentralised project management systems established and operational in GVT and IFFDC.

The total project cost is £28.0 million, which is made up as follows:

- A DFID grant of £20.0 million (71 percent) channelled through the Government of India to GVT and directly to IFFDC.
- GVT and IFFDC £1.0 million (three percent), provided by their parent organisations [KRIBHCO and Indian Farmers Fertiliser Cooperative Ltd (IFFCO)].
- Government organisations £3.5 million (13 percent) and community groups the equivalent of £3.5 million (13 percent), for development schemes in project villages.

The Mid-Term Review (MTR) of WIRFP was held in October 2003. The team included members from GVT, IFFDC, Government of India, Government of Madhya Pradesh and DFID India. The MTR recommended that GVT and IFFDC undertake more systematic evaluations of project interventions (for example, to assess financial viability, cost-effectiveness, socio-economic impact, sustainability), for which data on the costs and benefits of project interventions is needed. This information is needed both to (a) ensure that the project focuses on those activities that give the greatest benefits to poor people and (b) in order to interest government and/or other agencies in scaling-up these interventions in the long run.

AN1-2

GVT and IFFDC have requested the assistance of specialist consultants to assist them in carrying out these evaluations and to build their capacity to do so in future.

Purpose of the Study

The purpose of the study is to collect data on the costs and benefits of key project interventions in order to:

- Compare the different WIRFP activities with each other in order to identify the Project's impact on livelihoods and help prioritise future interventions and areas of work.
- Compare WIRFP activities with similar externally aided projects/programmes and Government of India government schemes to identify differences in approach and interventions promoted and assess their relative viability.
- Train WIRFP staff in how to evaluate the sustainability and viability of enterprises and build their capacity to undertake such work on an on-going basis.

The results of the study will be used by GVT and IFFDC in business planning, identifying future focus areas and in the end-of-project economic assessment.

Scope of Work

The consultants will familiarise themselves with the project (background, context, activities) and then assist GVT and IFFDC to:

- Develop an analytic framework to compare rates of return adjusted for risk, for a sample of different WIRFP activities with similar government or other NGO run projects/ programmes. The activities will include but not be limited to new crops, soil and water conservation (contour bunds, gully plugs, cross-dams, pumps), joint forestry management and similar schemes, livestock schemes, and other enterprises.
- Prepare a table showing the different types of land-based and non-land-based interventions supported by WIRFP, and relate this with actual project expenditure to date;

For the selected activities:

- Identify and quantify all the relevant costs (in particular identifying cost to replicate the project in new areas) and benefits, commenting on the basis for these estimates and degrees of uncertainty involved.
- Estimate the returns (including costs of administration, capacity building and project staff time), presenting data in a disaggregated form to facilitate discussion.

AN1-3

- Assess both financial returns to the household and social cost-benefit analysis, taking into account externalities, transfer payments, and shadow pricing of labour.
- Estimate the expected rate of return based on sensitivities to key risks – both positive and negative risks.
- Collect easily available unit costs and returns for similar activities in government/ non-governmental run programmes and estimate any 'hidden' costs or benefits in implementing these programmes, which need to be taken into account in making comparisons with WIRFP.
- Compare WIRFP norms with the standard/government norms, analyse the findings and determine whether government plans to change its norms;
- Compare the costs and benefits of different WIRFP interventions using the actual unit costs, administrative inputs, staff time and rate of returns collected and analyse the findings.
- Analyse and comment on the budgetary implications and sustainability, if the project were to be adopted by the state government.
- Present the findings of the study to GVT, IFFDC and DFIDI in a report and at a workshop in Delhi.

The consultants will involve project staff fully in the study and build their capacity to undertake this type of analysis in the future. A framework (including resource needs) for an on-going programme of assessment will be prepared with project staff.

The consultants will establish with GVT, IFFDC and DFIDI a steering group, which will manage the consultancy (for example, establish and agree tasks, schedules and outputs; review progress at key stages).

Expected Outcomes and Deliverables

The consultants will:

Days	
1-5	Familiarise themselves with the project by reading background documents and through discussions with GVT and IFFDC and prepare the methodology for the study.
6-48	After approval of the methodology, train GVT and IFFDC survey teams and supervise data collection and analysis (three weeks with GVT and three weeks with IFFDC).
49 -50	Collect information on similar government or non-governmental programmes.
51	Meet the Steering Committee and DFIDI to share initial findings.
52-59	Draft report not exceeding 20 pages, including a one page executive summary; annexure could be added separately) and submit to GVT, IFFDC and DFIDI).
60	Meet the Steering Committee and DFIDI to discuss the draft report.
61-62	Finalise the report and submit to the WIRFP and DFIDI (within two weeks).

Expertise, Timing and Conduct of Work

A three-person team consisting of a Team Leader, an agricultural economist and a social development/rural livelihoods specialist will undertake the assignment. The Team Leader will be an economist with a proven track record in leading evaluation studies of livelihood projects and capacity building in this area. The Team Leader will be responsible for ensuring the overall quality of the study. Both the agricultural economist and social development/rural livelihoods specialist should be well versed with national and state government livelihood schemes and with some experience in this kind of work. A sound knowledge of government's norms on livelihoods and the policy thinking behind those norms would be essential. The Team Leader will have inputs at key stages of the study (30 person-days) while the other two consultants will work full-time (62 days each). The total consultancy input will be 154 days.

The study will be undertaken between July and September 2004.

The consultants will be briefed by DFID India before commencing the work and will work in close co-operation with DFID India and WIRFP staff. As a key aim of the exercise is to compare WIRFP with other similar projects/schemes, the consultants will meet relevant Government of India ministries and selected state governments to obtain relevant information. The consultants will be responsible for all logistical arrangements, including travel and boarding at the various places they visit.

Contacts

The DFID Economic Adviser (Loga Gnanasambanthan) with the Project Officer (Sonali Chibb) will be the key contacts in DFID India for the consultants. Shri Amar

AN1-5

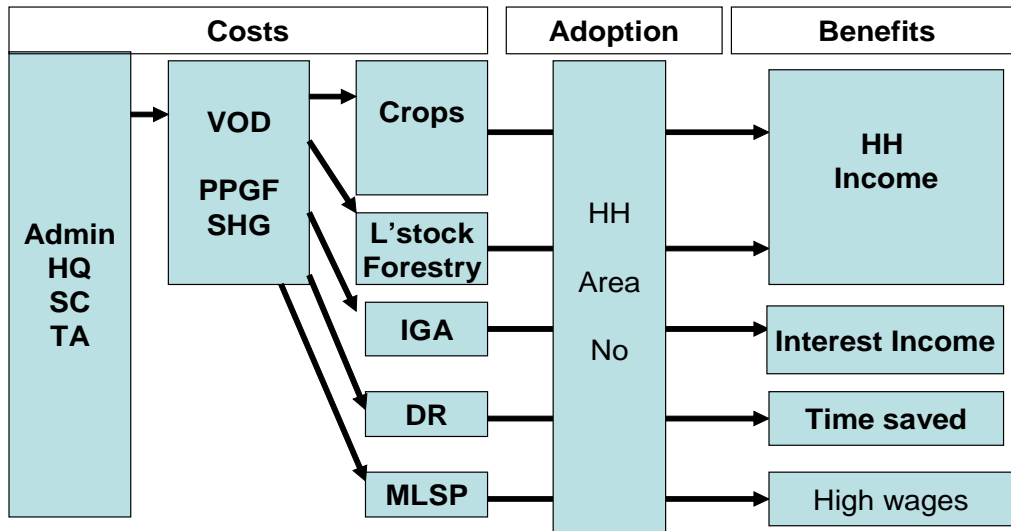
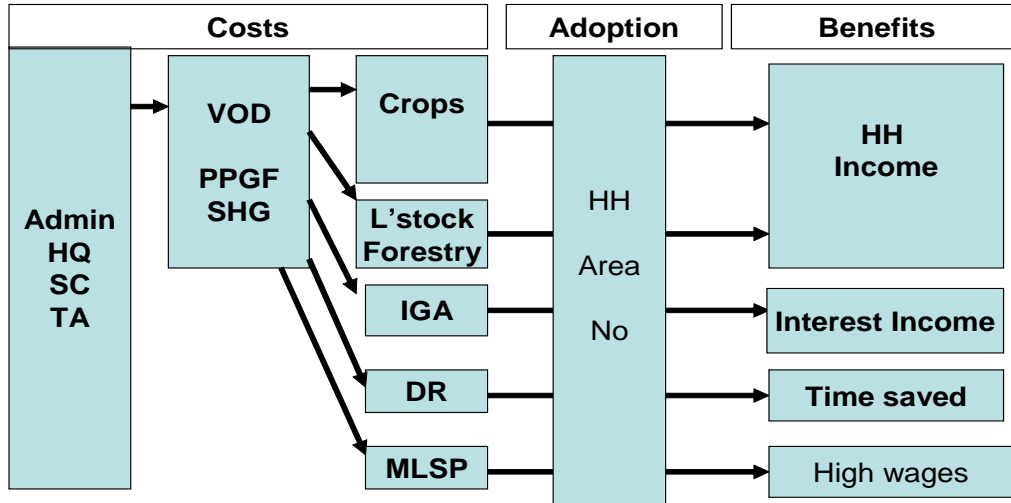
Prasad (CEO, GVT), Dr P.S. Marwaha (CEO, IFFDC) will be the key contacts in GVT and IFFDC.



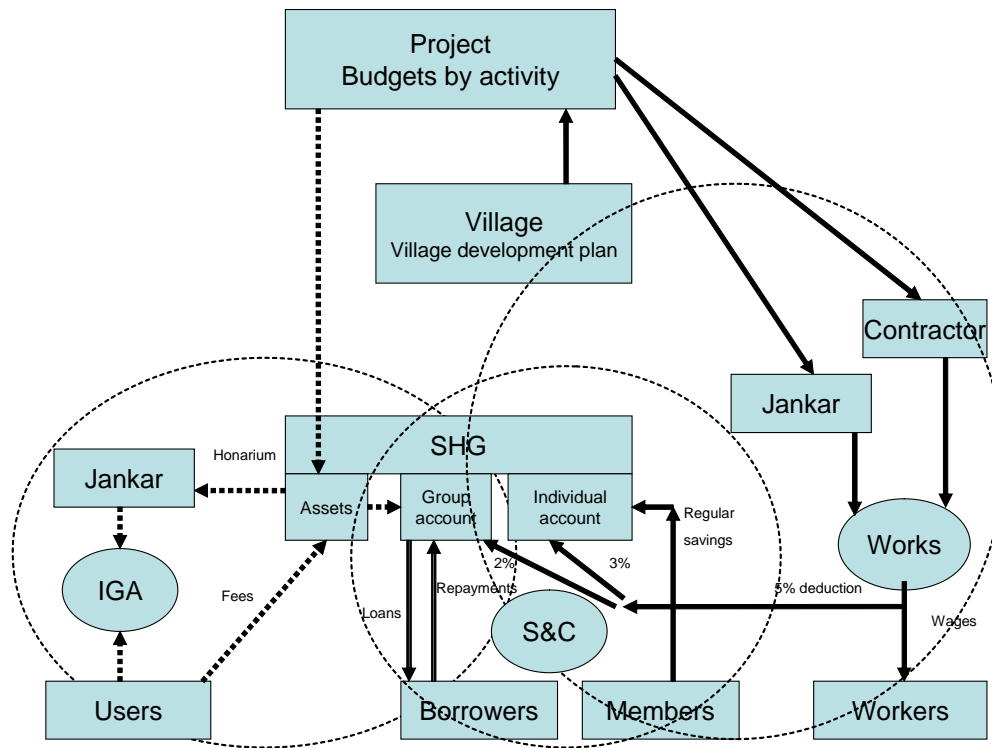
AN2 | Analytical Framework

AN2 Analytical Framework

Project Framework



Project Processes





AN3 | **Study Methodology**

AN3 Study Methodology

Introduction

Western India Rainfed Farming Project (WIRFP) Phase two project is implemented by Gramin Vikas Trust (GVT) in 202 core villages covering three states comprising 20 villages in Gujarat from financial year 1999 to 2000, 72 villages in Jhabua district from 1999 to 2000 and 50 villages in Ratlam district from 2001 to 2002, in Madhya Pradesh and 37 villages from 2000 to 2001 in Banswara district in Rajasthan. Indian Farm Forestry Development Cooperative (IFFDC) phase two operation is conducted in 25 villages from 1999/2000 in Pratapgarh district in Rajasthan and since 2002 to 2003, in a further 50 villages in Ratlam district in Madhya Pradesh. Details are summarised in Table A3.1.

Table A3.1: Core Village Entry by Year

Implementing Agent State / District	1990/1	2000/1	2001/2	2002/3	2003/4	Total
GVT						
1 Gujarat						
Dahod	5	15	-	-	-	20
2 Madhya Pradesh						
Jhabua	22	19	6	25	-	72
Ratlam	-	-	18	32	-	50
3 Rajasthan						
Banswara	-	37	14	9	-	60
Subtotal	27	71	38	66		202
IFFDC						
1 Rajasthan						
Pratapgarh	6	19	-	-	-	25
2 Madhya Pradesh						
Ratlam	-	-	-	50	-	50
Subtotal	6	19	-	50	-	75
Totals	33	90	38	116	-	277

Source: GVT / IFFDC Coordination Office Ratlam, Madhya Pradesh.

GVT = Gramin Vikas Trust, IFFDC = Indian Farm Forestry Development Cooperative.

Village Sample Selection

At the inception workshop (August 2004) it was agreed that the cost benefit analysis would be conducted on a sample of 20 core villages from the 90 villages in which

AN3-1

GVT and IFFDC activities commenced during the financial year 2000 to 2001. Field specialists from the four representative districts (GVT three and IFFDC one) presented a list of villages in which project development activities had been initiated in the financial year 2000 to 2001. From these lists a random sample of 20 villages (GVT 14 and IFFDC six) were selected for detailed cost assembly. Details of the selected villages are given in Table A3.2.

Table A3.2: Villages Selected for Cost Benefit Analysis

	GVT			IFFDC
State	Gujarat	M Pradesh	Rajasthan	Rajasthan
District	Dahod / Urolhara	Jhabua / Dhao	Banswara / Dungarpur	Pratapgarh
	Jadha ^{1/}	Bagoli	Bakaner	Chhayan
	Kasotiya	Borwa	Bhuripada	C Mayanga
	Poyali	Chamjar	Gara ^{1/}	Dharia Kheri
		Chenpura	Merana	Kachotia
		Kadwapada ^{1/}	Sundripanda	Moti Kheri ^{1/}
		Padabanda		S Ka Khera

Source: Cost Benefit Analysis Study January 2005.

GVT = Gramin Vikas Trust, IFFDC = Indian Farm Forestry Development Cooperative.

^{1/} Selected for in-depth social appraisal.

Team Resources

Gramin Vikas Trust (GVT)

- CBA Study Coordinator Mr Akhilesh Parey
- CBA Coordinator Ms Madhura Rawat
- CBA Supervisors Mr Naresh Bhal (Ratlam / M Pradesh)
Mr Jeevan Porwal (Ratlam / M Pradesh)
- Field Resource Team Mr Sandeep Panwar (Dahod / Gujarat)
Mr Dinesh Agarwaj (Jhabua / M Pradesh)
Mr Sunil Yadav (Banswara / Rajasthan)

Indian Farm Forestry Development Cooperative (IFFDC)

- Project Coordinator Dr RPS Yadav
- CBA Supervisor Mr Rajesh Sen
- Field Resource Team Mr Vinod Lasod (Pratapgarh)
Mr Anish Rizvi (Pratapgarh)

AN3-2



Case Studies



AN4 | **Jada Village**

AN4 | Jada Village

Profile of Gujarat^{1/}

Gujarat state came into existence as a separate State on first May 1960. The State is situated on the west coast of India between 20-6' N to 24-42' N north latitude and 68-10'E to 74-28'E east longitude. It is bounded by the Arabian Sea in the West, by the States of Rajasthan in the North and Northeast, by Madhya Pradesh in the East and by Maharashtra in the South and South East. The State has an international boundary and has a common border with the Pakistan at the northwestern fringe. The two deserts, one north of Kutch and the other between Kutch and the mainland Gujarat are saline wastes.

The State has a long coastline of about 1600 kms. This coastline is the longest among all States of the country. For the purpose of administration, Gujarat State at present comprises of 25 districts, sub-divided into 226 talukas, having 18618 villages and 242 towns. Gujarat has a geographical area of 1.96 lakh sq.kms. And accounts for 6.19 percent of the total area of the country. With just five percent of the India's total population and six percent of geographical area, Gujarat contributes to 16 percent of the country's total investment, 10 percent of expenditure, 16 percent of exports and 30 percent of stock market capitalization. The state's annual growth rate has been 10 to 12 percent for the last five years. As per the latest data of Centre for Monitoring Indian Economy (CMIE) of January 2003, Gujarat stands first in industrialization in India. Projects worth Rs 33,958 crores are under implementation.

63 percent of the total population of the State resides in rural areas. Seven percent of the total population of Gujarat belongs to SC community while 15 percent to the ST community. The sex ratio is 921.^{2/}

Profile of Dahod District

Dahod district was carved out from the erstwhile Panchmahal district of Eastern Gujarat in 1997. The district has M.P in the east and Rajasthan on the Northeast, Vadodara on the south and Southwest, Kheda in the west, and Sabarkantha in the northwest. The district has been divided in seven talukas. The district is quite backward when indicators like agriculture, irrigation, forest, and education are considered. This is a poor region with only 20 percent of the arable area under irrigation. This is low in comparison to the State average of 36 percent. Literacy rates

^{1/}
^{2/}

Source: Official website of Government of Gujarat.

There is very little information available on the rural situation of Gujarat. Interestingly there is no Department of rural development. The general thrust of the State is for industrialisation and for attracting investments. Unlike the States of M.P and Rajasthan there is no Human Development report prepared for Gujarat.

AN4-1

are also low at 45.20 percent. Dahod district accounts for 3.23 percent of the population of Gujarat State. 90.45 percent of the total population is in rural areas and 76.8 percent (ST) of the rural population is ST. The major caste group are Bhils, Patelia and Rathwa. The sex ratio of Dahod district is 985 as per 2001 census.

Agriculture and forest form the backbone of the economy of the district with 80 percent of the population dependent on the same. This is a rainfall deficient district. The average rainfall is 659.36mm. However in 2000, 2001 and 2002 it received only 275mm, 520mm and 560 mm rainfall. This resulted in severe drought conditions and a situation of famine. Every 10 years there is one cycle of drought that sometimes lasts two to three years at a stretch. The HDI of Dahod is 40. It compares rather poorly with the overall State HDI of 114 and 192 of Gandhinagar district that happens to be the most developed district of the state. Kharif is the main crop with maize, rice and cotton as the important crops.

Profile of Jada Village

Jada village is in Limkheda Block of Dahod district. It is located 26 km from the GVT State office in Dahod. Jada is a large village spread into 18 Falias consisting of 450 (?) households. The village settlement is in a radius of three kilometers. Majority of the village for example 350 HH consists of the Patelia Bhils. 68 HH have not joined with the programme. These are: 35 HH from Parmar Phalia, 20 from Patel Phalia and 13 from Khodiyar Phalia. The reasons for not joining in were the fear that they will be forced to convert to Christianity and/or the implementing agency will capture their lands.

There is a primary school in the village. The middle school is three kms away in village Kheria. 80 percent of the village population is illiterate. The nearest PHC is located 12 kms away in village Dadela. The Bank is 10 kms away in village Jeykot. The nearest bus point is five kms away in Kamboi. People go to Limkheda (25km) or Dahod (26 Km) for the weekly market.

The total land area of the village is 1137 Ha. Of this 251 ha is arable. According to the PRA report 60 percent of the land is used for growing maize in the Kharif season and rest for Tuar, Udad, and Moong. Only 50 percent arable land is used in the Rabi season. Of this 30 percent of the land is used for growing chickpea. The rest is used for growing Wheat, Maize, pea, castor and Moong.

Almost 80 percent of the people in Jada migrate in search of labour opportunities.

Evolution of the GVT Intervention

GVT made its first contact in the village in June 2000. The usual sequence of village entry and rapport building, PRA (three days), followed by CPA (Community Problem Analysis, done with representatives of the village) and VWP (Village work plan that includes prioritisation of development options and fixing of modalities and negotiated terms and conditions of the interventions), implementation, review PRA and withdrawal has been followed. At present Jada is in the Pre-withdrawal phase.

The CPA had revealed the following problems:

- degradation of forest;
- soil erosion;
- shortage of water (both for irrigation as well as drinking);
- lack of electricity;
- lack of pucca housing; and
- shortage of fodder.

The CO spent a lot of time with the different groups when the SHGs were getting organized. In this process he developed a fair idea about the leaders in various groups and the problems the members wanted to address. The village work plan development took place almost nine months after the village entry was made. This period was good enough for the CO to build the necessary rapport with the community. Representatives from the different SHGs got involved in this process. It took a day to develop the VWP. This plan was shared with the entire village community.

Activities at the Village Level

As part of the field validation exercise the social development specialist has focused mostly on VOG that is a part of component B for example Development and only partially focussed on Component B called Dissemination for example the work in Prasaar villages

Component A Development Activities; VOG (Village Organisation Development)

Self Help Groups

Jada has 22 SHGs in all. There are five Women's groups, two mixed and 15 men's groups. According to the Jankaars, of the 22, 15 can be called as well functioning SHGs. Of these four are women's groups and 11 are men's groups. According to the people interviewed the weak groups are the ones where:

- members do not save regularly;
- members are away on migration eight months to the entire year;
- members do not attend meetings;
- social evils like drinking, fights regarding women, blind faith too have resulted in weakening the group; and
- members do not listen to the village Jankaars.^{3/}

^{3/}

At the time of the field visit 50 percent of the village had already migrated. So having separate meetings with the members of the SHGS was not very fruitful. This researcher decided to meet up with a cross
AN4-3

SHG 1: Shri Nijananad Gram Vikas Mahila Mandal

This SHG has a membership of 20 women (one-BO, two-M, 11 poor and six very poor). There is a parallel men's group Shri Nijananad GVM with a membership of 20 men. Some of them are husbands of the members in the women's group (two BO, two M, 11 P and five VP). The women's group meets twice a month (on the first and the fifteenth). They save Rs.30 pm. They did try to introduce a fine for late payments but it never worked. The group was started four years ago. Four members have migrated at present. They have been saving regularly and usually put in their savings on their return from migration. Three of them are from VP category and one from the Poor category. Only one member of this group has stopped saving since February this year due to financial difficulties.

The group got Rs.10, 000 as a revolving fund grant from the Taluka. This amount was divided equally among the group members (Rs.500 per member). This money was mostly used for seed and fertilizer purchase and/or for hiring labour for weeding.

Major loans taken by group members and the purpose:

- Kalawati ben Kanubhai (WBR Medium) Rs. 10000 for Bangle store; Rs. 2000 for fertilize and Rs. 500 SGSY for weeding;
- Rameelaben Mangalsingh Deval (B.O) Rs. 10000 for tractor;
- Narmada ben Ramsingh Deval (poor) Rs. 1000 for seed and fertilizer; 500 SGSY; Rs. 1500 for fodder;
- Parvati ben Ratansingh Rathod (Poor) Rs.5000 for seed and fertilizer; Rs.500 SGSY; RS.1500 fodder;
- Kalaben Dalsingh Rathod (poor) Rs. 500 SGSY and Rs.1500 marriage; and
- Surtiben Ganabhai Rathod (Very poor) Rs. 5000 for marriage, Rs.500 SGSY.^{4/}

This group has also got an SGSY loan for tent house. The amount of loan is Rs 1,30,000 and the subsidy is Rs. 1,20,000. Kanubhai (the husband of Kalavati and the Adhyaksha of the Manhamandal^{5/}) has paid a bribe of Rs. 12000 to get this loan. While the loan is in the name of 13 women members of this SHG, the real manager and owner of this activity appears to be Kanubhai. He has been paying the monthly instalment of Rs. 2500 for the past three months. He is very confident of making a neat profit in the coming season. The terms of contract with the group are however not clear. It seems to this researcher that he has simply used the group to get access to this loan and the group too is not questioning his cornering the entire benefit. Of

section of SHGs. Between the CBA team and the social development person a total of six SHGs have been covered. This gives a fair picture of the village.

^{4/} The SGSY loan of Rs.500 came at the time of agricultural season. It was mostly used by members for weeding and fertilizer.

^{5/} The federation of SHGs of Village Jada.

course the other side of the story is that Kanubhai is looked upon as a benevolent person who is always around to help people, so nobody is looking at this situation with suspicion. According to him, he plans to share part of the profit from this activity with the SHG. However as mentioned earlier the terms of this arrangement are not yet clear. What is going to be the gain to the 13 members is something only time will tell.

Kanubhai is a very enterprising person. He has maintained very good contact with the erstwhile Sarpanch of the village. She lives in Dahod and is fairly influential. It is because of his initiative and effort that 13 groups have got registered under SGSY and three have got a revolving fund of Rupees 10000 each. Three groups have got group loans for general purposes that they are on-lending to members. Kanubhai has been groomed by the COs in-charge of the village.

SHG 2. Baba Ramdevpeer Gram Vikas Mandal

This group was also formed in 2001. It has a membership of 20 persons. At the time of field visit seven persons had already migrated. The repayment record has not been very good in this group. Many of loans have been due for more than two years. The group consists of poor and very poor HH. Many loans are consumption loans. That too explains poor repayment record. The literacy rates are very low. The group has the potential to become a good group. Unfortunately the Jankaar has not been very active. It is really the responsibility of the GVS to ensure that the Jankaar becomes more active. According to the previous CO pushing the Jankaar to become more active can revive this group. The people have to be made to realise that ensuring repayments will strengthen the group.

SHG 3. Pranaath ji Gram Vikas Mandal

This group was made in 2001. It has a membership of 20. The group meets and saves regularly. They save Rupees 30 per month. The group has a total savings of Rs.21342. It has a grain bank that was started in 2001 with 25 quintals of grain (please see the section on Grain Bank).

SHG 4. Pranaath ji Gram Vikas Mahila Mandal

This is a parallel SHG of the women. This too has a membership of 20. They save Rs. 20 per month. Like other groups they too save regularly. Unfortunately this group chose a rather unviable activity as a group IGA. This case is documented below (the case of leaf plate making).

Income Generating Activities (IGA); Minor IGAs where GVT makes a grant to the group

Case 1: Grocery Store

Maniben Mansingh Dewal of Jayguru Malik Gram Vikas Mahila Mandal got a loan of Rs. 5000 for setting up a Kirana shop. She got this money on 25 October 2002. Maniben has been repaying Rs.50 every month to the SHG. However the term of the loan was fixed at two and a half years. Two years have already gone by and she has

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repaid only 1100 of the interest free loan of Rs 5000. Effectively a balance of Rs. 3900 has to be repaid in remaining six months. According to the ex-CO of the village it was the responsibility of the Mahamandal to keep track of loans. They have not done so till now. It was agreed that they would now have to look into all outstanding loans.

Maniben has not kept any record of the costs and the net profit she is making out of this activity. According to her she is able to meet the HH running expenses as well as repay Rs. 50 every month from the earnings of the Store. However she has no idea about the cost, sale and net profit. According to CO they never ran the store activity as an IGA. In fact they left it to the initiative and skill of the borrower. However this researcher is of the view that this is not a good argument, especially since the idea of IGA is to also help in grounding viable IGAs. Repayment for such loans continues to be an area of concern. Since this money does not come from the savings of the group there does not appear to be a group pressure for timely repayment. At the rate Maniben is repaying it will be 78 months (more than six years before the entire loan is repaid).

Case 2: Diesel Pump

This asset has been given to the group: the group in turn hires it out to various people. Here there is no pressure to recover the cost of the pump. The system is simple; the group charges a different fee from Members and non-members. The Jankaar gets a fee of Rs 10 per hour. He deposits the balance left after deducting all costs to the group. So what exactly is the benefit of the diesel pump? According to the people interviewed the benefits are as follows:

- The pump is available on time.
- The group members help each other to transport it and ensure that pump is made available to whoever needs it. Unlike the private pump operators who have to operate the pumps single handedly, the group pump can be shared even for handling (and not dependent on one individual). This means that the rotation of the pump is faster.
- The private pump charges are fairly flexible- could range from anywhere between 80 to 100 rupees an hour as compared to 60 (for members) and 80 for non-members. The private operators also charge for transportation (50-60 rupees).

While all this is fine, it needs to be ascertained if the group is earning enough to be able to replace the pump when it has run its life. According to the ex-CO, the cost of a diesel pump is Rs. 22500. The life of a pump is usually 10 years. The Jankaar has been depositing more than Rs 2000 per year. The ex-CO believes that they can easily deposit Rs. 4000 per year and that should be more than enough to take care of repair, maintenance and replacement of the pump.^{6/}

^{6/}

In case of Kadwapada, another GVT village covered in detail by the CBA team one of the groups has not been able to agree to pay for the repair of the diesel pump from the group funds. There was some
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Case 3: Leaf Plate Making Machine

This intervention was started in 2001 where the group (Pranaathji GVMM) was given a grant of Rs10000. The group bought a plate-making machine for Rs. 6000. It kept aside Rs 4000 for purchase of raw material (the idea originally was to make paper plates). The women however decided to make leaf plates as there was local market for the same. 12 women were engaged in this activity. They used to collect *Butea monosperma* (*Khakhra*) leaves and then make plates from these leaves. The activity did not last for long as the women were not able to even earn minimum wages. They were not able to market their stock. The total turnover was Rs.3647 over a period of XX years and the expenditure was Rs. 375. They deposited Rs. 2150 with the group. There was no viability assessment done. The moral of the story is that non-traditional activities have to be introduced with care and no IGA should be started without assessing its viability.

Case 4: Rope Making

Nijanand GVM was given a group IGA for rope making (13 members). They were given a grant of Rs 10000. The group bought three machines worth Rs. 4000. They also bought Jute for making ropes. However the quality of ropes was poor and they could not sell the same. They used the ropes for personal use without paying for the same. The CO took a meeting and made the members pay for the ropes. It was decided to sell the machines. The fund of Rs. 10000 was given as a grant of Rs 5000 and a loan of Rs 5000 to another member, Kalawati W/O of Kanubhai. It was used for opening a Bangle store. Kalawati has returned the loan. She also made an investment of Rs. 20000 for other items like clothes, shoes, and cosmetics. 10 percent of the monthly profit is deposited with the SHG. Till the time of the study she had deposited Rs. 6134 with the SHG. All in the lesson is that any IGA has to be introduced with great care. Just because the people demand for a particular IGA is not a reason enough to support.

Minor IGAs - Where GVT Provides the Asset as a Grant to SHG Members

Usually Poultry and Goatry grants have been given to members under this category. However in case of Gara (the GVT village in Banswara District of Rajasthan), the CO felt that these were essentially efforts at breed improvement and not minor IGAs. Hence distribution of Poultry birds (Giriraja and Girirani) and the Jamnapaari and Sirohi goats is seen as an effort at breed improvement. In case of Jada these have been seen as IGAs.

Case 5: Poultry House

Waala Bhai took a loan of Rs.14450 from GVT through the SHG. He also spent 8500 for the construction of the poultry house. As per agreement 10 percent of total sale

conflict in the group as a result of which five of the group members got together to buy a new diesel pump. Now the pump Jankaar is not able to convince the group to release the fund for the repair of the group pump. Ironically he had been depositing the earnings from the diesel pump in the group account very regularly and ideally that amount was to be used for repair and maintenance of the pump. There is a deadlock at present. Similar situations can crop up in other groups as well. Basically the lesson for GVT is that groups have to be monitored closely to avoid and /or resolve such situations of conflict.

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was to be deposited with the SHG. However, Waala Bhai did not stick to this agreement. He has been making profits. He has also been paying the group regularly but the amount has been less than what was agreed. He has also diversified into poultry for eggs and to rabbit rearing.

Major IGAs. Individually Managed Assets through SHGs

These are cases where individual member gives a rent to the SHG and also makes a contribution (usually 10 percent of the cost of the asset) towards the purchase of the asset. The asset belongs to the SHG but the individual 'Jankaar' takes the responsibility of managing, maintaining and renting/operating this asset on behalf of the SHG. Some examples of such assets are Multicrop Thresher, Maize Thresher, Bullock Cart, Hand Cart, Chaff cutter, Flour Mill, and Diesel pump.

Case 6: Flour Mill

The Flourmill was given to the Khodiyar GVM that happens to be from a very poor hamlet. People had to walk two to three k.m to get their grain ground. The cost of the mill was Rs. 26000. The beneficiary did the installation. The activity was started in March 2003. The terms were that 60 percent of the profit would go to the Jankaar and 40 percent to the SHG. On an average the mill runs for three hours. 40 kg of maize can be ground in one hour implying 120 kg per day. He charges Rs. 16 per 20 kg. His gross income averages from 1000-1200 pm. He has already deposited Rs. 5500 with the group in one year. Unfortunately the room where the mill was housed got burnt down last December. He withdrew this money to repair the same. He also got some compensation from the Government for house construction. He has now been able to construct a pucca house where the mill is located. He has been running the mill successfully and depositing the money.

Case 7: Oil Mill

There is an oilseed project running in the Project area with the support of NRCRM (National research center for rapeseed and mustard) since 1999. The idea is to promote cultivation of oilseeds in this area. The total consumption of oil per person according to health authorities should be 14 Kgs per year. However the consumption in this area is only three to four. It was to address this concern that GVT started this project. The oilseed production in village Jada and its adjoining villages has increased.

However GVT realised that there were no processing facilities in the vicinity. The oil mill was introduced as a group IGA (in Jagni GVM) to ensure that people processed the oil and consumed the same. GVT is aware that this activity will take a long time to become economically viable. So it is more in the nature of a welfare intervention. The cost of the expeller and filter was Rs. 58000. The cost of installation of Rs 10000 was borne by the community. The total turnover till now has been Rs. 2363. Expense is Rs.535. The group has deposited Rs. 1100 with the SHG. At present the Jankaar is anchoring the activity. He is not taking any incentive as of now. The activity is likely to pick up momentum this year as the area under oilseed has increased in this region. People have also started consuming this oil. People have been exploring the

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option of getting a variety of oilseeds, processing the same and selling the same in the area. It is too early to give an assessment.

An impressionistic assessment was requested from one of the old timers of the team. According to him the IGAs have performed as below:

S.no	IGA/Assets/ service provider	No of persons	Successful	Possibly successful	Un- likely	Failure	Comment
1	Flour Mill	1	Yes				
2	Oil Mill	1	Yes as a welfare activity				
3	Diesel Engine	3	2	1			Money has not been coming to the SHG in the case of possibly successful case
4	Poultry	3	1	2			Possibly successful as the 2 groups waited too long and then the birds died
5	Bangle Store	1	Yes				
6	Leaf Plate Making	1				Yes	Because of wrong choice of the activity
7	Grocery Shop	1		Yes			Has not been repaying regularly
8	Carpentry	1		Yes			Has not been repaying regularly

Social Development Interventions

Unlike IFFDC where all the members of the SHG in Moti Kheri village got the various items distributed under SDI, in the case of GVT a few members have got these and it was expected that others would see the utility of the same and be willing to pay to get these items. This has not happened in practice. The number of users has remained stagnant at the numbers covered by GVT.

Fibre Sheets. A total of 150 Fibre sheets were given. GVT gave five to 20 fibre sheets to every SHG. The SHG decided who should get the sheets. The cost of the sheet was Rs. 58 in the first round and Rs. 97 in the second round (width was increased). There was no further demand for the sheets on payment basis - no scaling up although people did like these. Perhaps expecting GVT to provide these at subsidised rates. The problem is that GVT has not taken the scaling up of these technologies as an agenda. All they did was to introduce the technology - even if

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people want to adopt these technologies there is no information available to them as to where they could access these. In some cases it appears that information was provided but people did not take the initiative to go and buy these. These are possibly not a high priority item for them. People did not provide a clear response to our queries. There is some sort of inertia.

Smokless Chulhas. This makes an interesting study. It seems the Chulhas were made using sand and cement - while these functioned well for seven to eight months they started cracking after this time. As a result there was heat loss and the fuel wood requirement increased. Either people switched back to old chulhas or repaired the smokeless chulha using mud. The lesson is that mud chulhas work better than the cement ones. These Chulhas were made only till 2003 financial year. GVT has now stopped this activity. In some villages there has been 100 percent coverage. In Jada of the 68 Chulhas made only 20 percent are being used for cooking. The others use these only for heating water.

Ball Bearings. The size of the Chakkis used in this village is larger. In fact according to women they have chakkis of different sizes. The ball bearings were small for the large sized chakkis hence broke/did not work. 115 were distributed but failed in many cases. The lesson for GVT is that they should have checked the size of the chakkis and the appropriate size of ball bearings. If they had taken care the ball bearings would have been useful.

Health Jankaar. Maniben was trained by the project as a Para health worker. Earlier she had been working as a mid-wife. Getting her trained to provide basic health services was a good idea. While Maniben is confident of her abilities and did succeed in curing the sick, people refused to pay for the medicine. Soon the medicines provided by the project got over. As a result her services got confined to helping in deliveries - something she had been doing earlier. The systems for her sustainable functioning were not put in place. People did not want to pay for the medicine. Ironically the same people are willing to walk 10 km to a private doctor for treatment. While this is not the core of GVT's intervention, it is something that needs to be analysed and understood better. Why is it that the system has not sustained? GVT could take the help of organisations that have extensive experience in health services. Else it is likely that this intervention would have the same outcome in most if not all villages.

Community Assets

Wells for drinking water for cattle and humans, check dam for irrigation.

Grain Bank

It was started in May 2001. The past three years had been of poor monsoon. As a result there was a huge shortage of grain in the village. GVT started this intervention with 25 quintals of Maize. One SHG (Pranaathji GVM) was given the responsibility of managing this grain bank. Members of 16 groups benefited from this grain bank. The most needy members (100 in all) of the group were provided with grain. It may be noted that due to shortage of storage space, the grain bank was shared with two more groups Jagni (five quintals) and Khodiyar (eight Quintals) in the year 2003.

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Both the groups have been given storage bins and weight balance by GVT. At the time of field visit the overall quantity of grain had increased to 43 quintals. People are very happy with this intervention and there is huge demand to bring in more grain so that more families can be covered.

Crop Technology

This includes crop trials, seed distribution, cropping practices, agriculture implements, compost pits, drip irrigation, PVS/PTD.

FAMPAR Trial

Mustard, horse gram trials, oilseeds promotion has been taken up under the NRCRM.

Agriculture Implements

Intraculture hoe, Spray pumps have been given either to the SHGs or to individuals with part contribution.

Drip Irrigation

A total of 15 people have got drip irrigation kits. According to some people interviewed they are able to use these well for growing vegetables like gourds. However, the flip side is that these do not fetch a good price, so the benefit does not really translate into more income. Even if the benefit translates into better nutrition at the family level it is important. However this is the first year of this activity making it a bit premature to assess the benefits.

Compost Pits

67 compost pits and eight NADEP. The response has been good.

SWC

Work worth 15 Lakh has been completed on 141 Ha of private land. The total planning is for 170 ha.

WRD

Under WRD two wells have been constructed with 10 percent of material cost contribution to group and 100 percent labour and masonry charges. The persons who have got these wells cannot stop group members from using the same for drinking purposes (human and cattle).

The check dam has helped irrigate 35 acres of land covering 27 beneficiaries. The cost of the check dam was 20 Lakhs. People worked at Rs 55 as a daily wage instead of Rs. 85. This was their contribution to the construction of the check dam. Like in case of Moti Kheri, it needs to be checked if the contribution was the same for

the people who benefited from the check dam and those who only got a wage benefit.

The project also constructed water tanks for drinking water for cattle.

Livestock (Breed improvement of cattle, poultry, goats)

Poultry-Chicks and goats were given to members with part contribution from members.

Case 1

Nijananad GVM Waala Deeta (from the poor category) was given a grant in the form of construction material and 200 chicks for one cycle in February 2001. He contributed the roof material and labour cost. One cycle is usually of two months (four cycles per year). Ideally he should have done 14 cycles in three and half years. At present he is running only the eighth cycle. While he has made a good profit, the number of cycles has been less. The reason is that two cycles were a complete flop. (One 10-day-old chick costs Rs 10-12.) Since he is poor he was not able to immediately start the next cycle after a flopped cycle. However all in all he has a good grip on the activity and is making money. On an average the net benefit works to 2000 to 2500 rupees per cycle of two months. The family manages the activity as a part-time activity.

Case 2

Giriraja and Girirani (GG) chicks were distributed to 10 HH (50 birds in all five female and one male) on 50 percent contribution made to the group. The response has been good but no scaling up has happened. While breed improvement has happened but the demand for GG chicks has not come in. People do not perceive this species as an IG activity. Another reason for this view is that the mortality rate in the other villages was reported to be high. GVT too did not push this breed. Instead, it changed the breed to Kadaknaath as GG is an outside breed.

Forestry

This includes JFM, Fruit trees, Nurseries, orchard development, grafting and budding, medicinal plants cultivation, and CPR development.

There is a registered JFM committee but they have not started protection. This committee was formed last year.

Four patch plantations consisting a mix of Eucalyptus, teak, Sal and ber and 17 orchards of fruit plants like Mango, Chikoo, Guava and Lemon were started in 2001. These plants were provided on a 50 percent contribution. It is still early for returns to start flowing in.

Component B Dissemination (Prasaar Villages)

The Prasaar work started from April 2002. There are 75 Prasaar villages in Dahod and Godra districts.^{7/} Jada has 10 Prasaar villages: Kheria, Katholia, Bawka, Matwa, Polisimal, Valundi, Rojahm, Jaikot, Khadda, Khodwa. There are three Prasaar Jankaars who are responsible for two to three villages. The Prasaar Jankaars of the Limkheda East cluster (two clusters) meet on fifth and twenty-eighth of every month to plan their work. They also visit a few villages jointly if required for convincing the village community. The work is being done in a fairly systematic manner.

Future scenario

A Mahamandal Federation or GVS Gram Vikas Samiti for example Village development organisation was created in 2003. This has been formed as part of the TOP (Take over plan) in preparation of the withdrawal phase of the project. The Mahamandal has been registered under the Societies registration act. The Presidents of the 22 SHGs are members of this body. The president of this body is Kanubhhai. Each SHG contributes Rs 100 per annum as membership to the Mahamandal. In addition the contribution for individual activities undertaken under the project too adds to the fund of the Federation. The plan is to transfer the group funds generated from GVT interventions and all the community assets to this body. The Mahamandal will be responsible for monitoring. There is a plan to form a cluster resource center consisting of 20 Mahamandals of 20 villages. This resource center will be in partnership with GVT. It will have a tent house, diesel engine, tractors, irrigation and agriculture equipment- that can be rented out through GVS and SHGs.

Summary and Analysis

Institutions

Self-Help Group (SHG)

Self-help group (SHG) is the primary institution at the village level. In Jada village 15 of the 22 groups are functioning well. The primary reason for the poorly functioning groups is poor leadership.

Governance In the well functioning groups there are a few more enterprising and dominating individuals. At the same time the other members too are fairly active. Groups do have transparency. Financial institutions assess these aspects before giving any loan. It is notable that 13 groups have been registered under SGSY.^{8/} One problem is that they stick to equity to a ridiculous extent to avoid conflict. The grants for instance are divided equally. Of course the good thing is that the Jankaars or the group leaders do not corner the group assets. People have complete access. The biggest problem is that they want to divide money equally. This may not be healthy

^{7/}
^{8/}

Dahod and Godra were earlier part of the Panchmahal district. Dahod district was created in 1997. Swarna Jayanti Gram Swa-rojgar Yojana (SGSY) where group loans are made through Banks for productive activities of a SHG

for the group in the long run as the needs of different members are different and the group does not seem to be addressing that issue.

Decision-Making all decisions is taken in the group meetings. There are conflicts but they get resolved (at times with the help of the CO). Usually the CO would resolve these in the group itself.

Leadership. There has been no rotation in leadership. This is something that GVT will have to look into.

Mahamandal

The role of the CO has been taken over by a Jankaar. The Federation (Mahamandal) has become operational and they have started operating from their office in the village. All the records of the SHGs and the works undertaken in the village are maintained at the Federation. There are a few dynamic, educated youth in this village who have been taking up these responsibilities very enthusiastically. GVT staff is now playing the role of simply guiding this group.

Management Process

Decision-Making. As described above the decision making process is fairly transparent yet the fact remains that the more enterprising have come forward to take the maximum advantage from the groups. The group members too feel that their resources are in safe hands. Large loans are usually given to the safer options. While this is healthy, the flip side is that the relatively poorer and less enterprising lot has got left out. There has to be an alternate strategy to rope in and reach out the latter category.

Responsibility for Assets. Mahamandal will be responsible from now on. At present it is the responsibility of the concerned SHG. In case of irrigation structures there are user groups (UG) who are responsible for repair and maintenance. These structures are recent therefore systems are still being put in place. The charge will be on a per acre basis on an annual basis. The group account has been opened in the local Bank.

Maintenance of Information. Project level information is maintained as part of the usual MIS system. However care is being taken that all village level information is maintained at the SHG level.

Inclusion and Targeting

Village Selection. DFID guidelines for village selection have been followed very strictly by GVT, particularly in Phase I. In phase II there was some dilution.

Activity Inclusion. The village entry was made in May 2000. PRA was done in November 2000. The village work plan was finalized in February 2001. The implementation was started in March 2000. When the HH who had opted to stay out of the programme saw that SWC works were being done under the project, they approached GVT for getting included in 2002. However GVT refused as all the plans

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had been finalized. The process of getting new HH included is complex. There are usually several queries from GVT. Usually the time between entry and the finalisation of plans is at least six to nine months, this time was considered long enough for the late entrants to join in. Yet the fact of the matter is that after the initial round of formation of SHGs there is very little scope for inclusion of the HHs left out. The CO too gets busy with implementation responsibilities and there is little time to form new groups. According to the staff interviewed the implementation phase of work is different and the priorities too change. GVT may want to examine if this was really the right approach and whether it would have been better to allow the late entrants to join in by making the administrative requirements a bit more flexible. After all SWC is the most critical intervention for these areas.

While the SWC work included all the SHG members, for other interventions the CO had to assess whether a group had too many IGAs or if the group had the capacity to run the activity. In case of individual activities the capacity and need of the people was considered. The CO used to hold a meeting with a group of Jankaars to do this assessment, so that it was not left to his discretion alone. According to the ex-Co, the presence of CO would help to take rational decisions. The proposals were made once the CO OK-ed the idea.

Repayment Regimes. For 13 of the 22 groups 50 percent repayment is on time. For the outstanding loans these groups do not bother too much as they are confident that the money will come. However, for the remaining groups the loans have been outstanding for much longer and this is a cause for concern.

Public Works Leading to Private Benefits. In case of Jada no work was done on public lands.

Stakes

SWC, WRD, and Crops. A fall out of the excessive rains has been that the mud bunds made in the *palabandhi* (bundling) operations have got washed off. On checking with the community as to whether they would be able to do the necessary repair to the damaged bunds before the next cropping season, the response has been almost uniformly in the negative. The reason is the crop failure of this year and the need to migrate. GVT too will not be in position to financially support the repair and maintenance of the bunds.

SWC, WRD interventions have generally benefited the people. SWC has been the most popular intervention as it has not only provided wage income but also has helped to improve the quality of land. In some cases it has also increased the arable area. However no formal assessment of the same has been made so far.

Social Development Interventions (SDI). A range of technologies was introduced by GVT under SDI. However it seems that these were not followed up carefully. For instance the ball bearings were small for the large sized chakkis used in this area. Consequently the bearings broke or did not work at all. 115 ball bearings were distributed but failed to work in many cases. The lesson for GVT is that they should have checked the size of the chakkis and provided the appropriate size of ball bearings. If they had taken care the ball bearings would have been useful.

A health Jankaar was trained by the project. She had been functioning as the village mid-wife before she got the training. However her work as health Jankaar lasted only as long as the medicines provided by GVT lasted. People were not willing to pay for medicines. Ironically the same people are willing to walk 10 km to a private doctor for treatment. While this is not the core of GVT's intervention, it is something that needs to be analysed and understood better. Why is it that the system has not sustained? GVT could take the help of organisations that have extensive experience in health services. Else it is likely that this intervention would die a natural death in most if not all villages.

While the other interventions like light sheets, smokeless chulhas have been found to be useful these have stayed stagnant at the numbers that were covered initially. It seems that the problem is that GVT has not taken the scaling up of these technologies as an agenda. All they did was to introduce the technology. Even if people want to adopt these technologies there is no information available to them as to where they could access these. In some cases it appears that information was provided but people did not take the Initiative to go and buy these. These are possibly not a high priority item for them. People did not provide a clear response to our queries. There is some sort of inertia.

IGA. The experience of GVT in IGA activities in Jada has been mixed.

- The experience of rope making and leaf plate making units goes to show that any IGA has to be introduced with great care. Just because people demand for a particular IGA is not a reason enough to support. Non-traditional

activities in particular have to be introduced with care and no IGA should be started without assessing its viability.

- Another aspect of IGA activities has been that these are entirely left to the initiative and ability of the person taking up the activity. There is absolutely no back up support provided by the project. For instance Maniben (who is also the health Jankaar) took a loan for a Grocery store but has no idea about the cost, sale and net profit. (For details please see Case 1). She has also been far behind in repayments. According to the previous CO they never ran the store activity as an IGA. In fact they left it to the initiative and skill of the borrower. However this researcher is of the view that this is not a good argument, especially since the idea of IGA is to also help in grounding viable IGAs. Repayment for such loans continues to be an area of concern. Since this money does not come from the savings of the group there does not appear to be a group pressure for timely repayment. According to the ex-CO of the village it was the responsibility of the Mahamandal to keep track of loans. They have not done so till now. It was agreed that they would now have to look into all outstanding loans.
- Major IGAs like the flourmill and the oil mill are mostly doing well but given the high initial cost of these assets these are not likely to get replaced once they run their life. What would be the way out is something GVT may want to work on.
- In case of diesel pump the members are happy with the intervention. While the ex-Co is confident that when the pump has run its life it can be replaced by the earnings of the group, this needs to be factored in upfront. It needs to be ascertained for every group if the group is earning enough to be able to replace the pump.

Community Assets

The community in Jada is greatly influenced by a religious sect whereby they do a lot of things as a group. This is seen in the way the Grain Bank has been functioning. There is a strong community feeling in this village. The community is very active and aware. There is leadership at different levels: at SHG level, as well as at Village level. This leadership is well connected with the Panchayat leadership. The mutual understanding among the leadership is good. This is the strength of the village.

Savings and Credit

- The 13 SHGs are fairly strong in an economic social and political sense. This is a major contribution of the project. However the remaining SHGs need more support. This support has to essentially come from the Jankaar of the group under the overall guidance of the GVS and if necessary the CO.
- At the time of the field visit almost 50 percent of the village had migrated. This year the Kharif crop has been badly affected due to excessive rains. Most of the people are in heavy debt to private moneylenders. As in case of

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Kadwapada, here too many families have mortgaged their silver to the moneylenders.

- The other area that needs to be watched is the potential of the groups being captured by the more enterprising. There is the case of Kanubhai who has taken a loan on behalf of the group for Tent house. As explained in the case study the terms of contract with the group are not clear. It seems to this researcher that he has simply used the group to get access to this loan and the group too is not questioning his cornering the entire benefit. Of course the other side of the story is that Kanubhai is looked upon as a benevolent person who is always around to help people, so nobody is looking at this situation with suspicion. According to him, he plans to share part of the profit from this activity with the SHG. However as mentioned earlier the terms of this arrangement are not yet clear. What is going to be the gain to the 13 members is something only time will tell.

Employment Generation

Employment generation has happened mostly from the SWC and WRD works taken up under the project. However these works are almost over. The other area of employment generation has been of IGAs, However looked at in the context of the entire village this number is not very large. So while we cannot discount the impact of IGAs, we need to be alive to the fact that the reach of the same is rather limited. Given the marginal nature of agricultural land and the poor resource base and economy of the region, people are likely to continue to depend on migration income as an important source of livelihood. The MLSP programme has come in at a very appropriate time. The project needs to focus on how to make the labour move from being unskilled to skilled labour, how to improve its negotiation power and how to facilitate better terms in the labour market.

Migration Support

The CBA team did not look at this intervention but as mentioned above it is a very timely and appropriate intervention. The response of the community to the work in Dahod has been very encouraging. Village Jada has a very active MLSP center.



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Profile of Madhya Pradesh (MP)

Madhya Pradesh is a land locked State surrounded by the States of Uttar Pradesh, Rajasthan, Gujarat, Maharashtra and Chattisgarh. Madhya Pradesh came into existence in its present form on November 1, 2000 following its bifurcation to create a new State of Chattisgarh. The undivided Madhya Pradesh was founded on November 1, 1956. Madhya Pradesh is the second largest State of India with an area of 308,000 sq. kms. The bulk of the state lies in Central India bounded by the upper Gangetic plains in the north and the Godavari valley in the South, the plains of Gujarat in the west and Orissa and Chotanagpur plateau in Bihar to the east. The main hill ranges of the State are the Aravallis, the Vindhya and the Satpuras. The climate is typically tropical with three distinct seasons (winter, summer, and monsoon).

MP is divided into 45 districts and 313 Development Blocks. The districts in the western and northwestern part of the state are considered to be susceptible to desertification. These regions also do not have good forest cover in comparison with the central and eastern part of the state. 28.01 percent of the land area is under forest and 49.01 percent is the net sown area. Out of the 14 major river systems of India, the state of M.P is drained by as many as four for example Ganga, Narmada, Tapti and the Mahi systems. The spread of canal irrigation in the state is limited. The rivers in M.P are mostly seasonal and rainfed. Most of them dry up before summer. As far as ground water is concerned while Malwa region has shown a sharp growth in ground water utilization, the development in Shajapur, Vidisha, Hoshangabad, Jabua and Morena is low. The ground water development is directly linked to the economic capability of the people to invest in ground water structures. However excessive groundwater utilization has led to the problem of rapid depletion of ground water in the State. Most agriculture therefore continues to be rainfed and dry land agriculture. It is often said that the soil of Madhya Pradesh is not only thirsty but also hungry. Integrated management of nutrients is the only viable and possible option for sustainable output. The demographic pressures on land have been increasing significantly. Agriculture and its allied activities account for 35 percent of the GDP of the State. 75 percent of the rural workers are engaged in agriculture and allied activities. The labour productivity in agriculture is low and there is an urgent need to take people out of agriculture sector to manufacturing, transport, services and trading.

Almost 20 percent of the population of M.P consists of STs and 15.4 percent of SC. While the overall literacy is 64.11 percent, the rural literacy rates are low at 35.53 percent. The rural female literacy rate is just 19.17 percent. The sex ratio is 920.

In terms of per capita income, M.P is counted as one of the poorest States of the fourteen largest states of the country. It was ranked at eleventh position in 1996 to 1997 (Source: CSO; World Bank staff estimates). M.P continues to be bracketed as

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part of the BIMARU^{1/} states for example states that have ailing economies. Although it would be fair to say that the state has registered a faster rate of growth in the decade of 90s yet it has a long way to go before it can pull itself out of the BIMARU bracket. The head count ratio of rural poverty stood at 37.1 as compared to 40.6 in 1993 to 1994. It has the second highest HDI (Human Development index) among the BIMARU states, the first being Rajasthan.

Profile of Jhabua District^{2/}

In terms of the HDI Jhabua is ranked 43 out of the 45 districts in the State. Jhabua has 1313 villages, 612 Gram panchayats, eight tehsils and 12 tribal blocks. The entire district is a Schedule V district with 85.7 percent of the population belonging to the ST groups. Sex ratio is 990 with rural sex ratio at 996. Rural literacy rate has increased from 13.7 percent in 1991 to 32.3 in 2001.

Agro climatically Jhabua forms part of the Malwa Plateau and the Jhabua hills. The soil is medium black. 90.6 percent (1991) of the population is engaged in the primary sector. The employment in farm sector has gone down from 90.4 percent to 87.23 percent employed in the farm sector. Interestingly the population involved in agriculture labour has gone up from 5.9 percent in 1991 to 13.9 percent in 2001. Overall agriculture and wage income continue to be the major source of livelihood in the district.

Profile of Kadwapada Village

Kadwapada village is located 36 km away from the project headquarter in Jhabua and 18 km from the Tehsil headquarter in Meghnagar. It is part of Thandla Block of Jhabua district of Madhya Pradesh. At the time of village entry Kadwapada consisted of 139 households spread into four Falias. Now the number of households has gone up to 190. The main caste groups belong to the Bhil sub-castes like Rawal, Neenama, Bhuria, Maliwad, Dhama and Dangi. The Church has been very active in this village. 75 percent of the village population is Christian. The local priest has a house in the village where he comes and stays occasionally. The Church has taken up several welfare and economic programmes like house construction for the poor, poultry, improved agriculture etc for the past 15 years.

^{1/} This set consists of Rajasthan, M.P, U.P, Orissa and Bihar.
^{2/} Source: MP Human Development Report, 2002.

The Falia wise break up of HH is as follows:

	Name of the Falia	No. Of HH	No. Of participating HH	Self Sufficient	Poor	Medium Poor	Very Poor	% Of families migrating for more than 6 mt
1	Sarpanch Falia	70	36	10	12	23	25	75
2	Tadvi Falia	20	19	2	6	3	8	50
3	Maal Falia	45	16	4	8	13	20	75
4	Dangi Falia	20	14	5	4	6	5	60
5	Talav Falia	15	0	2	2	4	7	85
6	Amliyar Falia	20	1	3	3	6	8	75
	Total	190	86	26	35	55	73	
	At the time of village entry	139	86	5	15	30	54	

Kadwapada is a fairly remote village with poor access to basic services. People have to walk a minimum of seven km to Thandla to access public transport, health facilities, Bank, post office and the market. The village can be accessed by a Kuccha fair-weather road and gets cut off during rains. According to the staff interviewed, it was considered to be a tough village from the point of access. There is a primary school in the village. The Church supports some children for further education.

People in Kadwapada are primarily dependent on agriculture and migration to meet their requirements. As is clear from the above table the extent of migration is significant. The land varies from good black cotton flat land to undulating, stony poor quality land. The total arable area is 62.76 ha. The average landholding in the village is two to three bigha. The main Kharif crops are Maize and cotton with some paddy, soyabean and Black gram. Wheat and chickpea are the main crops of the Rabi season.

Evolution of the GVT Intervention

WIRFP had been operational in the nearby villages of Palasiapada and Navatpra since Phase one (1992 to 1999) of the project. Jeethra Bhai of Kadwapada got to see this work as his son-in-law lived in Palasiapada. He talked about the SWC and other works being done in this village with the other people in his village. Consequently when they got to know about the second phase of the project, they approached the CO with a request to start work in Kadwapada. A formal entry was made in March 2000. Building a rapport with the community was not a problem as the community was pretty aware and organised possibly because of the work of the Church and the efforts of Jeethra Bhai and Parsingh. However this did not mean that the going was easy. Some HH chose to stay away from the project, consequently an

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exposure visit was organised in April 2000. Several meetings were also held both in the village as well at the GVT office in Jhabua. Interestingly the HH that did not join the project in the initial stage (for example up to one year), continued to stay out of the GVT interventions right through the entire duration of the project. In case of Kadwapada two falias have been left out of the interventions. The people in these falias have relatively poorer agricultural lands (more rocky and undulating, the cotton crop showed poorer growth as compared to the main village). It is interesting to note that this falia was also the furthest from the main village. This researcher interviewed a few members of these falias's. According to them some of them were interested in joining in and even came to the CO with money to start a SHG, but the majority were not. The CO asked them to try convincing at least 15 people as an SHG of five persons would not work. They were not able to do the same as people were suspecting the intentions of GVT. This was as a result of an earlier Government programme where people were served with recovery notices. Another group of people scattered across Falias did not join in since one of the brothers/ parent had joined the programme making the family eligible for SWC work, the land being held jointly.

The main problems identified by the community in the PRA were:

- scarcity of water for drinking and irrigation;
- grain scarcity;
- lack of housing;
- fodder shortage;
- soil erosion;
- scarcity of wood for construction and fuel;
- poor access to seeds and manure;
- problem of health both human and animal;
- lack of electricity;
- lack of transportation, and
- Illiteracy.

According to the GVT staff Kadwapada village was used as a training ground for the staff of GVT. As a result the sequencing of PRA, WBR and VWP development was a bit muddled. The WBR (report date: 12 September 2001) was done much after CPA (report date: 8 January 2001) and VWP (Report date: 2 June 2001). Further the WBR ranking was done for 86 out of the total HH strength of 139.^{3/} These 86 were the HH that got organised as SHGs.

Another problem unique to Kadwapada has been a very high turnover of the COs in the past year. Infact during the initial visit of the researcher and the second field visit the CO had changed. The CO who was present at the time of the first visit had been

^{3/}

While Kadwapada may be a one off example where well being ranking was not used for developing the initial intervention strategy or targeting the work. In the other GVT villages visited by this researcher, while WBR was done as part of the initial baseline work it was not always used for planning the intervention strategy. Part of the reason probably was to do with the fact that the major part of the intervention was seen to be SWC and that was done on the lands of all the members. As far as IGAs were concerned they were encouraged among the enterprising and skilled persons. Another intervention where the poor have been reached is the MLSP programme but that is a very recent programme.

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there only for a couple of months. Fortunately the first two COs did stay much longer and the quality of work at that time was better. But there has been a lot of change in the past one year. This has surely affected the work in the village. Kadwapada is at present in the pre- withdrawal phase. A take over plan (TOP) has been prepared for the village. This was prepared in October 2002. Both the VWP and the TOP list a whole lot of activities and interventions people desire to make with the help of GVT. TOP is a compilation of activities that need to be undertaken in the withdrawal phase. A review was also done of the work done and a group assessment exercise was carried out to understand the status of the SHGs. The purposes of the TOP was to provide continuity in the work done under the project and prepare the community in managing the project on their own. On the whole it reads as an interesting document with lot of possibilities. The TOP had been prepared under the guidance of a CO who had been responsible for Kadwapada for almost three years. However with the change in the CO, the work did not proceed as expected. The subsequent COs has not been able to come to grips with the situation in the village. In short they have failed to ground the TOP. The question is that who is responsible to keep track of the state of implementation of the TOP? Or has the TOP become a mere administrative requirement with no pressure to actually get it off the ground?

Activities at the village level^{4/}

Component A Development Activities VOG (Village Organisation Development)

Self Help Groups

There are a total of six SHGs in Kadwapada. The group details are as follows:

	Name of the group	Male/Female	No. of members	No. of active members	Year of starting	Major activities	Comments
1	Sheetlamata Bachat Samooh	Female	18	12	2000	Flour Mill, diesel pump, chaff cutter, vegetable vending	6 members have stopped saving for more than a year
2	Dhartimata Bachat Samooh	Female	18	16	2001	Nursery, vegetable shop, new well	
3	Hanuman Samooh	Male	14	11	2001		Not able to tackle the defaulters
4	Dukan Samooh	Male	14	6	2001		There has been conflict in the group and the group has collapsed
5	Bagaja Samooh	Female	11	11	2001	Nadep, goats	Poor repayment discipline
6	Ujala Samooh	Male	14	12	2001		Savings regular but poor repayment record since 2002

SHG 1: Sheetlamata Samooh

Of the 18 members in the group, six have stopped saving for the past year or more. Members save Rs 50 per month. The Jankaar does the collection between twentieth and twenty-fifth of every month. According to the Jankaar he has to make several

^{4/}

As part of the validation exercise the social development specialist has focused mostly on VOG that is a part of component B for example, Development and only partially focussed on Component B called Dissemination for example the work in Prasaar villages.

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rounds for this purpose. Ramesh was made the Jankaar for the Flourmill. The group Jankaar Gabboo is also a member of this group. Another member Saka/Kodaria has taken a loan of Rs 4500 (for motor and pump) in December 2002. He has not repaid this money. Rasli Ganni had taken three loans earlier and repaid the same but the most recent loan of Rs. 2000 taken in August 2003 has not been repaid. The group has decided not to extend any further loans to her. Similarly there have been a large number of loans extended to members in this group for amounts ranging from Rs. 1500 to Rs. 3000 or even 5000. Usually people have taken loans for seed/fertilizer purchase, illness in the family, purchase of an asset or for social use like Notra, and marriage. The rotation of money in this group has been by far the best among the groups in this village. The applications for loan too have been prepared very systematically. However at the same time the dropping out of six members from the group is a cause for concern. There is also system of fines for non-deposit of savings or for non-repayment. The non-repayment of loans is something the group Jankaar is now keen to look into. According to the group Jankaar, they plan to hold a meeting in December after cotton harvest where the decision will be taken on cases of default and non-repayment.

SHG 2: Hanuman Samooh

This group has 14 members. Three members of this group took a loan of Rs 3000 and passed on the same to a third person (not a member) at a higher rate of interest. This person defaulted. The three persons have stopped saving. The group is very angry but is feeling helpless about dealing with this situation.

SHG 3: Dhartimata Samooh

This group started with 18 members. At the time of field visit 16 members were saving regularly. This is one of the better groups.

SHG 4: Ujala Samooh

The group had 14 members. But one member is dead. The rest are saving regularly. However the repayment has not been good for the past one year. One member has recently joined the SHG started by the missionaries. The amount of outstanding loans since 2002 is significant ranging from Rs. 1000 to Rs 5000. The group members are keen to streamline the repayments after this Rabi harvest.

SHG 5: Dukan Samooh

This group has members from two extended families. The total membership is 12. Of these only six are saving regularly. Repayment record is poor. Six members have left the group and have joined a group promoted by the Church. There is a lot of tension in the group. The group has collapsed for all practical purposes. Several members of this group are under a huge debt burden (ranging from 10000 to 40000 rupees) with the local moneylenders from whom people have taken loans after mortgaging their silver.

SHG 6: Bagaja Samooh

The Jankaar for this group had changed three times. Now Gabboo, the group Jankaar is writing the records. The group has 11 members. Of them 10 have been

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saving regularly but the group does not meet regularly. The one member who has stopped saving is from the very poor category.

Some general observations that could be made after the intensive interaction with these groups are:

- none of the groups have been meeting regularly for the past one-year. The meetings are not held on a fixed day and on a regular basis;
- savings are collected door to door by the Jankaar of the group. This however means that there is no peer pressure on members who do not save or repay the outstanding loans. This is not healthy for the long-term sustainability of the group;
- the group records are not up to date. Especially the individual passbooks have not been filled for a long time for many of the groups;
- meetings are usually held;
 - when some resolution has to be passed (for carrying out an activity, for appointment of a Jankaar);
 - a request has to be made to GVT for some support (for forwarding a grant or loan application);
 - a decision on giving a loan from the SHG funds has to be made, and
 - the CO has to share some information.

These meetings usually take place once in two to three months for a particular group.

- The meetings details report tabulates the total no of meetings held in a month and the total number of people who attended these meetings. The concerned CO of the village compiles these reports. While the format also has the attendance according to well being category, it is usually left blank. The column for comments is also left blank. It appears that the filling up of these formats is really a formality and the data is not really used for any analysis except to compile broad information on the total number of meetings held and the total number of people who attended these meetings. It is also not possible to track who and how many people have stopped saving. This information is only available at the group level with the concerned Jankaar who maintains the primary record of the group.
- The focus of the COs has been on implementing the activities rather than in strengthening the SHGs. From the discussions with the staff this researcher concluded that strengthening the SHGs per say was not really part of their brief. Their brief was to organise the SHGs in order to implement the project activities that were mainly around SWC and WRD. SHGs were in a sense used in an instrumental sense to organise the community. In the words of one GVT staff, "if an SHG turned out to be functioning as a proper SHG then it was not because of a conscious effort of the programme". This researcher

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would interpret this statement slightly differently; that wherever the SHGs were functioning well it was due to the individual initiative of the concerned CO or good leadership within the group. This was not really mandated by the project. What was mandated by the project was the implementation of the project components for example, SWC, WRD, distribution of assets like agricultural implements, small assets and promotion of a few IGAs among the interested people. Unfortunately this has meant that wherever the groups are not strong there is every chance of the activities not sustaining beyond the life of the project.

Income Generating Activities (IGA)

Where GVT makes a grant to the group (Minor IGA):

Case 1: Vegetable Trading

Sena /Martin of Sheetalamata Samooh, took a loan of Rs 5000 for vegetable trading. Sena's husband Martin manages this activity. Sena was busy in the fields so this researcher got to talk to Martin. He is functioning as a petty vegetable trader. He attends two to three weekly haats in the neighbouring villages. According to him he buys Rs. 400-500 worth of vegetables for each haat and ends up making a net profit of Rs. 50-60 per haat. This is the first time he has taken up this activity. From the minutes of the meeting register it emerges that it had been decided that he would be paying an interest of two percent and a lump sum payment of Rs. 100 per month. He got this loan in 2002. He has repaid Rs. 1300 till now. He is not aware of the interest that he has to pay. It is not clear to him or to the group whether the Rs. 100 he has to repay every month also includes interest. If it does then it should be calculated on a reducing balance. However these details have not been worked out. Martin is willing to pay interest as well if others too pay. There is also no clarity of the duration of this loan. The group members too were not clear about the terms of the loan.

Case 2: Carpentry

Aryat/ Hursingh of Seetlamata Samooh took a loan of Rs 3000 for Carpentry. Aryat got this loan in 2002. Aryut's husband is a carpenter and she borrowed this money so that he could buy some more tools. In this case too a flat payment of Rs. 100 has been fixed. As in case of Martin there is confusion regarding interest payment and duration of loan. As far as latter is concerned there does not seem to be any pressure from the group for repayment, possibly because it is money that has come from GVT and not from the savings of the group. Aryat has repaid Rs. 800 till now. Aryat was busy in the field therefore this researcher met her husband Hursingh. On being questioned as to when they plan to repay the loan, his response was that they would repay after the harvest in February. He too agreed to pay the interest as well if the others too pay.

Where GVT provides the asset as a grant to the members of the SHG (Minor IGA)

Case 3: Maize Thresher

A Maize thresher was given to Hanuman Samooh. The contribution was Rs. 5000. The group appointed Dudha as the Jankaar. But the thresher was not used as

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moving it around from where Dudha lived was a problem. Therefore Hanuman Samooh in consultation with the Dhartimata Samooh decided to transfer the Maize thresher to Dhartimata Samooh. It was agreed that Dhartimata Samooh would pay a contribution of Rs 5000 to Hanuman Samooh. The thresher has been used in this season. Repairs were done. Shaitani bai has been appointed as the Jankaar. She had to spend Rs.7000 in repairs. The terms of arrangement have not been finalized as of now. Shaitani has been using the thresher and the pump for personal use only.

Case 4: Hand Cart

Seetlamata Samooh was given a handcart. A rent of Rs five was fixed for its use but this is not usually charged. Only members of Seetlamata use the handcart. Five groups have a handcart each. Since no money is being charged for its use it is not clear who will bear the cost of maintenance of such group assets.

Case 5: Honda Pump

The Honda pump given to Ujala Samooh had been functioning well in the last season. The Jankaar had deposited a total of Rs. 3000 from the earnings of the pump. However the pump had to be sent in for repair in this season. Martin, the pump Jankaar was complaining to this researcher that the Ujala group is not releasing the money for repair telling martin to spend the money from his pocket. The reason appears to be the fact that six members of the group have their own pumps so they are not concerned. The entire village used to benefit. There was a conflict in this group. Five members of this group have bought a new diesel pump and now they are not concerned about this pump. Hey are not interested in co-operating with the Jankaar. The Jankaar was sharing this state of affairs with this researcher when she made a follow-up visit in the month of November. There a clear need to resolve this conflict otherwise this activity will not sustain. This may even lead to a collapse of the group.

Case 6: Chaff Cutter

Kalla of Dukan Samooh was made the Jankaar for the Chaff cutter. However the Chaff cutter has not been used.

Case 7: Bullock Cart

Martin got a loan of Rs.13900 on 29 February 2004 to purchase a bullock cart. He made a contribution of Rs.3000. It was agreed that he would deposit Rs.100 per month with the group. However Martin has not deposited anything till now. On being questioned as to when he intends to pay he informed the researcher that he plans to do so after the soybean harvest. In his case too there does not seem to be any group pressure for repayment.

Individually Managed Assets Through SHGs (Major IGA)

Case 8: Flour Mill

Ramesh, husband of Hukli of Seetlamata Samooh was made the Jankaar for the flourmill. The flourmill was installed in April 2002. It functioned well for sometime but has not been functioning for the past five months. This has become a bit of a conflict

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issue in the village as the villagers are keen to have a functioning flour mill as they have to walk quite a distance to Sajeli or Thandla to get their grain ground. However Ramensh has been asking the group to pay the money for repair, something the group is not ready to do as they feel that repair is his responsibility. There was a suggestion that if Ramesh was not willing to repair the mill it could be transferred to another willing person. However Ramesh has not been agreeing to this as well. All in all there has been a deadlock for all these months and no solution seems to be emerging. Incidentally the group fixed a rent of Rs. 100 per month. Ramesh did deposit this amount when the mill was functional but has stopped since the mill broke down.

Case 9: Multicrop Thresher

Bahadur of Dokan. Samooh got the multicrop thresher two years back. The cost was Rs. 40000. While Bahadur and Victor have maintained some record, the group was not aware of the same. According to Bahadur he has spent Rs. 500 on the repair of the thresher. The thresher has been used. According to the Jankaar he is not able to earn much therefore he is not paying any money to the group. He has not deposited any money with the group in the past two years. While the thresher is in working condition it has not been used as it breaks down frequently. It is not turning out to be a viable implement.

	IGA/Assets/ service provider	No of persons	Successful	Possibly successful	Unlikely	Failure	Comment
1	Carpentry	2	Yes				
2	Vegetable Trading	1	Yes				
3	Goatry	2 groups	Yes				Jamnapari failed, Sirohi successful
4	Diesel Engine	2	1 Functioning				1 has to be repaired
5	Kirana Shop	2	1	1			
6	Flour Mill	1				Yes	Ramesh willing to repair this
7	Maize Thresher	1		Yes			Has just been transferred to Dharti mata will have to take a decision in the next meeting
8	Multicrop Thresher	1				Yes	
9	Chaff Cutter	2				Yes	Not fitted may be people do not want it

From the above cases the following can be concluded:

- the terms of payment are not clear to any of the borrowers;
- the lump-sum payment fixed has been paid very erratically;
- there is no group pressure on the borrowers to repay the IG loans that were extended by GVT through the SHGs. The idea of these loans was to make a revolving fund available to the groups so that many more people could take up some income enhancing activities. However since the repayments have been erratic that objective is still far from getting realised;
- many of the assets are either being used only as personal assets or are gradually breaking down and not getting maintained;
- while some individual IGA are continuing but in these cases too repayment is not regular, and
- all in all it appears that unless some effort is put in resolving conflict and setting up a working institutional mechanism for maintenance of assets they

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will not sustain. Interestingly the TOP was made precisely for this purpose. Each major activity was to be overseen by a *Nigrani samiti*. The plan also spelt out the names of the persons responsible for each activity.

Forestry (JFM, Fruit trees, Nurseries, orchard development, grafting and budding, medicinal plants cultivation, CPR development)

This researcher did not get to see much of the work done under this head. The work done has been primarily that of distributing saplings, orchard development. The project sanctioned a nursery of Eucalyptus plants in December 2003 and another one of 5000 plants consisting of Guava, Bamboo, Papaya, aonla, Custard apple and Kaju plants in 2004 to Huka/Prakash of Dhartimaata Samooh. There are two active JFM Samitis but these were started independent of the GVT intervention.

Social Development Interventions

The ball bearings for chakkis (Gatti) were not installed by anyone, as people in this village prefer to use the flourmill. When the flourmill was functional people got great relief from the trouble of walking to Thandla or Sejali to get their grain ground. The maize Shellers have been used for seed extraction. The Health Jankar system collapsed two years ago, as the person selected was not able to run the activity well. He failed to deposit the money for the health kit. People usually go to Thandla for treatment. The average expense of a family in a year comes up to Rs. 1000- 2000. There are two persons who provide traditional medicine. They were given further training and exposure by the project. They continue to treat people who seek treatment.

Paravet Jankaar has been catering to the needs of the people only in his falia. He got training three years ago. This comprised of a day long training every month for three years. He used to get guidance from the Veterinary doctor employed by the project, however the Vet has left the project as a result his training could not be completed. The paravet Jankaar charges a fee of Rs.10 and makes an average earning of Rs. 150-200 per month. The first CO of Kadwapada started a Grain Bank in the year 2000 with 16 Quintals of grain. All the 86 HH got grain and returned the same in the agreed quantities in the first round. The grain bank continued to function for one more round but stopped after that. According to people interviewed it was mainly because of drought. They are now keen to revive the grain bank. Smokeless chulhas were also introduced but due to faulty construction they tended to use too much fuel. Around five chulhas are functioning. The use of smokeless chulhas has not been scaled up.

Crop Technology (crop trials, seed distribution, cropping practices, agriculture implements, compost pits, drip irrigation, PVS/PTD)

This researcher did not study this component in great detail, as the focus was to understand the institution of SHG. However from the conversations with the people we gathered that a Spray Machine was given to each of the SHGs. People have been using these. People could also get agricultural implements like ploughs, spray tanks by making a 50 percent cost contribution.

SWC

This was the most attractive of interventions and all the members of the SHGs benefited from this.

WRD

The project made funds available for wells for drinking water for cattle and humans. Ownership of these wells is with the group. Shaitani of Dharti mata Samooh got a new pucca well on her patch of land in December 2003. The water is to be used for irrigation as well as for drinking purposes. The total cost of the well was Rs.37000. A check dam was constructed for irrigation. This has benefited 15 members.

Livestock (Breed improvement of cattle, poultry, goats)

Goats and birds were distributed by the project. Some people have been able to go through a few cycles of profit in Goats. However the experience in poultry has not been good. In either of the cases the role of GVT was limited to distribution of goats and poultry on a contribution basis. The health Jankaar was also provided training and he made his services available to members of one Falia. These activities were not pursued in an intensive manner.

Component B Dissemination (Prasaar Villages)

Interestingly the ex-CO of Kadwapada maintained that the work in the Prasaar villages was not part of his beat. This was not the view of the CO of Jada village in Gujarat. Another confusion regarding Prasaar villages is that while we were initially told that these are essentially a cluster of villages around a core village. The subsequent interactions in Kadwapada and other core villages revealed that this might not always be the case. It is not as if the Prasaar villages depend on the core village for any support. As far as the Prasaar villages around Kadwapada are concerned this researcher met the MLSP workers of some of these villages. According to them they have not seen the Prasaar Jankaar functioning in their villages of Talawali, Unnikhali and Pawagoibadi. The Prasaar work seems to be on a low key in this area. However a deeper study would be fair to arrive at a definitive conclusion.

Future Scenario

One of the objectives of the project in the withdrawal phase is to help establish direct linkages of the community with the line department. In order to achieve this meetings have been held with the representatives of the community. However according to the people interviewed they have always had to rely on GVT to get any line department functionary to come to the village. Basically the staff has to be ferried to and from the village, they do not come on their own.

An attempt was made to federate the SHGs in to a Federation. The idea being that it could then gradually take over the supervision and maintenance of interventions made by the programme. GVT was also successful in getting a linkage established with the MP agro Industries Corporation for the Federation to deal in seeds and fertilizers. However the federation did not take off due to group conflict.

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Summary and Analysis

Institutions

One clear gap this researcher found in the whole effort is in the approach of GVTs' work. The approach revolves around activities and technology. The emphasis is not on institution building or empowerment. As a result the communities have developed an attitude of dependency. It will be unfair to blame GVT entirely for this situation. The Missionaries have been active in this area for almost a decade and a half. Almost 75 percent of the HH are Christians. The Church has been doling out several benefits to them- building houses, distributing chicks, goats, seeds, and educating the children in their hostels. According to GVT staff, because of the heavy presence of church and a large Christian population, this village does not represent a typical GVT village of Jhabua district. Unfortunately this information became available to the researcher almost after two days of fieldwork; also it was part of the sample selected. However this researcher believes that several lessons that are emerging from this village remain valid and have a learning value.

As mentioned earlier an attempt was made by the project to create a Federation of SHGs. However this had to be closed down due to too many conflicts within the groups. One of the areas of conflict has been religion. Only two of the six SHGs are of Hindus while the rest are Christians.

The SHGs too are not really functioning very well. While people did agree that they need to address the various issues, unless that happens these institutions are not likely to last beyond the life of the project.

Management Process

Decision-Making

The experience in Kadwapada has been mixed. While in two of the SHGs the decision making process is fairly transparent. In at least one there are several reasons to believe that some group members have felt alienated. As a result that group has almost collapsed. In another instance where the Jankaar is not able to get money released for the repair of Honda pump due to some members not being interested, there does not appear to be a mechanism by which this issue could be raised and discussed in the group. The groups do not have a monthly meeting and the Jankaar has not been able to convince the members to meet. The Jankaar has been looking up to the GVT staff to help resolve this issue.

Responsibility for Assets

In principal the responsibility for the maintenance of assets lies with the User group or the concerned Jankaar who is supposed to get the money from the group. This money is essentially the fund that the use of that asset helps generate in the form of rental/ usage fee. In practice this system has not worked for the Honda pump and the flourmill. In case of the multicrop thresher the asset has not been used. The maize thresher was recently transferred from one SHG to another. The repairs had to be done the individual Jankaar with her own money.

Maintenance of Information

Identical systems of information maintenance are followed in GVT. These have been explained elsewhere. The only observation we would like to make is that we noticed that the formats developed for the monthly report of the CO are often incomplete. It also appears that they are used to fulfil an administrative requirement and not really to improve the work.

Inclusion and Targeting

Village Selection

As described this village got included at the request of a few members of the community who saw the work in the neighbouring Phase I village. However the researchers were wondering why this village was taken up if the Church was already doing so much work in the village.

Activity Inclusion

The members of two falias who did not join in have remained out of the project. As far as the members are concerned, all benefited from the SWC work. As in other villages IGAs were limited to a few more enterprising persons. There were some complaints from members of one group (the one that has almost collapsed) that the project was partial to some in the distribution of goats and poultry. However the team was not able to verify these observations. The situation in this village is complicated due to religion and presence of the Church.

Repayment Regimes

The repayment regimes are uniformly poor in this village. While drought has been offered as a reason for poor repayment record this is not a very convincing argument. Drought affected the entire region and it needs to be deliberated as to why the SHGs in other areas have shown better repayment discipline.

Stakes

SWC, WRD, Crops

This is one intervention that has got a uniformly positive response from the community. This is partly to do with the nature of intervention with a wage component in it and with land improvement and water resources development.

IGA

Very few IGAs have been taken up in this village. The experience has been mixed. As mentioned elsewhere with no business plan in place it is not clear whether these will eventually turn out to be viable and sustainable.

Community Assets

Not many community assets have been created in Kadwapada. Interestingly the community has demonstrated the ability to maintain CPRs by successfully managing

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the JFM programme as well as fisheries co-operative. However GVT did not have a role in either of these.

Savings and Credit

Interestingly GVT has not visualised these SHGs as savings and credit groups. These groups were essentially created for the implementation of interventions in order to be eligible for any GVT intervention a HH had to be a member of an SHG. Savings and credit has been an incidental fallout of the primary interventions like SWC, and WRD. Where there was a component of wage, part of that got saved due to a formula followed by GVT (two percent to go into group account and three percent as individuals savings in the group). An amount has also been fixed by each group as the monthly savings. However regular meetings are a thing of past. Meetings only happen if there is a need to take a decision regarding a loan application from the group or for forwarding a request to GVT. The group Jankaar makes a door-to-door collection of the monthly savings from each member- there are members who have not been saving regularly in some cases for more than a year. Some members have even crossed over and joined the SHG promoted by the Church and have become inactive in the GVT promoted group. The problem is that some of the inactive members have also defaulted on the loans that have taken from the SHG. As far as repayment of loans is concerned this is an area concern for almost all the groups.

This region has seen a good crop only in the past two years. Before that there were four years of continuous drought. The situation of drought has put most households in heavy debt with the private moneylenders. Apart from cash they owe to the ML, they have pawned their silver (locally called *Rakam*, that is seen as the most liquid and valuable asset) 500 gms to three kilograms) and there is no hope for the silver to get recovered. Basically people find themselves in a very vulnerable situation with nothing to fall back upon. In such a scenario it is quite difficult to expect SHGs to function well. Now there is talk that people will repay with the cotton crop. But given the collapse in-group discipline issues like whom will they repay first- the SHG or the ML need to be looked into. Possibly people will prefer to first pay the ML as they need the silver for the marriages in the coming season? This is an issue that needs to be looked into and a strategy worked out.

On the whole the SHGs have to be looked at carefully and supported if they have to sustain beyond the life of the project. Till now the CO had been under pressure to implement hardcore interventions. Very little time was devoted to institution building. Now in the withdrawal phase the stress has to be on focussing on institutions.

Employment Generation

As in other villages employment generation has remained mostly confined to SWC and WRD work. The few IGAs will generate some employment but that will be limited to a few individuals. It is too early to comment on the viability and sustainability of these interventions, as they have not been approached as businesses.

Migration Support (wage labour support programme.)

This village has an MLSP center with a functional telephone and support services. The MLSP center is fairly active. It has got very good response from Kadwapada as well as the surrounding villages.



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AN6 | Gara Village

Profile of Banswara District

Banswara district is surrounded by the Aravali mountain range. It lays in the southern most part of Rajasthan. It is surrounded by Udaipur and Chittorgarh in the North, Dungarpur in the west, Ratlam and Jhabua districts of Madhya Pradesh in the east and south respectively.

The district is divided into two sub-divisions, viz., Banswara and Kushalgarh. There are a total of five tehsils and eight blocks. There are 1522 revenue villages in 325-gram panchayats. The population of Banswara district is 15,00,420. This is 2.66 percent of the total population of the State. 73.47 percent of the population belongs to Bhil and Meena scheduled tribes (ST) and about five percent population is of various castes of scheduled castes (SC). Literacy rates are low at 26 percent. . Banswara ranks 30 amongst the 32 districts in terms of the human development indicators.

The district has a climate that is very much milder than that in the desert regions in further north and northwest. It is the highest rainfall district of Rajasthan. The average rainfall is 96.07 cm. However during the year 1999, 2000, 2001 the rainfall was much below average at 64.94 cm, 49.10 cm, and 64.40 cm. Consequently, the district suffered from drought for these years. Agriculture is the backbone of the economy of this district. It provides partial or full time employment to 80 percent of the population.

Mahi is the major river of Banswara. It separates the district from Dungarpur district. The Anas, Chap, Hiran, Erav are the other important rivers of the district. There are several lift irrigation systems along the Banks of Mahi River. The completion of Mahi Bajaj Sagar Pariyojana brought most parts of Talwara, Garhi, Bagidora and Ghatol blocks under its command area. The irrigation facilities created by this project have encouraged people to adopt new techniques of agriculture. They are now able to grow wheat, rice, soybean and cotton. But in the non-command areas the cultivation of maize, pulses, and other rain fed crops is the only option left to the farmers. The recurrent drought of the last four years has further aggravated their problems. It may be noted that the GVT project villages fall outside the command area, are poorer and more deprived villages in all senses of the word.

Profile of Gara village

Gara is one of the very remote villages covered by GVT in Banswara District. It is a good 60 km from Banswara, the Project headquarter and 32 km from Bagidora where the CO is based. The road from Banswara to Bagidora is mostly metalled and in a reasonable shape. However the road from Bagidora is only partly metalled and is in a very bad shape. It takes a good two hours of travel time from Banswara to Gara and of that an hour and quarter from Bagidora to Gara. The village is also not

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well serviced by motor transport. The nearest bus point is nine kms walk from the village. Interestingly the village was not electrified at the time of village entry. Now it is electrified but the electricity supply is erratic. The nearest PHC, Bank is in Shergarh (nine km). The village has a Shiksha Karmi Vidhyalaya till class five. Children from class six to eight have to go to Tandi nanai GP that is five k.m. From Gara. Only two children have pursued studies beyond eighth for which they have to go to Bagidora/Kalinjara in the Adiwasi Hostel. All in all this is a poorly serviced village. From the discussions with the GVT staff and village community it is clear that till GVT selected this village it had been completely neglected by the Government machinery.

This is a fairly old settlement. According to the PRA report, the village was settled almost 200 years ago. The village consists of 116 households. A large majority of these (86) belong to the Bhil Garasia Caste. The rest are also sub-castes of the Bhil caste like Machar, Damor, Ad, Keet, Bhabor, Singhara. The village is divided into five Falias (hamlets). These are:

- bhagat Fala;
- mata Fala;
- kasala Fala;
- patel Fala, and
- maal Fala.

Of the 116 HH, 104 have got organized into SHGs and have benefited from the efforts of GVT. The 12 remaining HH are mostly from Maal Fala and they have not joined in due to a previous bad experience with the SWC undertaken under a Government programme (in 1978 to 1979) where they were served recovery notices much after the work was over. They also suspect GVT of being linked to the missionaries whereby they would force conversions to Christianity. There is also some old time conflict of this group of families with the rest of the village. So there is a mix of factors that has resulted in their non-participation.

Agriculture accounts for 60 to 75 percent of the income of the people. The average land holding is two bigha.^{1/} The quality of land is generally poor. It is undulating, stony and mostly rainfed. This is a largely monocrop area with maize as the main crop. Most families are able to grow food for three to four months and for the rest they have to turn to wage labour. They meet the deficit by migrating and working as casual labour in cities like Ahmedabad, Baroda, Surat, Bhuj, and Kutch. Almost 75 to 80 percent of the families migrate from one to four months a year. At the time of village entry only 10 percent of the HH had skilled labour, now this has gone up to 15 percent. As of now there are 25 skilled labourers, mostly masons, in the village. They earn about Rs. 160 per day when they migrate while the unskilled casual labour earns only in the range of Rs.50-60 per day. The local wage rate is Rs. 40. However there are very few local labour opportunities.

^{1/} 6.25 bigha= 1 hectare.

At the time of village entry the community problem analysis had revealed the following problems:

- soil erosion;
- shortage/non-availability of safe drinking water;
- lack of food security;
- lack of health facilities both for human as well as animal;
- no electricity;
- no flour mill;
- lack of employment;
- lack of transport;
- lack of irrigation;
- housing for the very poor;
- malnutrition among children;
- no school; and
- pest management.

Evolution of the GVT Intervention

The village entry was made in 2000. According to the present CO who was the CO at the time of village entry as well, it took him six months to win the confidence of the community. After that the community has been very co-operative except a group of some 12 households who have not joined in. Interestingly unlike some other GVT villages where the number of participating households has remained static from the time of PRA to the later years- in Gara the number of participating HH has increased from 40 to 80 (beginning of 2003) to 104^{2/} over the past five years. The usual sequence of village entry and rapport building, PRA, followed by CPA and VWP, prioritisation of development options, implementation, review PRA and withdrawal has been followed. At present Gara is in the implementation phase. The GVS (Gram Vikas Samiti) has been formed in preparation of the withdrawal phase.

^{2/} This includes the sons who have got married and made a separate chulha. The landholdings have therefore remained unchanged.

Interventions at the Village Level;^{3/} Component A: Development Activities; VOG (Village Organisation Development)

Self Help Groups

There are 10 SHGs functioning in the village. These are:

	Name of the group	Male/ Female	No. of member	Year of starting	Major activities	Comments
1	Mata Fala Samooh	Male	17	2001	Diesel pump, Lift irrigation (13 members)	Diesel pump cornered by one family, LI not yet functional
2	Bhagat Fala Samooh	Male	18	2001	Lift Irrigation (17 members), Thresher, Breed improvement	No business plan for the thresher, LI not functional yet
3	Kasala Phala Samooh	Male	18	2001	Grain Bank, Diesel pump, grain bank, goatry, Lift Irrigation (3 members)	Grain Bank functioning well, Diesel pump has been a disaster, Li not yet functional
4	Mata Fala Mahila Samooh	Female	17	2002	Grain Bank, Tent house	Grain Bank functional, Tent house functional but due to some social conflict the returns to the group less than agreed
5	Bhagat Fala Mahila Samooh	Female	17	2002	Grain Bank, sewing machine	Grain Bank functional, still getting training for sewing
6	Patel Fala Samooh	Male	20	2003	Flour mill, grain bank, poultry	Flour mill, grain Bank functional, Poultry successful for breed improvement
7	Maal Fala Samooh	Male	16	2003		Conflict in the group, they have stopped saving
8	Dhuni Fala Samooh	Male	16	2004		2 months old at the time of field visit
9	Dhuni Fala Samooh	Female	12	2004		2 months old
10	Bजारंग Dal Swayam Sahayata Samooh	Mixed	12	2004		2 months old

^{3/}

As part of the validation exercise the social development specialist has focused mostly on VOG that is a part of component B for example, Development and only partially on Component B called Dissemination for example, the work in *Prasaar* villages.

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The CBA research team covered seven of the SHGs in detail. The social development person had extensive meetings with the members of five SHGs. The following observations could be made for all the five groups:

- All groups meet regularly twice a month. Once before fifteenth when the savings are collected and second time before the thirtieth.
- Members of all the groups are by and large saving regularly.
- However there is no system of fines or of ensuring that if a member has not saved then he or she has to deposit that amount at a later date. The records show this gap.
- The group records are up to date. The records are maintained by the group Jankaar.
- Very few loans have been advanced by the groups-the reason according to the members is the wage income coming in from the SWC and WRD works. Most people have been able to meet up their requirements from the wage income. They have also been able to get their mortgaged silver back from the moneylenders.
- However there have been cases of borrowings from the moneylenders for marriage purchase of bullock and other purposes. In these cases people have mortgaged their silver to access the loan. According to members of Kasala Fala Samooh almost all the people of the village have mortgaged 500gms to two Kgs of silver with the moneylenders to access credit. This needs to look into, as there is a lot of idle cash with the groups. In fact there have been very few loans advanced from the SHGs in this village. So while people do need credit, they are accessing it from the moneylenders and not the SHGs.
- Interestingly the arrangement with the moneylenders seems to be ongoing and people appear to be comfortable in these traditional arrangements.

There has been a recent attempt at federating the SHGs into a federation for each village called the Gram Vikas Samiti (GVS). This is expected to represent the interest of the community at the Block and district levels and act as a larger platform. However since the GVS is still in the process of getting formed it was not covered in the study.

IGA

Where GVT makes a grant to the group (Minor IGA):

Here the SHG on-lends to the individual member. The money that comes back to the group in the form of interest and principal repayment becomes part of the revolving fund of the group. In Gara very few loans have been made under this arrangement. There are five sewing machines, one carpentry loan and two diesel pumps. The experience has been as follows:

Case 1: Sewing Machines

Five sewing machines were given to five women in 2002. Of the five women two are getting trained in Bagidora. GVT is paying for this training (at 1200 rupees). The family is bearing the cost of living. It is likely to be a three-month training. The other three women are not able to mobilize resources to stay in Bagidora hence they have not been able to get the training. GVT is trying to work out a training arrangement in Shergarh. The principal and interest for the loan will be fixed once the activity starts. According to the CO the group will take the decision once the women complete the training and start their business.

Case 2: Carpentry Loan

Natha Sapa of Mata Fala Samooh got Rs3600 as a loan in 2003. He got this loan to purchase tools. He has been depositing Rs.100 per month with the SHG. So far he has repaid Rs. 600. He has been able generate good business in the village. His income has gone up from 800-900 rupees per month (for eight to nine months a year) to 1800-2000. He gets work from the surrounding villages as well. While his repayment has not been regular the group is monitoring this closely. The group members are confident of recovering the entire amount.

**Where GVT provides the asset as a grant to the SHG Members (Minor IGA)
No examples in Gara**

Individually managed assets through SHGs (Major IGA)

Where individual member gives a rent to the SHG and also makes a contribution towards the purchase of the asset. The asset belongs to the SHG but the individual 'Jankaar' takes the responsibility of managing, maintaining and renting out this asset on behalf of the SHG (Multicrop Thresher, Maize Thresher, Bullock Cart, Hand Cart, Chaff cutter, Flour Mill, Honda pump)

Case 3: Flour Mill

The mill was given to Patel Fala Samooh in March 2004. It cost Rs.32000. Birji Kalji is the Jankaar for the flourmill. The community made the house for the mill. The cost of Rs.15000 entirely came as contribution of the group members. Rs. 150 per member was collected as a contribution for this purpose. The mill has been functioning well. The Mill broke down in July 2004. The Jankaar had to spend Rs. 9000 for repair. He took a loan of Rs. 5000 from a SHG in village Bakaner at two percent. He mobilized the rest of the money on his own. The group has decided that till he recovers this amount he need not deposit any money in the group fund. This is likely to take 10-12 months. After that he is expected to deposit 60 percent of the earnings with the group.

It may be noted that 45 HH from three falas (Kasala, Maal and Patel) have benefited from this mill. They now have to travel far less to get their grain ground.

Case 4: Maize Thresher

The maize thresher was given to Ramji Jokha of Bhagat Fala Samooh on 29 September 2003. The cost of the thresher was Rs. 36000. Ramji gave a 10 percent

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contribution of Rs. 3600. The thresher has speeded up the task of threshing. It also costs far less than threshing done using labour. According to the people interviewed the thresher is able to tackle five quintals of maize in six minutes and costs Rs. 50. While the same quantity would take a full day for five to six people at Rs 50 as wage rate for example, the cost of manual threshing would work out to Rs. 300. There is a significant labour and cost saving with the maize thresher. GVT has distributed 22 such threshers in its project villages. However the thresher has not yet been used in a commercial sense. There is no business plan in place as yet. Questions like in how many years will they earn enough to replace the machine, what is generally the life of the machine, what volume of business they will have to have in order to make it a viable and sustainable intervention etc have not been looked into. The group members did agree that there was need to develop a business plan at the earliest.

Case 5: Diesel pumps

One five HP pump was given to the Kaasla Fala Samooh on 22 February 2002. The cost of the pump was Rs. 17000. Here the group started with a group contribution of Rs. 25 per month. The group contribution was reduced to Rs. 20 in the second month and then on to Rs. five for a few months after which the group contribution was completely stopped. The reason for this was the fact that only five members of the group were really using the pump. The group had arranged that the pump Jankaar would charge Rs. 40 per hour of the pump operation and deposit 30 rupees per hour of the pump usage in the group account. However by and by the Jankaar stopped depositing the money for usage in the group as according to him the money got used up in the repair and maintenance of the pump. To add another twist to this story the CO informed this researcher that the water pump was sold off by the five people for Rs. 10000. However this information came back to the group. The CO called a meeting and the group decided to get the pump back. It also decided to make the five persons using the pump to pay the group as agreed initially. However this has not yet started.

Bharatlal of Mata Fala Samooh was made the pump Jankaar for the pump given to this group in September 2003. The cost of the pump and pipe was Rs. 22475. The contribution deposited by the Jankaar was Rs. 1500. Since Bharatlal had his own personal pump, he rented out the group pump to three persons. The terms of payment were Rs. 40 per hour where the Jankaar would get Rs. 10 and Rs. 30 would get deposited in the group account. However the records for the pump usage are incomplete. The payment received by the group also is much less. The people who have used the pump owe money to the group for example, Mohan (Rs. 300), Samsu (Rs. 400) and Kalu (RS. 200). There does not appear to be any pressure on them from the group to pay this amount.

Now the Jankaar has sold his pump. He now plans to use the group pump for himself or for the other five members of his family (his four brothers and one nephew).

The group has not been getting any income from the pump till now.

Conclusion

The diesel pumps have become the private property of a few individuals. The groups have not been getting the income that had been planned. The CO is aware of this

and was very candid in admitting that things have not worked the way they were expected.

Case 6: Tent House

Galli/Dhana of Mata Fala Samooh got Rs. 18000 to start a tent house in 2002. He made a contribution of Rs. 2000 and bought utensils, mike, battery and two petromax lamps with this money. It was agreed that he would deposit 40 percent of his earnings with the SHG. However the activity has not got streamlined as yet. At the time of the field visit the researcher also got to know about an ongoing social conflict involving the tent house Jankaar. As a result the Jankaar had broken away from the group. He has formed another SHG with his supporters. He has however continued to run the tent house and he had been depositing Rs. 100 per month with the former group. So far he has deposited Rs. 700. Since he has not done the accounts till now he has not followed the rule of depositing 40 percent of his earnings with the SHG. This needs to be looked into by the group at the earliest. It may be noted that at the time of the field visit the social conflict too had got resolved and it was hoped that the group would be able to streamline the activity. However there is still the issue of the Jankaar having formed a new group. He is not willing to deposit the earnings from the tent house with the original group. This conflict has remained unresolved, so effectively his earnings will form the revolving fund of the new group. At the time of writing this report the issue is still being debated.

	IGA/Assets/ service provider	No of persons	Successful	Possibly successful	Un- likely	Failure	Comment
1	Flour Mill	1	Yes				
2	Maize Thresher	1	Yes as a welfare activity				No business plan ready
3	Diesel Engine	2				Yes	Money has not been coming to the SHG. The engines have been cornered by the individual Jankaars
4	Carpentry	1	Yes				But repayment has been irregular
5	Tent House	1		Yes			Social conflict, no business plan but the activity is ongoing
6	Sewing Machines	5		Yes			Cannot say definitively as they are still training
7	Goats						Cannot say
8	Poultry						Cannot say

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Social Development Interventions

Ball bearings for chakkis (Gatti), maize Shellers, Grain Bank, Paravet janakaar, Health camps (human and cattle), House construction for the poor, Solar energy, Adult literacy classes:

- **Smokeless Chulha**, four out of 20 Chulhas made are functioning well. According to the people interviewed there was design fault. This fault has been identified and now a fresh demand for 55 Chulhas has come in;
- **Sanitation Kits**, have been given to all the members of the SHG. These are being used;
- **Light Sheets**, Mata Fala and Patel Fala members have got one each. According to the CO the proposal for others has been approved and each member will get one light sheet;
- **Maize Shellers**, Four maize shellers were given to Patel Fala Samooh. People find it good for seed extraction. Many HH borrow the maize shellers for this purpose. People find it useful and would like more of these;
- **Ball Bearing**, 35 HH have got the ball bearings for their chakkis. All have reported that this has resulted in substantial reduction in drudgery with grinding time reduced from two hours to one hour. With the coming in of Flourmill the dependence on hand Chakki is less but they still use it for grinding pulses. The very poor HH continue to use it for grinding maize as well;
- **Grain Bank**, Four groups got grain from GVT to start a grain bank in June 2003. The rotation has been uninterrupted and they have been able to increase the stock from 20 quintals to 25 quintals in one cycle. It may be noted that since members of six groups are effectively from the same family (with three male groups and three female groups) making it three groups plus one more for example, four groups. The other three groups were started very recently in 2004. Thus all groups that were in existence in 2003 were covered except Maal Fala samooh that had stopped savings. Recently Maal Fala samooh has made a demand for a grain bank. In order to qualify for the same they have also resumed savings. But GVT has decided to wait and watch the group discipline before advancing grain to this group;
- **House Construction**, for the very poor was done for 3 HH. There is additional demand for eight houses.
- **Solar Lanterns**, Two solar lanterns have been given to two groups (Rs. 600 was taken as Bhagidari from individual beneficiary) and two gas lanterns have been given to the GVS. There is a huge demand from every HH and they are willing to give 50 percent Bhagidari. GVT has budget constraint therefore will try to get them linked with other sources, and
- **Adult literacy Classes**, were held for six months and then stopped. The girl running the class got married and moved out of the village. Now a new

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daughter in law might take it up- GVT will pay her an incentive of 75 paise per attendance per day. The impact of the literacy class has been that people are able to sign much faster than before.

Crop Technology

This includes crop trials, seed distribution, cropping practices, agriculture implements, compost pits, and drip irrigation, PVS/PTD.

FAMPAR Trial: Maize Paddy seed, Black gram and pigeon pea seed were distributed to all in the Kharif season. FGD revealed that the GDRM 187 maize variety is preferred. For rice Kalinga third. Pigeon pea BDN. Chickpea in Rabi- ICCV2 and ICCV 10 were preferred. These preferred seed varieties will be distributed.

Agriculture Implements: Have been distributed to every HH. According to the people interviewed the serrated sickle works better and there is time saving.

Hand Operated Winnowing Fan: Only 20 percent of the people using the fan, as it requires high stamina. This has not been a successful intervention in this village.

Drip Irrigation: A drip irrigation kit costing Rs1500 was given to Bhagat Fala SHG in February 2002. 17 members of this group have given the contribution at Rs.8 i.e. Rs. 136. The Jankaar made a contribution of Rs. 14 to make a total contribution of 10 percent for example, Rs. 150. According to the CO the idea of Bhagidari is not necessarily linked to getting benefit of a specific activity it is also a way to increase group fund. There are nine members who are taking vegetables from this facility. Two to three members from Mata Fala also take vegetables. Only five members are taking care of the facility. There has been a demand for seven more drip facilities from members living near hand pumps and wells.

Compost Pits: five compost pits were built with five groups in February 2002. There has been a good demonstration effect of this intervention. Earlier they were not making a proper size and not following the proper method. Now the proper size and method is being used. Earlier they used to get five kg manure from one kg dung. Now get 30 kg. Manure from one kg dung. There has been a good adoption of this activity. 10-12 pits have been dug through linkages with the help of Watershed department.

SWC

There is no village common land in Gara. All the SWC work has been done on private land with 50 percent contribution. Total area planned for treatment is 560.50 acres. Of this 466.72 acres has been treated. This has resulted in approximately 20 percent increase in cultivable area (for example, 70 acres). This area is located in the Nala portions, behind the existing fields. Usually the farmers do not cultivate on more sloppy parts of their land. Some land that was earlier used for growing maize has now been converted to growing paddy as a result of the SWC work.

WRD

The following interventions were made by GVT:

- Well construction (making existing wells pucca): three.
- New dug out well one.
- Well deepening: eight.
- Lift Irrigation: one.
- Hand pumps: three.
- Diesel Pump (also covered in Minor IGA) three.
- Water tanks for cattle six.

There has been a huge reduction in drudgery due to a reduction in time taken to fetch water. Earlier women would spend three to four hours every day to fetch water, now this time has come down to between 30 minutes to one hour. There is no shortage of water throughout the year. Women have found time for leisure, are able to do the household chores more peacefully and take better care of their fields. The quality of water has also improved as earlier people were fetching water from the river or open wells.

The lift irrigation scheme is very ambitious but no assessment could be made, as it had not yet started functioning. It was expected to get functional by the month of November 2004 for the Rabi season. However the CBA team was worried to note that the arrangements for the use of this facility had not been worked out. People had no idea about how water would be shared, what they would have to pay for its use, and how the maintenance will be done.

Livestock (Breed improvement of cattle, poultry, goats)

Several members were given Giriraja, Girirani and Kadaknaath breed of poultry. While there was some mortality by and large the objective of crossbreeding was achieved not just in Gara but also in the surrounding villages. People reported good earnings from poultry and have expressed interest in continuing with the activity. The same holds for Goatry, the objective of breed improvement seems to have been achieved. Although people do recognize that Sirohi and Jamnapari are more susceptible to disease. Jamanpari suffers huge mortality even in the transportation (50 percent). Yet it still is considered a viable option, as the milk yield is much more. Need some more information on the crossbred goats. GVT has decided that they would entirely focus on breed improvement and give only the buck for this purpose. Community will be taken for an exposure visit to Dahod and Jhalod where contacts will be established with the poultry farms so that they can continue with the activity.

Forestry

JFM, Fruit trees, Nurseries, orchard development, grafting and budding, medicinal plants cultivation, CPR development

JFM. The community has got together and protected a patch of 100 ha of forestland for the past two years. They have formed groups of four persons each who are responsible for protection. The groups rotate daily. There has been no break in this protection. The immediate benefit the community got from protection is of grass.

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They have got grass worth Rs.50000. For this they paid a royalty of Rs. 5000 to the FD. The JFM group has a separate bank account. It is now in the process of getting registered by the FD.

Orchard Development. Fruit plants have been distributed for the 2002, 2003, 2004 seasons. These have included 200 Aonla, 400-500 Mangoes, Bamboo (600), and improved tissue culture teak plants (75). No assessment has been made on survival percent.

Six horticulture trials, 93 trials of Aonla and three of mango have been taken up 2004.

Ber budding of 200 plants was done in 2002. People have reported improved fruiting.

Component B Dissemination (Prasaar Villages)

There are two Prasaar villages of Gada- Dhalar and Munakhada. These are six Km from Gada. Dhalar has had natural dissemination even before the formal entry of GVT. They made two groups (20 members each) on their own. There are 60 HH in this part of the village. These groups were formed in 2003. This village has 700 HH with Bhil Garasia and Damor as the dominant community. Dhalar groups have been saving regularly. The rest of the village is still not part of the effort. All the members of the SHG have got Smokeless Chulha and Fibre sheets, there is one water tank constructed for cattle, improved seeds have been given to all, and Kitchen gardening has been promoted with all. GVT also organised Vet camps, Human health camps. According to the CO Since this is a very large village GVT cannot really cover the entire village the strategy will be to work through linkages.

Munakheda, the second dissemination village has 85 HH. It has three groups with 45 members. Similar activities have been undertaken. One SHG will be getting a loan for dairying under SGSY.

Prasaar Jankaars receive regular training. There is a monthly training. The CO in charge of the villages has to give overall guidance and direction to the Jankaars. The CO is training in charge at Bagidora and provides training to the Prasaar Jankaars. He is also responsible for monitoring of the work of the Prasaar Jankaar. They submit their monthly Planning reports in the office. They are completely responsible for mobilizing the community in the villages. There are a total of 175 Prasaar villages in Banswara and 39 Prasaar Jankaar (of these nine are women)

Future Scenario

No take over plan (TOP) or hand over plan (HOP) has been prepared for Gara as of now. A review PRA also has not been done. Some work has begun in the direction of forming a federation of the SHGs for example, a Gram Vikas Samiti (GVS) however it is still in the process of getting formed. From the discussions held with the CO and other people it appears that the thinking on future has just about begun.

Summary and Analysis

Institutions

Self-help group (SHG) is the primary institution at the village level.

Governance

While the groups are meeting and saving regularly there does seem to some kind of inertia in dealing with the people who have taken up IGAs or are managing group assets like the diesel pumps, tent house. Almost all the groups have reported cases where repayments are either not coming in or are less than what was agreed. In almost none of the cases a business plan existed for the larger assets like the Maize thresher, tent house. The group records are well maintained by the Jankaars. But very few loans have been advanced by the SHGs. At the same time people have been taking loans from the moneylenders by mortgaging their silver. According to the CO the groups have taken much longer to gain the confidence to start lending from the group savings. They gave a few loans to see if people repay. Now they are far more confident. However the CO also agreed that people of Gara have been rather slow on the uptake and they have been really viewing the SHGs as a means to get the various kinds of interventions from the project. They feel that so long as they meet and save regularly they will continue to be eligible for the interventions and benefits. The CO has a very good rapport with the community and people also are very actively engaged with the project. It is possible that people have been more focussed on wage income coming in from SWC and WRD works and have not really focussed on making SHGs a viable and robust institution. This appears to be a general situation in the GVT project villages where there is a tendency to take on a more instrumental view of the SHG groups. The IGAs too are not being looked at as businesses where the groups may need some pushing and prodding. The money has been made available for these activities without much pressure for repayment. A lot more effort will be needed to make the institution of SHG a strong institution that could survive beyond the life of the project.

Decision Making

While the groups meet and save regularly they seem to have allowed some kind of inertia to develop. Even in the case of the sale of the diesel pump by the members who were using it, it was the CO who had to bring up this issue and facilitate a decision within the group to push the erring members to get the pump back. In other cases too the leadership is not pushing for timely repayment or the equitable and proper use of the groups asset. All loan decisions are taken at the group level but very few loans have been advanced. Strangely while people kept claiming that due to extra cash income from SWC and WRD work they did not need credit, yet the extent of indebtedness to the moneylenders is large. The reasons for this situation have to be explored by GVT.

Leadership

As of now the leadership of these groups is successful only to the extent of ensuring regular savings and meetings. This too has happened because people believe that that if they are not active members of the SHG they will not remain eligible for the

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benefits of the project. From the various interviews and discussions their perception does not seem to be wrong. There is no system though of making good any gap in savings. In case of Patel fala samooch for instance there are cases where members have not deposited the savings in some months. There is no system of imposing a fine or even of ensuring that this money is deposited at a later date. All in all, the group leadership is weak. According to the CO the group leaders of Gara did not attend all the trainings. Overall too there were less trainings held for leadership development than was desirable.

Gram Vikas Samiti (GVS)

Too new an institution for the CBA team to comment on.

Management Process

Decision Making

Decision-making is transparent and takes place in the group. However not many decisions have been taken in these groups. Most members are only interested in the wage income coming in from SWC and WRD works and in the other benefits flowing in from the project. The proposals too have been late in coming in. The literacy levels are very low and that has slowed the entire process.

Responsibility for Asset

User groups have been created for maintenance of group assets like the Lift irrigation scheme. However this system has not yet been tested as yet. For other assets it is the concerned SHG that is responsible for their maintenance and management. The experience has not been very good till now.

Maintenance of Information (which information is kept)

The group Jankaar maintains village level information. Till recently he was paid by the project. He has not been paid for some time. No decision has been taken as yet about how he will get compensated.

Inclusion and Targeting

Village Selection

This is a perfect village from the point of view of reaching out to a poorly served area and a poor community.

Activity Inclusion

Almost all the willing persons have been included in the intervention

Repayment Regimes

Very few loans have been advanced by the SHGs from their own savings. While the repayment has been reasonably satisfactory for the individual loans advanced from the group's own fund, this has not been the case with the loans for asset purchase

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that were routed from GVT through the SHG. The repayment amounts have been less than agreed, sometimes not taking place at all. The groups also do not have any control on the individuals who have taken these assets.

Stakes

SWC,WRD,Crops

SWC, WRD interventions have generally benefited the people. SWC has been the most popular intervention as it has not only provided wage income but also has helped to improve the quality of land. In some cases it has also increased the arable area. People informed this researcher that there has been some new area brought under paddy as well as some old maize fields have been converted into paddy fields. Paddy was not grown in this village. People used to buy rice for consumption. They are happy to grow this relatively higher value crop. However no formal assessment of the actual increase in this area has been made.

The response to drip irrigation and compost pits has been very positive and some scaling up with funds from other sources has also happened. There is demand for more units and GVT is trying to link the groups with other departments.

IGA

Very few IGAs have been taken up in this village. The experience has been mixed. As mentioned elsewhere with no business plan in place it is not clear whether these will eventually turn out to be viable and sustainable.

Community Assets

The community has demonstrated good community spirit in the JFM programme. There has been no break in the protection responsibilities and they have even got good returns in the form of grass. So the community does have the capacity to work together. This capacity has not been used by the project. GVT has acquired the image of a project that is there to distribute benefits and not as an organisation that is into building institutions of the community.

Savings and Credit

Members have very little stake as of now. The SHGs are being seen as a means to access the project benefits only. The institutions are unlikely to survive beyond the project

Social Development Interventions (SDI)

The response to solar lanterns has been very positive. People are willing to contribute 50 percent of the cost. GVT is trying to link them up with the concerned department. The response to the ball bearings, light sheets etc has been positive but only time will tell whether these will get replaced after they have run through their life.

The grain bank has been functioning well and it seems that it will be sustained.

Employment Generation

This has remained mostly confined to SWC and WRD work. The few IGAs will generate some employment but that will be limited to a few individuals. It is too early to comment on the viability and sustainability of these interventions, as they have not been approached as businesses.

Migration Support

The migration support programme is new. It was started in June 2004. Till now 189 identity cards have been made. The response to this programme has been good.



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AN7 | Moti Kheri Village

Profile of Rajasthan^{1/}

Rajasthan is India's largest State. It is divided into 32 administrative districts. It has the highest proportion of Scheduled Castes, and a high proportion of Scheduled tribes. Agriculture, the largest employer of the workforce in the State, has faced sluggish growth rates, while the more dynamic services sector has accounted for a small percentage of overall employment. The low employment in the industrial sector indicates an inactive secondary sector, resulting in a heavier dependency on the primary sector. Agriculture and Animal husbandry are the principal sources of livelihood in Rajasthan and together with mining and quarrying, make up the primary sector for employment in the State.

In the 10-year period 1981-1991 the population of Rajasthan increased by 28.4 percent while the number of main workers registered a growth of 33.3 percent, the maximum increase in the workforce occurring in one of the poorest districts, Banswara. An important feature of this decadal employment trend is the increase in women's employment. The number of female workers increased by 79 percent, three times the men in the same category, mainly in the rural areas. Women therefore play a major role in the State's economy.

The economy of Rajasthan is characterized by diversity in terms of livelihood sources and low levels of income poverty and unemployment. Susceptibility to drought, decelerating growth rates in the 1990s; low levels of technology and poor credit and marketing facilities are cause for concern. Strategies and programmes have to be evolved to improve the skills of the local population and encourage greater community participation to generate additional income and employment in the rural areas, especially among the poorer sections of the society.

50 percent of the total land holdings continue to be small or marginal and cover only 10 percent of the cultivated area. The poor quality of land and scarce irrigation facilities affect even the larger landholdings, so that land inequality is compounded by ecological fragility. This results in low productivity making food security the primary concern of farmers.

Most districts in Rajasthan have low HDI values. In terms of HDI, Chittorgarh ranks twenty-first out of the 32 districts. Pratapgarh is one of the Sub-divisions of Chittorgarh district.

^{1/} Source: Rajasthan Human Development Report, 2002.

Profile of Chittorgarh District and Pratapgarh Block

Chittorgarh district consists eight sub-divisions, 13 tehsils, 14 blocks and 2415 villages. The main crops of the area are maize, sorghum, sugarcane, wheat and oil seeds. This is also a mining belt with zinc, copper, lead, marble and limestone mines.

Pratapgarh block is located in the southern part of Chittorgarh district. It is located at 24.03 N, 74.78 E on height of 1660 ft from sea level. The block is bounded by Mandsaur, Ratlam, Neemuch districts of M.P. and Banswara and Udaipur districts of Rajasthan.

The area is known as "*Kantha*" meaning the edge of the State. Pratapgarh was established in year 1699. The main language of the area is *Malvi*. The traditions of this area are mostly based on Gujarati culture. The total population of Pratapgarh is 236500 (census 2001). Out of this 8.5 percent belong to the scheduled caste and 53.6 percent belong to scheduled tribe. The Sex ratio is 953.

Agro climatically the area has mild summer and winters. The mean annual rainfall is 887 mm with an average of 50-60 rainy days, almost all of it falling in the monsoon period of July to September. The area is surrounded by river Chambal, Shivna, Jhakhm, Retam and Mahi. Main crops in the area are Wheat, Rice, Gram, Cotton, Sugar cane, and Pulses.

Profile of Moti Kheri Village

Moti Kheri village is located 28 kms from the project headquarter in Pratapgarh. Though the village is connected by road to the Tehsil headquarter in Sohagpur, the last five kms of this road is *kucha* that gets cut off during rains. IFFDC made an entry in this village in August 1999. According to the village people interviewed, at the time of village entry, the situation in the village was very bad with a majority of families dependent on migration to meet their requirements. Almost the entire village used to do headloading of fuelwood to make the two ends meet. They also used to walk huge distances (35kms) to Mandsore and Bajna to sell timber.

The total number of households (hh) in the village is 115. These are spread into five hamlets. Of these 110 hh have got engaged with the project. The remaining five did not join for a variety of reasons. One family had a person in a Government job, another was concerned that IFFDC people were missionaries and would force them to convert at a later stage. Of all the poor families only one got left out, as this family took too long to get convinced. By the time they got convinced the SWC planning and budgeting had been completed.

The details of different hamlets including the WBR are as follows:

	Name of the Fala	No. of HH	Self Sufficient	Poor	Medium Poor	Very poor	percent of families migrating for more than 6 months
1	Semalkhedhi Fala	40	1	15	17	7	60
2	Mamadev Fala	20	3	7	4	6	50
3	Haldukheda Fala	17	1	8	4	4	47
4	Rail Fala	15	0	8	3	4	46.66
5	Bhuri Ghati Fala	23	4	8	5	6	47.82
	Total	115	9	46	33	27	52.17

Source: Panchmukhi Vikas ki aur Agrasar, Moti Kheri-A report, IFFDC Office, Pratapgarh, 10 October 2003

Most families are nuclear families and belong to Bhil Meena caste and sub caste groups. The literacy status is poor with only 30.4 percent men and 5.51 percent women being literate. There is one Middle school (upto standard eighth) in the village where 170 children study. For further studies the children go to Suhagpura (distance four kms), Arnod (distance six km) or Pratpgarh (Distance 22 kms). Lok Jumbish, a literacy programme supported by the Government of Rajasthan, is also running some informal literacy centers in the village. As a result of the informal literacy centers, the percentage of functionally literate is 17.28 percent of the total population.

There is no public or private transport facility to the village and the closest point for the public transport is Suhagpur/Arnod. The village has a PHC (Primary health center) sub center, however that does not function very well. There is also an Anganwadi (ICDS: Integrated Child Health Services) center. There is no electricity or telephone facility in this village.

The land is undulating and uneven with two to 10 percent slope. The valley portion has Black cotton soil and is more productive. The soil is red on the uplands and mixed on medium lands. Almost all households own a mix of different land types. The average rainfall in this area is 700 to 1000 mm but the intensity of the rainfall, its frequency and distribution is very irregular. The total arable land is 170.16 Ha. Of this only 25-30 percent is cultivated during the Rabi season. The major crops taken up in the Kharif season are Maize, Soyabean, Urd, Paddy, Cotton, Ajwain, red gram and Til. The Rabi crops are wheat, gram, mustard, lentil, maithi and Garlic. The technology used is traditional and seed material too is what the farmers are able to save from the previous years. All in all agriculture is low yielding

As far as Animal husbandry goes, Goatry seems to be very popular with more than 60 percent HH having goats. A few self-sufficient HH (12) have buffaloes.

Agriculture is the main source livelihood for the people. However it does not provide for the needs of 92 percent of the families. The agriculture income has to be supplemented by labour income from migration. Migrant people engage in both

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agriculture and non- agricultural activities. More than 52 percent of the families migrate in search of wage labour to Pratapgarh, Malwa, Mandsores and Bhalod. The wages for casual unskilled labour range from Rs. 40-50 for men and Rs.30-40 for women. People usually migrate from December to June when there is not much work in the village. The ones who stay behind continue to work as daily wage labourers in nearby areas like Arnod. The large farmers from these areas come in their tractors to fetch labourers.

Evolution of the IFFDC Intervention

According to the CO who made the village entry in August 1999 Moti Kheri is one of the 25 villages covered under the WIRFP. It is one of the eight villages where IFFDC decided to put in the maximum effort in the first year of its operations. According to a report^{2/} prepared in November 2000 the process followed in Moti Kheri was different from the other villages. The key differences were that the process of social mobilisation was given greater emphasis and the PRA for understanding the baseline village situation was better linked to the planning process. Moti Kheri was developed as a model village. The team was able to establish its credentials by September 2000. The first VLDP (Village level development plan) was prepared for Moti Kheri. The other IFFDC villages also developed on the same lines but from various discussions it can be concluded that the intensity in the other villages was less than that in the model village.^{3/}

Initially people were very scared and sceptical of the intentions of IFFDC. The fears ranged from the IFFDC staff coming in to convert them to Christianity or to take away their lands and women and so on. The team placed at Moti Kheri decided to go slow on social mobilisation and it was nine months before a PRA could be conducted in the village.^{4/} The period of nine months was spent in rapport building with the community, in working on the opinion leaders and gatekeepers, slowly conducting hamlet-based meetings to explain the programme. EPAs (Entry point activities) like construction of water storage tank near the hand pump and organizing of a health camp through one enthusiastic women's SHG (Santoshi Mata Bachat Samooh), built the confidence of the women and some of the members of the village community. This effort was then complemented with an exposure visit to a few selected villages. Once they were convinced about the intentions of IFFDC the going was easy. The villagers started getting organized into SHGs with regular savings and meetings. IFFDC staff was careful in not giving them the impression that the physical works would follow soon.^{5/} The emphasis was on making strong and functional SHGs. Given the co-operative background of IFFDC, having strong functional groups was considered of primary importance.

^{2/} Participatory Development Process through Social Mobilisation at Moti Kheri, November 2000.

^{3/} Since the CBA team only took one IFFDC village for a detailed study, it is not in a position to substantiate this observation.

^{4/} This is unusually long time. In most cases the PRA exercise is conducted in the first three months of entry.

^{5/} It may be noted that once the programme started getting known, physical works did tend to become a major point of attraction, especially in the villages that were covered later. In the Prasaar villages too the village community is hopeful of some physical interventions in the long run.

According to the report one of the lessons of Phase one of the WIRFP was not to allow a Jankaar dependent project model as in that model Jankaars become alternative power brokers for their groups. IFFDC has therefore opted for the concept of a broad based leadership where by capacity building inputs can be accessed by a larger number of group members (and not just a few select Jankaars) through Capacity building measures (CBM) conducted at the village level itself. According to the report, to practice the concept of broad based leadership, all group members were provided basic training on SHG concepts and functioning. The physical interventions were only made after appropriate CBMs. In practice it meant that while the Jankaars were given more intensive centralised training, the members of the SHGs were also given trainings at the village level so that they could follow what the Jankaar was doing and keep track of the work. The team followed a proper process of conducting a PRA, arriving at the Livelihood asset status, doing a critical problem analysis and finally deciding on interventions based on group discussions and negotiations among various stakeholders.

The following areas were identified in the CPA:

- Water for irrigation and drinking.
- Unavailability of good seed and fertilizer on time.
- Soil and water erosion.
- Low crop productivity.
- Scarcity of fuel and fodder.
- Lack of credit.
- Unproductive animals.
- Lack of marketing avenues.
- Lack of flourmill.
- Lack of electricity.
- Lack of a pucca road.
- Women overburdened with work.
- Degradation of forest and community lands.
- Poor health status.

Activities at the Village Level^{6/}

Component A: Development Activities;VOG (Village Organisation Development)

Self Help Groups

There are a total of 13 SHGs in Moti Kheri village with a total membership of 231. Of these seven are women's groups and six are men's groups. Some of the features that stand out about the SHGs are as follows:

- The groups meet regularly twice a month.

^{6/}

As part of the validation exercise the social development specialist has focused mostly on VOG that is a part of component B for example. Development and only partially focussed on Component B called Dissemination for example the work in *Prasaar* villages.

- They save regularly.
- The system of fines for late payment of savings or for non-attendance of meetings is enforced strictly. The fine is Rs five if savings are deposited within 15 days and Rs 10 if these are deposited within a month. The fine for non-attendance of meetings is Rs. Five.
- There has been a fairly good rotation of money in the groups with a good track record of repayments. (See the CBA team's output) on repayment status.
- The members are not meeting all their credit requirements from the SHG especially the ones who have not been repaying their previous loans. The defaulters of the SHG groups have had to turn to the local moneylender for loans. In addition other people who need larger loans too are forced to turn to moneylenders. There are instances of people mortgaging their silver to access these loans. However people have reported a 50 percent decrease in dependence on moneylenders since the formation of SHGs. A few farmers (four to five) have also taken Kisan credit cards from Punjab National Bank.
- The record *Jankaars* for the SHGs, get an incentive from IFFDC for maintaining records of two to three SHGs. At the beginning this was fixed at Rs.five per member per month for example, 75 rupees for a group of 15 members. There has been some discussion on making the groups start paying for these services. It has now been decided that Re.one per meeting will be paid by every member, while IFFDC would pay Rs. two per member per meeting towards meeting the cost of record *Jankaar*. However this has not yet been put into practice.
- According to members of SHGs everybody has access to loans provided they have a good repayment record. The loans are cleared based on the need of the applying member. The decision to sanction a loan is taken in the group meeting.

Income Generating Activities (IGA)

Where IFFDC Makes a Grant to the Group (Minor IGA):

Case 1: Carpentry

Rajmal Nagji Meena (from the poor category) of Bheru Bhavji SHG, used to do minor carpentry jobs like making ploughs, and doors. He apprenticed under the local schoolteacher who taught him more complex items like box beds, and almirahs. Two years back he took a loan of Rupees 500 from the SHG to purchase tools at two percent rate of interest. He has repaid that amount. He has been operating as an itinerant carpenter taking up jobs in the surrounding villages as well. He gets a wage of Rupees 100 per day. If the job is big then he even employs an assistant at Rs. 50 to 60 per day. After repaying the first loan he took a second loan of Rs.1000 for purchase of wood, another Rs. 500 for loan repayment and Rs. 500 to tide over an illness in the family. He is fairly well established as a carpenter. Earlier he used to migrate as a casual labour for five to six months a year but for the past three years

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he has stopped going out as casual labour. Now he goes as a skilled carpenter. He has applied for a loan of Rs. 30000 to buy a lathe machine. The proposal is presently with the PLDCS (Primary Livelihood Development Co-operative Society) started by IFFDC. The PLDCS would forward the application to the concerned Bank. People prefer to approach the Bank through this route because they feel that IFFDC would not only help them access money from other schemes of the Government but also help establish direct link with the Bank whereby they do not have to go through middlemen. The role of IFFDC is to help them with preparing a proper application.^{7/}

Case 2: Goatery

10 members of Ganga Mata Samooh took a loan of Rs. 1000 each from the group loan of Rs. 10000 they got from the Bank in June 2002. Nine of them invested this money in purchase of goats. One person used the money for contributing in the investment of a flourmill. All of them have been able to multiply the goat population in the course of two years. They have utilised the earnings from the sale of goats for a range of activities like repayment of outstanding credit (four women), well deepening, seed purchase and meeting household expenses. The activity has been successful.

Case 3: Handpump Repair

Deetalal, the SWC Jankaar of Moti Kheri village was associated with the project activities right from the beginning of the project. He had several opportunities to attend training programmes and exposure visits related to SWC and WRD. He attended a handpump repair training in January 2004. He got a handpump repair toolkit as well as a certificate at the end of the training. Deetalal started repairing handpumps in and around his village. In the initial few months he earned Rs. 800 from this service. He decided to make handpump repair a supplementary livelihood for himself. When the project undertook digging of handpumps in 16 of the project villages, Deetalal offered his technical services to fit these. He earned Rs. 1600 from this service during May to June 2004. Now Deetalal is known in the area for this skill. He gets paid around Rs 50 for minor repairs and Rs 300 for major repair work. On an average he earns about Rs. 700 per month from this activity. This has become a source of supplementary income for him.

Case 4: Diesel Engine Repair

Kalu the engine repair Jankaar got training in the repair of diesel engine in December 2003. At the end of the training he got a tool kit. He earned Rs. 3300 from January to June 2004. During the peak agricultural season there is huge demand for his services. On an average he earns between Rs. 280 to 300 per day in season and gets work for 17 to 18 days in a month. For minor repair jobs he charges Rs. 40 to 50.

Case 5: Sewing Machine

Ranglal who is presently a Prasaar Jankaar has benefited greatly from the IFFDC intervention. He belongs to the very poor category. He and his wife have only five

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Eventually it is expected that PLDCS would take over this role from IFFDC.

bighas of land with a large family consisting of five children to feed. They were able to grow enough grain for six to eight months. He had got a sewing machine and some raw material financed from the Bank under the TRYSYM scheme. He learnt sewing in Suhagpur and started a tailoring business. However the business did not take off and Ranglal was burdened with the loan. The Bank threatened to take back the machine. Around the same time IFFDC intervention started (in 1999) and Ranglal became actively associated with the interventions. He was made the SWC and Group Jankaar. He started earning some incentive money as a result and that helped him to pay off the Bank loan. In June 2003 IFFDC started a sewing training center in Suhagpur. Ranglal's wife Sajana joined this training programme along with 18 other women from 10 villages. This was a six month long training. Sajana has continued to take up tailoring work from home. It has continued to a source of supplementary income for her. Ranglal does the cutting jobs while Sajana does the stitching. They earn between Rs. 45 to 60 per day for 10 days a month.

The sewing training center in Suhagpur has attracted many women. Batches of 10 to 12 women from the project villages have been attending the six-month training course at this center. There are problems in maintaining continuity as women do drop out during the peak agricultural season. IFFDC has been taking feedback on how to make the training more effective.

Where IFFDC Provides the Asset as a Grant to SHG Members (Minor IGA)

No activity was undertaken under this head.

Individually Managed Assets Through SHGs (Major IGA)

These are cases where individual member gives a rent to the SHG and also makes a contribution (usually 10 percent of the cost of the asset) towards the purchase of the asset. The asset belongs to the SHG but the individual 'Jankaar' takes the responsibility of managing, maintaining and renting/operating this asset on behalf of the SHG. Some examples of such assets are Multi-crop Thresher, Maize Thresher, Bullock Cart, Hand Cart, Chaff cutter, Flour Mill, and Diesel pump.

Case of the Chaff Cutter

A chaff cutter worth Rs. 40000 was purchased in June 2002 by the PLDCS by mobilizing resources from the savings of six SHGs. The SHG wise details are as follows:

- Kalkamata SHG Rs.11000
- Bhairu Bhavji SHG Rs. 8000
- Bhadui Mata SHG Rs. 5000
- Rambavji SHG Rs. 3000
- Ganga mata SHG Rs. 6000
- Bijwamata SHG Rs. 7000
- Total Rs 40,000

It is interesting to note the following:

- This purchase decision was not made in consultation with the community. The erstwhile, well meaning, ADM (Additional Divisional Magistrate), felt that this would be a good investment and the decision was imposed on the community.
- The PLDCS was not in existence at that time.
- No interest was fixed for the money lent by the respective SHGs for this purchase.
- No term of loan was fixed.
- A profit of Rs. 10000 was made in the first year due to the fodder-cutting job coming in from the district administration in the fodder camps opened for drought relief. This was a one-time source only. According to the people interviewed, chaff cutting is not traditionally practiced in this belt, so there is no market for this service. The chaff cutter has been unutilised since the second year. It is gathering dust. There was an attempt to sell it off; however the sole offer the group got was too low (Rs.15000 only).
- The SHGs have neither got the principle back and there is no question of getting the interest.
- All in all IFFDC staff too agrees that this was a bad decision. Unfortunately a huge amount of the hard earned money of people has got locked in this enterprise.
- There is some talk in IFFDC to write this off and give this money back to the groups from IFFDC resources. However no decision has been taken as yet.
- The group members appeared not to be happy about the state of affairs but this researcher did not see too much concern either, especially among the members of the PLDCS. Is it because they do not want to confront IFFDC? This just might be true, as the people do feel grateful to IFFDC for the interventions they have made.
- Interestingly one of wheels of the chaff cutter was stolen in the last quarter of 2003. This became a big issue in the community. It was asked to replace it with contribution from each member of the SHG. The members were not willing to make any further contributions. In fact they raised questions on the utility of a community asset that had been lying unused. Issues of who is responsible for the maintenance and safety of such an asset also came up. This has surely raised larger issues with respect to community assets.

One of the team members was asked to give an assessment as to how different activities have fared in Moti kheri. The following table presents that assessment:

	IGA/Assets/ service provider	No of persons	Successful	Possibly successful	Unlikely	Failure
1	Carpentry	2	Yes			
2	Vegetable Cultivation	16	50%	50%		
3	Goatry	35	100%			
4	Sewing Machine	1	Yes			
5	Diesel Engine repair	1	Yes			
6	Hand Pump mechanic	1	Yes			
7	Buffalo and Cow (AH)	8	100%			
8	Chaff Cutter	1				Yes
	Total	65				

From the above it is quite clear that most activities have been quite successful except the Chaff cutter. The reasons for its failure have been discussed earlier.

Forestry (JFM, Fruit trees, Nurseries, orchard development, grafting and budding, medicinal plants cultivation, CPR development)

Orchard Development was taken up as an activity in Ratan Kachru's plot of one bigha in the year 2000. This was primarily an orange orchard (50 plants) with gap filling with Pomegranate, and Guava. He also intercropped these plants with vegetables. By October 2003 papaya and oranges had started fruiting. The orchard has been a success. The farmers from other villages have come here for exposure visits and have taken up orchard development in their lands. About 10 villages have had the demonstration effect of this activity. The CO had to put in a lot of effort in convincing Ratan to take this up. IFFDC provided him 50 percent labour cost for pit digging, saplings, insecticides and fertilizer. He has maintained the patch. While he is very happy with the plantation and hopes to increase his income from the same, no projections have been worked out for the yields and income from this plantation.

Plantation^{8/} of fuelwood species, eucalyptus, bamboo, neem, ber etc on farm bunds has been promoted by IFFDC. All the members as well as some non-members took

8/

It is interesting to note that IFFDC has promoted plantations in several of the project villages. How viable some of these are needs to be checked. In one of the villages (Bhiladi) visited by the CBA team the team noticed that the plants were being watered by water brought in by tankers. How sustainable and cost effective is such a plantation is something that needs to be looked into. The stream of benefits and costs of such plantations too need to be worked out to get an idea of their viability.

up this work. About 10,000 saplings were distributed by IFFDC in 2000. The pit digging was partially supported (50 percent) by the project. Saplings have been made available every year. A contribution of Rs. five per fruit sapling costing Rs.25 was taken. However the forestry species were given free of cost. Labour cost was not supported in later years. Unfortunately because of drought the survival percentage of these plants has been very low.

Crop Technology

Crop trials, seed distribution, cropping practices, agriculture implements, compost pits, drip irrigation, PVS/PTD

From a report^{9/} prepared by IIFDC on 10 October 2003 we gather that new varieties of Maize and Soyabean were introduced in the village. Of the 165 members of the SHGs 53 have adopted the new varieties. Line sowing has been adopted by only 79 members. Seed priming, seed treatment and seed culture is being practiced by some. People have found these methods useful but the adoption rates have been low. The report concludes that more work is required in dissemination of these technologies.

SWC

- People have reported clear increase in the productivity as a result of SWC intervention. Gita of Bhurighati Fala has reported an increase from six to seven bags of wheat to eight bags in her two-bigha plots. The maize yield has also increased from two to four bags to six to eight bags.
- According to Chanda of the same group the erosion of the fields has been checked. However according to Radha, the excessive rains of this year have meant that several of the mud buds have got washed away. They will need to do the bunding again in these plots.
- Ratni has two bighas land that has got irrigation from the Anicut. There is an increase in the yields of both wheat and maize by two bags. She has also taken to vegetable cultivation in half a bigha of land for the past two years.

WRD

Before the IFFDC intervention, the village had only three hand pumps. The 40 HH of Semalkhadi and Bhurighati Falas used to share one source of water (a well) during the summer months. Each HH would spend about three hours everyday to fetch drinking water. There used to be conflicts too. The number of handpumps has increased from three to 10 (three installed by IFFDC and four by the Government). The SWC work has also resulted in the increase in the water table. All in all drinking water is no more a problem in this village for the entire year. People (especially women) also spend far less time in fetching water, there is less conflict, and they are able to devote more time to their fields and for leisure.

^{9/}

Panchmukhi Vikas Ki Aur, IFFDC report, Dated 10 October 2003.

Livestock (Breed improvement of cattle, poultry, goats)

IFFDC did not distribute any new breeds. It has conducted some livestock health camps, given a Travis and trained a Vet Jankaar.

Social Development Interventions

In the case of Moti Kheri village all the members of the SHGs have got light sheets, blowers for the Chulhas, Matka (Water Pot) Stand, strainer, storage bins and ball bearings. People interviewed said that they use these and have found them to be useful. There is no issue of an increase in demand from HH that got left out, as the coverage was 100 percent. Like in other villages here too ball bearing for chakkis has been found to be a good drudgery reducing intervention. People prefer to use their own chakkis for daily use as most households do not find it affordable to go to the flourmill where they not only have to pay for the job but there is also some quantity of flour that is retained by the flourmill. So while the better off people use the flourmill more regularly, the poorer households use the flourmill when they have a function. It may be noted that one flourmill services a group of five villages in the area so the flourmill has enough business.

Smokeless chulhas were made for members of only one SHG. The experience with cement smokeless chulhas has not been good. According to people the mud chulhas work better but there is a problem in getting the raw material (horse dung in particular) for the mud chulhas. So smokeless chulhas have not really taken off despite people recognising the benefits of the same.

Component B Dissemination (Prasaar Villages)

The project had identified 50 dissemination villages in Pratapgarh block and started working in the dissemination villages. 15 dissemination jankars (core villages jankar) are playing key roles in dissemination villages. The process of SHG formation in particular is being done in a very systematic fashion.

Moti Kheri has five Prasaar villages Lalpura, Tarabawdi, Khora, Ratanpuria, and Achalawada. The dissemination Jankaar Suguna is responsible for the Prasaar villages. She has been getting regular training from IFFDC. The major work is SHG formation, seed distribution for varietal improvement, livestock camps, drudgery reduction interventions for women (like ball bearings for chakkis). The work done on CPR of Motikheri (for example the Golkhora dam) has benefited the dissemination villages (lalpura and Taarabawdi). The dam has provided water for livestock as well as irrigation for 25 bighas of land belonging to 10 families.

Future Scenario

The (Primary Livelihood Development Co-operative Society) PLDCS

The PLDCS (Primary Livelihood Development Co-operative Society) has been set up as an institutional structure that will anchor all the interventions. There is a list of 22 functions that a PLDCS is expected to perform. (For details on PLDCS- its objectives, functions, source of funds etc please refer to the brochure on the PLDCS model brought out by IFFDC). During the field visit the social development specialist had a meeting with the PLDCS members of the Moti Kheri Village. This PLDCS has

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members not only from Moti Kheri but also from Choti Futwas and Choti Kheri villages as well. The PLDCS has a membership of 14 SHGs (eight Men's SHGs and six Women's SHGs) and 88 individuals (42 Men and 46 Women). The SHGs have a share of Rs. 1000 each and the individual members of Rs. 100. As of now the total share capital with this PLDCS is Rs22, 800. The total fund with the PLDCS is Rs. 65,790. It has an executive committee consisting of 11 members with a term of three years. The detailed break up across the villages is as follows:

S.No	Village	No. of HH	HH covered	No. of SHGs	Members
1	Moti Kheri	115	112	13	186
2	Chhoti Khei	17	15	2	34
3	Chhoti Phutwas	23	21	2	36
4	Total	155	148	17	256

According to the group members the primary functions of the PLDCS are:

- Ensure that the SHGs function smoothly.
- Make loans available to the members through the SHGs.
- Provide services like training, camps, farm produce marketing), Purchase of seed and fertilizer.
- Information dissemination.

The following observations can be made for the present:

- It may be noted that the functions listed above are the functions that have been undertaken by the PLDCS till now. Given the fact that these are early days it is hoped that they will slowly take up all the 22 functions.
- It may also be noted that the total number of HH in these villages is 155 from which 88 people have become individual members.
- However the PLDCS has decided to make its services available to both members and non-members on the same terms. This then raises the issue as to why should anybody want to become a member. On being questioned the EC representatives said that they are planning to ensure that the two SHGs and the remaining families that have not become members will also join in.
- Last year in the months of October and November the PLDCS had undertaken bulk purchase and sale of Maize, Soyabean, Udad, and three NTFPs (Charota, Baheda and Aonla). However even a year down the line they have not yet worked out the profit and loss account for this activity. The PLDCS is therefore not in a position to say whether they have actually made a profit out of this activity or not and whether it would be a viable activity.

- One of the SHGs (Jai Hanuman) undertook bulk purchase of fertilizer (25 bags) for nine of its members. They were able to negotiate a better deal as well as get it transported on time. Usually people used to buy individually and carry it as head load. The same is the case for grain. According to people interviewed if sale and purchase can be taken up on a larger scale it will not only benefit them financially, but also reduce the drudgery of head loading the seed, fertilizer and grain. The PLDCS plans to take this up but they are aware that they really need to develop Business development plans if this has to be a viable activity in the long run.

SWC and WRD works

- The SWC and WRD works have generated wage employment in the village. Consequently migration has come down in the past four to five years. According a report brought out by the IFFDC office in Pratapgarh^{10/} the irrigated area has increased from 53.2 ha to 96.2 ha. This has definitely meant that the production has increased from previous levels.
- From the discussions held with the community as well as the IFFDC team members it appears that there is a case of subsidisation by non-beneficiaries for large structures (Anicut, Earthen dams, Check dams) that provide irrigation to a few families. The rule being followed in the project is that if a structure is being built on public lands then the labour contribution both by the direct beneficiary and the non-beneficiary is 25 percent. Ideally the direct beneficiary should be contributing 50 percent as they are reaping the benefit of the structure even if it is built on public land. When probed people did agree that there is a case of subsidisation. This issue needs to be discussed further.

Summary and Analysis

Institutions

Self-Help Group (SHG) is the primary institution at the village level. IFFDC has been successful in setting up a fairly good system of running the SHGs. The records are well maintained; the record Jankaars have the responsibility of keeping the records up to date. While the Jankaars still continue to be paid by the project for their services, there is already some discussion to make the groups start bearing at least part of this expense. The governance of the SHGs is healthy. All decisions regarding loans are taken collectively at the time of the meeting of the SHG. The cases are assessed on merit and nobody is allowed to get away with breaking the rules and norms. Earlier the cases for larger loans were forwarded to the IFFDC through the CO who was also responsible for preparing the proposal. Now the loan applications are first passed on from the SHG to the PLDCS, which in turn forwards the same to IFFDC.

The leadership has been with the Jankaars who have been playing a very active role in the promotion and management of the SHGs. However that does not mean that

^{10/}

Pachmukhi Vikas Ki Aur, IFFDC, 10 October 2003.

other members are not playing an active role. These are still early years but it will be a good idea to promote multiple and a more broad based leadership. Despite IFFDC talking about not having a Jankaar dependent model the fact of the matter is that in the early years the Jankaars do have a critical role and place in the whole scheme of intervention. The Jankaars have demonstrated good examples of leadership in Moti Kheri. In the year 2000 (before the PLDCS was constituted), the community was motivated for collective purchase of fertilizer. Some Jankaars pooled the money from all the SHGs and made some individual loans. Using this fund four trolleys of fertilizer was bought from Pratapgarh. People got the fertilizer of better quality, on time and at better rates. This year there was a bumper crop. The local merchants lost out and threatened the farmers that they would not advance them credit if they did not purchase fertilizer from them. However with the SHGs in place people did not have to anyway depend on the merchants to make credit purchase of fertilizer. They have been taking loans from SHGs and making cash purchase of fertilizer.

This experience of collective action helped people appreciate the importance of a body like a PLDCS. IFFDC has federated groups of willing SHGs into a PLDCS (Primary livelihood development co-operative society). Eight such societies covering 25 villages have been registered till now in Pratapgarh.

However, PLDCS is still in the early formative years. As discussed in an earlier section not all HH or SHGs have taken the membership of the PLDCS while they all have access to its services. This issue was discussed with the members of the PLDCS and they agreed that there is a need to make their coverage 100 percent to develop everybody's stake in the PLDCS.

The other area of concern is that of making the activities taken up by the PLDCS viable as a business. As mentioned earlier the purchase operations of PLDCS have not yet been analysed, although a year has passed since this activity was taken up. The members of the PLDCS are still learning bookkeeping and basic accounts. They will need support from IFFDC for some time to come. However that still does not explain why the activity has not been analysed for its viability even if it meant taking help from IFFDC staff. They plan to take up purchase of agricultural produce this year as well with no idea about how they fared last year.

Management Process

Decision-Making

As mentioned earlier decisions are taken either at the level of the SHG or at the PLDCS level. Only one instance of a somewhat top down decision is the case of Chaff cutter. The SHGs are still bearing the brunt of that decision with an unused Chaff cutter and Rs. 40000 of their savings locked up in this asset.

Responsibility for Assets

The maintenance of community assets is the responsibility of the concerned user groups. According to IFFDC the PLDCS is supposed to keep an eye on the management and use of these assets. Since it has not been a long time since the assets were created this has not yet been tested as yet. Only in the case of Chaff

cutter the PLDCS has not been able to make a breakthrough. It is very clear that they will need to be bailed out of this by IFFDC.

Till IFFDC completely withdraws from the project village, the Community Organiser (CO) will continue to have an important role. The nature of this role has been changing over time. At the beginning it was to build the rapport with the community, conduct the PRAs, CPA and to facilitate the annual plan. At present it is to participate in the PLDCS meetings, capacity building of the community, ensure smooth flow of project funds in the village, do the necessary planning and negotiation, interface with Government departments and financial institutions, monitor activities and institutions and conduct technical demonstrations.

Maintenance of Information

At the SHG level information on deposits, loans, repayments, fines, overdues, outstandings, meeting records, guest related information, and members profile, is maintained. The record Jankaar, who gets an incentive from the Project, mostly maintains this information. There is some discussion on making the groups pay for these services but it has not been made operational. The Monthly progress report of the village is maintained at the PLDCS level. The project office makes a quarterly progress report.

Inclusion and Targeting

- **Village Selection** IFFDC has not followed the DFID guidelines very strictly consequently most of the villages are better connected and accessible villages. It seems that the working conditions were difficult in Pratapgarh area. People were very suspicious of the foreign aided project and possibly this was a reason for relaxing the guidelines.
- **Activity Inclusion** Moti Kheri is a model village therefore intensive effort has gone in to involve the entire village community. The CO spent almost nine months before even the PRA was conducted in the village. No wonder almost the entire village community has got engaged with the project. AWP based on the CPA were developed for each SHG. These plans were developed after negotiation with the members in a meeting. All SHGs met on one platform to develop a long-term perspective plan that was broken down into yearly activities. Since this was the only village covered in the detailed study of IFFDC villages, it will be incorrect to generalise from this experience. It just goes to show that the more intensive the effort the better would be the inclusion of the community.
- **Repayment Regimes** The systems set up for the SHG have been enforced very strictly. The repayment regimes are good by any standards.
- **Public Works Leading to Private Benefits** The rule being followed in the project is that if a structure is being built on public lands then the labour contribution both by the direct beneficiary and the non-beneficiary is 25 percent. Ideally the direct beneficiary should be contributing 50 percent as they are reaping the benefit of the structure even if it is built on public land.

When probed people did agree that there is a case of subsidisation. This issue needs to be discussed further.

Stakes

A vision building exercise had been done by the CO at the beginning of the project. In this people had visualised a village where there would be no drinking water problem, there would be anicuts and water sources all over, better agriculture, food security, Co-operative in the village, they will have some asset like silver, facilities like transportation, schools, health services, Bank, pucca houses and so on. After four years of the project, people seem to be generally happy with the way things have grown. The village has no drinking water problem anymore. People are getting loans at low interest. They still have to turn to the moneylender for large loans, but these are required occasionally (for a large asset, enterprise, or a major expense). Small loans are available from the SHG. People are also now accessing loans from Banks. At least 10 families have built pucca houses. Pucca wells have meant that the recurring cost of Rs 2000 per year for maintaining a kuchha well is no more there. Bulk purchase of inputs has been another activity that has got a good response- it has made inputs available on time, at lower costs, of good quality and also saved the drudgery when people used to carry these on head loads. People have developed clear stakes in the sustainability of interventions.

SWC, WRD. SWC works have been done on private lands and people have clear stakes in maintaining these. Similarly the well deepening, well construction, hand pump installation and other such works done under WRD bring in clear benefits to the people and they have stakes in maintaining these. In all cases the community has contributed in the construction of these structures.

IGA. Individual IGA has by and large been a success but mostly as a supplementary source of income. Seen in the context of the entire village community, the number of people who have successfully taken up some IGA is miniscule. One of the primary reasons for this is lack of a large enough market to support the limited kinds of IGAs that have been taken up till now. After all how many tailors or engine /hand pump repair service providers can the area support. The experience in the case of grocery shops has not been very encouraging (as could be gathered from a case of another neighbouring village, Choti Futwaas) where the promoter could not pay the instalments as all his capital got blocked in credit sales. Similar stories of failure of some IGAs are available from other project locations. IGA is anyway one of the most difficult things to ground. So it still goes to the credit of the project that it has helped to promote a few successful ones even though the number of HH who have benefitted is small. The individuals have developed a stake in these activities and they have also been repaying the money they have borrowed for these to the concerned SHG.

Community Assets (Anicut, Chaff Cutter, Travis). These are early years to really see how the community assets will get maintained. The structures are mostly less than two years old. If one goes by the planning for maintenance then it appears to be satisfactory. The overall responsibility of maintenance is with the User group under the guidance of the PLDCS. The users also have to contribute a certain amount with the SHG for the use of the asset. The SHG in turn makes a deposit with the PLDCS. This fund will be available for the repair and maintenance of the asset. However in

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case of the Chaff cutter the experience has not been good. The reason is obvious, as people have not found the Chaff cutter to be of any use. It is nobody's baby and as a result nobody has taken the responsibility of maintaining the same. The experience however does raise issues of who should decide on creating/buying a community asset and further how the responsibility for the maintenance and safety of asset be shared. The Jankaar system has worked in the case of Moti Kheri for other assets that are managed by individual Jankaars, however can the large community assets also be managed by the same approach is something that needs to be explored further. The critical question is choice of the community asset that enjoys a clear stake of the community.

Savings and Credit. IFFDC has ensured that the SHGs function as viable savings and credit groups and not just as instruments for the project interventions. Consequently people have developed the required discipline for running these groups. People also recognise the utility of doing things together (fertilizer purchase and grain sale are two clear examples). Except for one SHG that the IFFDC team feels was a wrong choice (as the group consisted of youth who were not serious about the activity) all the other SHGs demonstrate that the members have developed stakes in the functioning of the groups. The groups are likely to survive beyond the life of the project.

Employment Generation. The SWC and WRD works undertaken by the project meant that wage employment opportunity was available right in the village. These years have also seen a drop in migration. However it is not clear what would be the situation in the absence of wage income available from the project interventions. There are many questions: Will people be forced to revert back to migration and casual lab or they have alternatives as a result of the project. How many families have such alternatives? From what interventions? What has been the impact of interventions made under the project on the food security and livelihood options of the people? On how many HH? SWC, well deepening, well construction and other WRD interventions as well as input in crops have resulted in better yields. This has meant an increase in food security. To some extent IGAs have helped a few families but this number is small. While no detailed study has been conducted so far, it seems from various discussions that almost 60 percent of the HH are now in a position where they have food security for the entire year. They may undertake short-term migration to add to their incomes, however this would not be distress migration. However the remaining 40 percent families still would have to migrate in search of labour to meet the deficit. The wage labour support programme being run in Pratapgarh since past year has helped in Skill enhancement, awareness about rights, proper wages, tracing Haali labour and providing support to this labour. It is time that a study is commissioned to get a clearer picture of the impact of the project on food security and wage labour scenario. (Is this distress migration or migration by choice?)

Till now the programme has been very intensive on wage employment. As far as SWC work is concerned all members of the SHGs have got this benefit. All have had the opportunity to work as wage labour irrespective of the class from which they come from. The WRD works too have been taken up in consultation with the village community. However the IGA activities appear to be an area where the group vests greater faith in the people who are more enterprising and who are likely to return the money to the group. So we do find that it is entrepreneurial ability that has been a

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deciding factor not class. By and large in most cases the very poor do not show enterprise and for them the benefit from the project remains confined to wage income coming in from SWC and WRD works.

The project is rightly focussing on MLSP because after the wage income opportunity from the project dry up, it is migration that will continue to provide the livelihood to most. According to some estimates a larger percentage of the population would now stay back or stay back longer than they did before, as there has been an increase in cropped area, or availability of water for irrigation whereby some people are able to take the Rabi crop. However migrant income continues to be an important source of income. Even the families who have reached some level of food security for the 12 months, still prefer to send one person as migrant labour for a few months a year to bring in the cash income to meet other requirements- of better housing, clothing, and input costs in agriculture.



Financial Analysis



AN8 | **Project Costs**

AN8 | Project costs

Introduction

WIRFP Phase two project financial investment cost expenditure by both implementing agencies (GVT and IFFDC) is subdivided into administration and village development investment cost headings. GVT administration is further subdivided into Bhopal project headquarters (PHQ) investment expenditure and the three state coordinating offices (Dahod in Gujarat, Jhabua and Ratlam in Madhya Pradesh and Banswara in Rajasthan). IFFDC administration is subdivided into the project headquarters in Delhi and two state coordinating offices at Pratapgarh in Rajasthan and more recently at Ratlam in Madhya Pradesh.

Project administration and development investment costs identified by both GVT and IFFDC represent actual expenditure for the four-year period 1999/2000 to 2003/2004 (financial years run from 1 April to 31 March) and budgeted investment expenditure for the two years 2004/2005 and 2005/2006. No projected investment and or recurrent expenditure figures were produced for the period after March 2006. Financial and in kind contributions made by the village community and Government to the component A activities, at village level, have also identified and included in the project investment costs.

The phase two project consultancy costs, funded through the project by the Department for International Development (India) (DFID), relating only to development activities under component A, have also been identified and included under administration costs.

Development costs relate specifically to project intervention activities, at village level, and are subdivided into components A, B and C. Component A relates to activities conducted in the 'core' villages, component B relates to activities in the dissemination '*prasaar*' villages and component C to the crop variety development programme. Agreement was reached at the inception workshop that the current study would relate only to those costs and benefits associated with component A activities.

Development costs for component A are further subdivided into the following cost subheadings:

- participatory planning and group formation (PPGF);
- village organisation and development (VOD);
- crop technology programme;
- soil and water conservation (SWC) programme;
- water resource development (WRD) programme;
- livestock programme;
- forestry programme; and more recently the, and
- migration labour support programme (MLSP).

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Details of the phase two seven year (1999/2000 to 2005/2006) consolidated project investment costs of GVT and IFFDC (including contributions by DFIDI, village communities and Government), broken down into administration (headquarters, DFID and state coordination offices) and development costs (component A) and other development costs (component B and C), are given in Annex 8. Average costs per village by administration and development cost headings, derived by dividing the total investment costs by the number of core villages, are also given in Annex 8 and summarised in Table A8.1.

Table A8.1: Average Investment Costs per Village Rs'000 (Financial)

Agency	GVT			IFFDC
State	Gujarat	M Pradesh	Rajasthan	Rajasthan
Office	Dahod	Jhabua	Banswara	Pratapgarh
Administration Costs				
Project HQ	383.7	383.7	383.7	432.5
DFIDI	338.6	338.6	338.6	338.6
Coordination Office	1,757.7	903.1	869.2	1,595.6
Subtotal	2,480.0	1,625.4	1,591.5	2,366.7
Development Costs Component A				
PPGF	124.7	41.6	90.4	49.4
VOD	405.7	195.3	312.3	156.0
Crop Technology	228.4	134.2	209.4	98.1
SWC	1,132.1	796.7	1,091.8	175.1
WRD	641.4	616.4	692.8	1,396.1
Livestock	178.3	118.1	122.2	60.8
Forestry	134.1	82.7	60.2	75.9
Migration Support	34.4	11.7	7.3	-
Subtotal	2,879.1	1,996.7	2,586.4	2,011.4
Totals	5,359.1	3,622.1	4,177.9	4,378.1

Source: Cost Benefit Analysis Study January 2005.

GVT = Gramin Vikas Trust, IFFDC = Indian Farm Forestry Development Cooperative.

DFIDI = Department for International Development (India).

PPGF = Participatory Planning and Group Formation, VOD = Village Organisation and Development,

SWC = Soil and Water Conservation, WRD = Water Resource Development

Administration costs for GVT account for between 40 percent of the total investment costs and 50 percent in the case of IFFDC. There are small variations between the respective coordination offices. The balance represents direct development investment costs at the village level of which significantly soil and water conservation (SWC) and water resource development (WRD) account for 70 to 75 percent. As a

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result, the quantification of the incremental crop benefits, and to a lesser extent livestock benefits', resulting from this investment in association with crop technology, is critical to the reliability of the cost benefit analysis.

Individual Village Investment Cost Estimates

Development activity expenditure at the coordination office level is not accounted for by individual villages. Thus no actual year wise cost information was available for the individual sample villages. The sample village cost data were derived by reconstruction from the actual year-wise physical quantities of individual items and their unit costs with the help of the relevant village coordinator. These derived costs for the sample villages were comparing with the average village cost for the coordination office. Major variance from the average was noted.

Details of the average village investment cost for the four villages studied in depth are given in Table A8.2.

Table A8.2: Investment Costs of Four Villages Rs'000 (Financial)

Agency	GVT			IFFDC
State	Gujarat	M Pradesh	Rajasthan	Rajasthan
Coordination Office	Dahod	Jhabua	Banswara	Pratapgarh
Sample Village ^{1/}	Jadha	Kadwapada	Gara	Moti Kheri
Administration Costs				
Subtotal	2,480.0	1,625.4	1,591.5	2,366.7
Development Costs				
Component A				
PPGF	322.5	129.7	101.4	74.6
VOD	335.5	314.0	399.2	749.1
Crop Technology	258.2	415.6	167.3	273.7
SWC	3,003.4	531.1	2,482.6	645.1
WRD	2,778.8	515.6	2,471.4	2,745.2
Livestock	258.7	226.6	236.2	242.0
Forestry	191.9	129.1	42.9	212.5
Migration Support	235.1	81.0	-	-
Subtotal	7,384.1	2,342.7	5,901.0	4,942.2
Totals	9,864.1	3,968.1	7,492.5	7,308.9

Source: Cost Benefit Analysis Study January 2005.

^{1/} Villages selected for in-depth social analysis.

GVT = Gramin Vikas Trust, IFFDC = Indian Farm Forestry Development Cooperative.

SWC = Soil and Water Conservation, WRD = Water Resource Development

PPGF = Participatory Planning and Group Formation, VOD = Village Organisation and Development,

Employment Generation

Estimates have been made of the levels of employment generation, in terms of household income and person days of work, created in the four sample villages during the assumed five-year implementation period. The calculations indicate that a typical household has benefited by an average annual increase in income from wage labour from SWC and WRD development activities ranging from a low of Rs 1,710 (Kadwapada, Madhya Pradesh) to a high of Rs 5,780 (Gara, Rajasthan). This represents the equivalent of 43 person days of employment per household in Kadwapada to 145 days person days in Gara. The annual wage income occurs mainly in the *rabi* season when alternative income sources necessitate migration of household members to major urban centres. Details of employment generation calculations are summarised in Table A8.3.

Table A8.3: Employment Generation of Four Villages

Agency	GVT			IFFDC
	State	Gujarat	M Pradesh	Rajasthan
Office	Dahod	Jhabua	Banswara	Pratapgarh
Sample Village ^{1/}	Jadha	Kadwapada	Gara	Moti Kheri
Administration Costs				
Subtotal	2,480.0	1,625.4	1,591.5	2,366.7
Development Costs				
Component A				
SWC	3,003.4	531.1	2,482.6	645.1
WRD	2,778.8	515.6	2,471.4	2,745.2
All Other Activities	1,601.9	1,296.0	947.0	1,551.9
Subtotal	7,384.1	2,342.7	5,901.0	4,942.2
Total Costs	9,864.1	3,968.1	7,492.5	7,308.9
Employment Generation				
Wages -SWC ^{2/}	2,402.7	424.9	1,986.1	516.1
Wages – WRD ^{3/}	1,667.3	309.4	1,482.8	1,647.1
Total Wage Costs	4,070.0	734.3	3,468.9	2,163.2
Household Employment				
HHs / Village (No)	363	86	120	112
Income / HH / Year ^{4/}	2,242.4	1,707.7	5,781.5	3,862.9
Days / HH / Year ^{5/}	56	43	145	97

Source: Cost Benefit Analysis Study January 2005.

^{1/} Villages selected for in-depth social analysis.

^{2/} SWC wage labour estimated at 80 percent.

^{3/} WRD wage labour estimated at 60 percent.

^{4/} Average period of construction estimated at five years.

^{5/} Average daily wage rate estimated at Rs 40 per day

GVT = Gramin Vikas Trust, IFFDC = Indian Farm Forestry Development Cooperative.

SWC = Soil and Water Conservation, WRD = Water Resource Development

Recurrent Cost Estimates for Administration and Development

No details had been identified by either implementing agency of the administration and development ongoing recurrent cost expenditure after 2005/2006, required to sustain the village development. Neither had the source of this funding been determined, whether this was to be by the implementing agency, the individual village community or by Government. Much emphasis was being placed on the ability of the individual village SHGs and/or federations of village SHGs to provide services to sustain village development. At the time of the study, planning was at an early stage and no estimates of costs and cost recovery had been developed. In the

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absence of a projected village development business plan, ongoing recurrent costs have been calculated as percentages of annual and or accumulated investment costs. These estimates are summarised in Table A8.4.

Table A8.4: Recurrent Cost Estimates

Investment Cost Head / Subhead		Recurrent Cost Assumption	Percent
A.	Administration Costs		
	Project Head Quarters		
	Staff Costs	Percent of final year staff cost	10%
	Office Costs	Percent of final year cost	10%
	Equipment Costs	Percent of final year cost	10%
	Capital Costs	Percent of final year cost	10%
	DFIDI Consultancy Contract	None	Zero
	Coordination Offices (GVT/IFFDC)		
	Staff Costs	Percent off final year staff cost	10%
	Office Costs	Percent of final year cost	10%
	Equipment Costs	Percent of final year cost	10%
	Capital Costs	Percent of final year cost	10%
B.	Development Costs		
	Component A		
	1 PPGF	Percent of final year cost	2.5%
	2 VOD	Percent of final year cost	5%
	3 Crop Technology	None	2.5%
	4 SWC	Annual O and M, percent of cumulated investment cost	12.5%
	5 WRD	Annual O and M, percent of cumulated investment cost	15%
	6 Livestock	Percent of final year cost	10%
	7 Forestry	Percent of final year cost	10%
	8 Migration Labour Support	Percent of final year cost	10%
	Other Development Costs	Not Applicable	

Source: Cost Benefit Analysis Study January 2005.

GVT = Gramin Vikas Trust, IFFDC = Indian Farm Forestry Development Cooperative.

DFIDI = Department for International Development (India),

PPGF = Participatory Planning and Group Formation, VOD = Village Organisation and Development,

SWC = Soil and Water Conservation, WRD = Water Resource Development, O and M = Annual Operation and Maintenance.

Cost Inflation

For the purpose of identifying the impact of cost inflation, it has been assumed that project investment costs relate to the actual expenditure in the relevant financial year and that the budget figures for 2004/2005 and 2005/2006 are projected in constant 2003/2004 terms. The major benefits resulting from the development activity investment relate to the crop incremental benefits as measured in by the Net Income Study^{1/} over the period 2002/2003. In relating cost and benefit streams, it is proposed that these should be valued in constant 2002/2003 terms. Investment costs disbursed before this year should therefore be adjusted to reflect their 2002/2003 equivalent value. The index for wholesale prices of all commodities in India, over the initial period of the project, is set out in Table A8.5 together with the indicative deflation factor relevant to this analysis. The factor is considered insignificant to the overall analysis of the sample villages and has therefore been excluded for the computations.

Table A8.5: Project Cost Deflation Index

Year	Wholesale Price Index ^{1/}	Project Cost Deflation Index
1998 / 1999	140.7	84.30
1999 / 2000	145.3	87.06
2000 / 2001	155.7	93.29
2001 / 2002	161.3	96.64
2002 / 2003	166.9	100.00

Source: Office of the Economic Adviser, Ministry of Industry, and Government of India.

^{1/} All commodities, base 1993 / 1994 = 100.

Conversion of Financial Costs to Economic Values

The economic analysis measures the contribution of the project to the development of the economy of the country or society as a whole and that this contribution is sufficient to justify the use of the scarce capital resource required for implementation. Financial prices are adjusted to reflect the value of these costs to society as a whole and are identified as adjustment for (a) direct transfer payments such as commodity taxes and duties, staff salary taxes and any subsidies, (b) price distortions relating to traded and non traded items, and (c) wage rates in the project area. Such adjusted prices are commonly referred to as shadow prices.

For the purpose of the analysis, no premium has been assigned to any foreign exchange portion of implementation costs. A conversion factor of 0.9 has been used to adjust administration costs, excluding DFIDI consultancy contracts, and development cost for direct transfer payments. The effects of any subsidy on building materials are considered negligible and as a result ignored. Further, it is assumed that, financial prices generally reflect the economic value of traded and non-traded materials used in any project construction activities.

^{1/} Study of Impact of WIRFP on Net Incomes of Target Households, January 2004, sees also Annex 11.

The financial expenditure for SWC and WRD construction works include a significant proportion of both skilled and unskilled labour costs. The unskilled labour component was estimated using the government wage rate prevailing in the project area. For the purpose of the analysis, it has been assumed that the wage rate for skill labour (masons) accurately reflects their opportunity cost. For unskilled casual labour, especially during the *rabi* season when most of the construction work was undertaken, the government rate does not accurately reflect the opportunity cost of rural labour where seasonal under employment is prevalent. As a result, a social conversion factor of 0.75 has been applied to the costs of SWC and WRD activities to reflect the economic value of such construction, which uses a high percentage local unskilled village labour. A more accurate assessment of the shadow wage rate will be possible following analysis of the results of the migration labour survey aimed at determining the net wage rates obtained by household members who migrate to major urban centres for employment during the dry season.

For the analysis, all costs and benefits are valued in the local Rupee currency and an opportunity cost of capital of 12 percent, evaluated over a twenty-year period, has been used as the measure of the contribution of the project to rural development in India. The conversion factors (CF) and social conversion factors (SCF) assumptions for the various administration and development cost subheads are set out in Table A8.6.

Table A8.6: Economic Conversion Factors

Cost Head / Subhead		Conversion Factor (CF)		Social Conversion Factor (SCF)
A.	Administration Costs			
	Coordination Offices (GVT/IFFDC)			
	Staff Costs	0.90		1.00
	Office Costs	0.90		1.00
	Equipment Costs	0.90		1.00
	Capital Costs	0.90		1.00
	DFIDI Consultancy Contract	1.00		1.00
B.	Development Costs			
	Component A			
1	PPGF	0.90		1.00
2	VOD	0.90		1.00
3	Crop Technology	0.90		1.00
4	SWC	0.90		0.75
5	WRD	0.90		0.75
6	Livestock	0.90		1.00
7	Forestry	0.90		1.00
8	Migration Labour Support	0.90		1.00
	Other Development Costs	Not Applicable		

Source: Cost Benefit Analysis Study January 2005.

GVT = Gramin Vikas Trust, IFFDC = Indian Farm Forestry Development Cooperative.

DFIDI = Department for International Development (India).

PPGF = Participatory Planning and Group Formation, VOD = Village Organisation and Development,

SWC = Soil and Water Conservation, WRD = Water Resource Development

Lessons Learnt

A number of comments relating to the identification of actual/budget project costs are given below:

- The identification of 'actual' investment costs per village has been complex, as expenditure records maintained by the accounts department are not recorded by individual village. Project M and E should insist at the outset of the project, that investment and recurrent expenditure, be analysed as per the village unit identified in the project proposal if a completion report cost benefit analysis is to be undertaken.

- The 'budget' investment costs (both administration and development) are prepared at PHQ for the individual state coordination office. This resulted in a lack of a clear allocation at village level suggesting a top - down approach, which is not reconcilable with concept of a village development plan.
- Little concrete evidence existed as to the ongoing physical resources and annual recurrent expenditure requirements and possible funding sources, whether they be the implementing agency, Government or the village community itself, to sustain village development.
- Major WRD structures, such as the lift irrigation scheme being constructed at Gara village, need detailed business plans to identify the ongoing operation and maintenance costs for the scheme and more importantly the resulting water or other charges that will be required to meet these ongoing operation and maintenance costs.

WIRFP - Phase II - Cost Benefit Analysis Study

Tables AN8.0: Project Costs (Financial / Economic Values)

Project Investment Cost

Table AN8.1	WIRFP - Phase II: Core Village Development Years 1999/00 to 2004/05
Table AN8.2	WIRFP - Phase II: Total Investment Cost Summary Years 1990/00 to 2005/06 (Rs '000).
Table AN8.3	WIRFP - Phase II: DFIDI Consultancy Contract (Financial) Years 1999/00 to 2004/05.

GVT Investment Cost

Table AN8.4	WIRFP - Phase II: Total Investment Cost (Financial) - GVT, DFIDI, Community and Government (Rs '000). WIRFP - Phase II: Total Investment Cost (Economic) - GVT, DFIDI, Community and Government (Rs '000).
Table AN8.5	WIRFP - Phase II: Indicative Average Cost per Village (Financial) - GVT, IFFDC, DFIDI, Community and Government (Rs '000). WIRFP - Phase II: Indicative Average Cost per Village (Economic) - GVT, IFFDC, DFIDI, Community and Government (Rs '000).

GVT Investment Cost - Bhopal Headquarters

Table AN8.6	WIRFP - Phase II: Bhopal Head Quarters Total Investment Cost (Financial) - GVT, DFID, Community and Government (Rs '000). WIRFP - Phase II: Bhopal Head Quarters Total Investment Cost (Economic) - GVT, DFID, Community and Government (Rs '000).
Table AN8.7	WIRFP - Phase II: Bhopal Head Quarters Total Indicative Investment Cost per Village (Financial) - GVT, DFIDI, Community and Government (Rs '000). WIRFP - Phase II: Bhopal Head Quarters Total Indicative Investment Cost per Village (Economic) - GVT, DFIDI, Community and Government (Rs '000).

GVT Investment Cost - Gujarat - Dahod

Table AN8.8	WIRFP - Phase II: Gujarat - Dahod: Actual Investment Cost (Financial) - GVT, DFIDI, Community and Government (Rs '000). WIRFP - Phase II: Gujarat - Dahod: Actual Investment Cost (Economic) - GVT, DFIDI, Community and Government (Rs '000).
Table AN8.9	WIRFP - Phase II: Gujarat - Dahod: Indicative Investment Cost per Village (Financial) - GVT, DFIDI, Community and Government (Rs '000). WIRFP - Phase II: Gujarat - Dahod: Indicative Investment Cost per Village (Economic) - GVT, DFIDI, Community and Government (Rs '000).
Table AN8.10	WIRFP - Phase II: Gujarat - Dahod: Summary of Investment Costs Per Village - Financial / Economic (Rs'000).

GVT Investment Cost - Madhya Pradesh - Jabhua

Table AN8.11	WIRFP - Phase II: Madhya Pradesh - Jabhua: Actual Investment Cost (Financial) - GVT, DFIDI, Community and Government (Rs'000). WIRFP - Phase II: Madhya Pradesh - Jabhua: Actual Investment Cost (Economic) - GVT, DFIDI, Community and Government (Rs'000).
Table AN8.12	WIRFP - Phase II: Madhya Pradesh - Jabhua: Indicative Investment Cost per Village (Financial) - GVT, DFIDI, Community and Government (Rs'000). WIRFP - Phase II: Madhya Pradesh - Jabhua: Indicative Investment Cost per Village (Economic) - GVT, DFIDI, Community and Government (Rs'000).
Table AN8.13	WIRFP - Phase II: Madhya Pradesh - Jhabua: Summary of Investment Costs Per Village - Financial (Rs'000). WIRFP - Phase II: Madhya Pradesh - Jhabua: Summary of Investment Costs Per Village - Economic (Rs'000).

GVT Investment Cost - Rajasthan - Banswara

Table AN8.14	WIRFP - Phase II: Rajasthan - Banswara: Actual Investment Cost (Financial) - GVT, DFIDI, Community and Government (Rs'000). WIRFP - Phase II: Rajasthan - Banswara: Actual Investment Cost (Economic) - GVT, DFIDI, Community and Government (Rs'000).
Table AN8.15	WIRFP - Phase II: Rajasthan - Banswara: Indicative Investment Cost per Village (Financial) - GVT, DFIDI, Community and Government (Rs'000). WIRFP - Phase II: Rajasthan - Banswara: Indicative Investment Cost per Village (Economic) - GVT, DFIDI, Community and Government (Rs'000).
Table AN8.16	WIRFP - Phase II: Rajasthan - Banswara: Summary of Investment Costs Per Village - Financial (Rs'000). WIRFP - Phase II: Rajasthan - Banswara: Summary of Investment Costs Per Village - Economic (Rs'000).

IFFDC Investment Cost - Rajasthan - Pratapgarh

Table AN8.17	WIRFP - Phase II: Rajasthan - Pratapgarh: Actual Investment Cost (Financial) - IFFDC, DFIDI, Community and Government (Rs'000). WIRFP - Phase II: Rajasthan - Pratapgarh: Actual Investment Cost (Economic) - IFFDC, DFIDI, Community and Government (Rs'000).
Table AN8.18	WIRFP - Phase II: Rajasthan - Pratapgarh: Indicative Investment Cost per Village (Financial) - IFFDC, DFIDI, Community and Government (Rs'000). WIRFP - Phase II: Rajasthan - Pratapgarh: Indicative Investment Cost per Village (Economic) - IFFDC, DFIDI, Community and Government (Rs'000).
Table AN8.19	WIRFP - Phase II: Rajasthan - Pratapgarh: Summary of Investment Costs Per Village - Financial (Rs'000). WIRFP - Phase II: Rajasthan - Pratapgarh: Summary of Investment Costs Per Village - Economic (Rs'000).

Table AN8.1 WIRFP - Phase II: Core Village Development Years 1999/00 to 2004/05

Implementing Agent State / District	1999/00	2000/01	2001/02	2002/03	2003/04	2004/05	2005/06	Totals
Gramin Vikas Trust (GVT). Gujarat								
Dahod								
Per Year	5	15	-	-	-	-	-	20
Cumulated	5	20	20	20	20	20	20	
Madhya Pradesh (MP)								
Jhabua								
Per Year	22	19	6	25	-	-	-	72
Cumulated	22	41	47	72	72	72	72	
Ratlam								
Per Year	-	-	18	32	-	-	-	50
Cumulated	-	-	18	50	50	50	50	
Rajasthan								
Banswara								
Per Year	-	37	14	9	-	-	-	60
Cumulated	-	37	51	60	60	60	60	
Subtotal GVT Core Villages								
Per Year	27	71	38	66	-	-	-	202
Cumulated	27	98	136	202	202	202	202	
Indian Farm Forestry Development Cooperative (IFFDC)								
Rajasthan								
Pratapgarh								
Per Year	6	19	-	-	-	-	-	25
Cumulated	6	25	25	25	25	25	25	
Madhya Pradesh (MP)								
Ratlam								
Per Year	-	-	-	50	-	-	-	50
Cumulated	-	-	-	50	50	50	50	
Subtotal IFFDC Core Villages								
Per Year	6	19	-	50	-	-	-	75
Cumulated	6	25	25	75	75	75	75	
Total GVT and IFFDC Core Villages								
Per Year	33	90	38	116	-	-	-	277
Cumulated	33	123	161	277	277	277	277	

Source: Gramin Vikas Trust (GVT).
Indian Farm Forestry Development Cooperative (IFFDC).

Table AN8.2 WIRFP - Phase II: Total Investment Cost Summary Years 1990/00 to 2005/06 (Rs '000).

Cost Head / Subhead	Indicate Average Costs Per Village (Financial)									Indicative Average Costs Per Village (Economic)					
	GVT			Gujarat			M Pradesh			Rajasthan			IFFDC		
	GVT			Gujarat			M Pradesh			Rajasthan			IFFDC		
	(Rs'000)	(%)	(%)	(Rs'000)	(Rs'000)	(Rs'000)	(Rs'000)	(Rs'000)	(%)	(%)	(Rs'000)	(%)	(%)	(Rs'000)	(%)
A Administrative Cost															
Head Quarter Allocation	383.7	8%	22%	383.7	383.7	383.7	432.5	10%	18%	345.4	345.4	345.4	345.4	389.2	
DFIDI Consultancy	338.6	7%	20%	338.6	338.6	338.6	338.6	8%	14%	338.6	338.6	338.6	338.6	338.6	
State Coordination Office	1,008.1	22%	58%	1,757.6	903.0	869.1	1,595.6	36%	67%	907.3	1,581.8	812.7	782.2	1,436.0	
Total A	1,730.5	38%	100%	2,480.0	1,625.4	1,591.5	2,366.7	53%	100%	1,591.3	2,265.8	1,496.7	1,466.2	2,163.9	
B Development Cost															
Component A															
1 PPGF	61.5	1%	3%	124.7	41.6	90.4	49.4	1%	2%	71.8	112.2	37.5	81.4	44.4	
2 VOD	255.9	6%	12%	405.7	195.3	312.3	156.0	4%	8%	293.9	365.2	175.8	281.1	140.4	
3 Crop Technology	161.9	4%	7%	228.4	134.2	209.4	98.1	2%	5%	179.9	205.5	120.8	188.4	88.3	
4 SWC	909.9	20%	41%	1,132.1	796.7	1,091.8	175.1	4%	9%	750.1	764.2	537.7	737.0	118.2	
5 WRD	611.7	13%	28%	641.4	616.4	692.8	1,396.1	31%	69%	447.9	432.9	416.1	467.6	942.4	
6 Livestock	116.0	3%	5%	178.3	118.1	122.2	60.8	1%	3%	125.7	160.5	106.3	110.0	54.7	
7 Forestry	79.5	2%	4%	134.1	82.7	60.2	75.9	2%	4%	86.8	120.7	74.4	54.2	68.3	
8 Migration Support	13.3	0%	1%	34.4	11.7	7.3	-	0%	0%	12.0	30.9	10.5	6.5	-	
Subtotal	2,209.7	49%	100%	2,879.1	1,996.7	2,586.3	2,011.4	45%	100%	1,968.1	2,192.2	1,479.1	1,926.1	1,456.7	
Other Development Costs	612.5	13%		684.2	295.3	437.4	57.6	1%		655.6	615.8	265.7	393.7	51.8	
Total B	2,822.3	62%		3,563.3	2,292.0	3,023.7	2,068.9	47%		2,623.7	2,808.0	1,744.9	2,319.8	1,508.5	
Total A + B	4,552.8	100%		6,043.3	3,917.4	4,615.2	4,435.7	100%		4,215.0	5,073.8	3,241.6	3,786.0	3,672.4	
Average Households / Village (No)	142			188	107	140	86								
Average Component A Cost Per Household (Rs'000)	15.6			15.3	18.7	18.5	23.4								

Source: Cost Benefit Analysis (CBA) Study Estimates Jan 2005.

DFIDI = Department for International Development (India).

PPGF = Participatory Planning and Group Formation.

VOD = Village Organisation and Development.

SWC = Soil and Water Conservation.

WRD = Water Resource Development.

Table AN8.3 WIRFP - Phase II: DFIDI Consultancy Contract (Financial) Years 1999/00 to 2004/05.

Cost Head / Subhead	1999/00	2000/01	2001/02	2002/03	2003/04	2004/05	2005/06	Total	
	Actual	Actual	Actual	Actual	Actual	Budget	Budget		(%)
Cosultancy Contract (UKL'000)									
Expatriate Fees	102.8	203.3	67.2	149.1	100.3	114.5	88.3	825.5	65%
Indian Fees	22.7	57.2	19.5	43.3	43.0	38.6	25.2	249.4	20%
Expenses	30.7	59.9	33.8	59.2	38.5	50.4	32.5	305.0	24%
Subtotal	156.2	320.3	120.6	251.6	181.8	203.5	146.0	1,379.9	
Adjustments \1	(13.3)	(26.3)	(10.1)	(20.8)	(13.9)	(16.5)	(12.1)	(113.0)	
Total (UKL)	142.8	294.0	110.5	230.7	167.9	187.0	133.9	1,266.8	100%
Exchange Rate Assumptions									
UKL 1.0 = Rs	69.5	67.3	67.5	75.9	78.2	81.0	81.0	74.0	
Cosultancy Contract (Rs '000)	9,930.6	19,774.4	7,458.4	17,510.2	13,134.7	15,147.8	10,848.2	93,804.2	100%
Allocation \2									
GVT Gujarat	717.0	1,427.8	538.5	1,264.3	948.4	1,093.7	783.3	6,772.9	7%
Madhya Pradesh - Jhabua	2,581.3	5,139.9	1,938.6	4,551.4	3,414.1	3,937.3	2,819.7	24,382.3	26%
Madhya Pradesh - Ratlam	1,792.5	3,569.4	1,346.3	3,160.7	2,370.9	2,734.3	1,958.2	16,932.2	18%
Rajasthan	2,151.0	4,283.3	1,615.5	3,792.8	2,845.1	3,281.1	2,349.8	20,318.6	22%
Subtotal	7,241.8	14,420.3	5,438.9	12,769.1	9,578.3	11,046.4	7,910.9	68,405.9	73%
IFFDC	2,688.8	5,354.1	2,019.4	4,741.0	3,556.3	4,101.4	2,937.2	25,398.2	27%
Total	9,930.6	19,774.4	7,458.4	17,510.2	13,134.7	15,147.8	10,848.2	93,804.2	100%
Per Village	35.9	71.4	26.9	63.2	47.4	54.7	39.2	338.6	

Source: Department for International Development (India).

\1 Component B and C estimated at 10 percent.

\2 GVT Core Villages

Gujarat	20
M Pradesh - Jhabua	72
M Pradesh - Ratlam	50
Rajasthan	60
Subtotal	202
IFFDC Core Villages	75

Table AN8.4

WIRFP - Phase II: Total Investment Cost (Financial) - GVT, DFIDI, Community and Government (Rs '000).

Cost Head / Subhead	1999/00	2000/01	2001/02	2002/03	2003/04	2004/05	2005/06	Total			
	Actual	Actual	Actual	Actual	Actual	Budget	Budget	(Rs'000)	(%)	(%)	
A. Administration Costs											
GVT Bhopal (PHQ)											
Staff Costs	11,432.0	23,179.0	26,024.0	29,255.0	24,045.4	34,226.0	34,226.0	182,387.4	52%		
Office Costs	4,638.0	7,026.0	9,046.0	7,290.0	5,557.0	7,291.0	7,291.0	48,139.0	14%		
Equipment Costs	749.0	1,403.0	1,851.0	1,890.0	1,695.8	2,342.0	2,342.0	12,272.8	4%		
Capital Costs	7,842.0	2,651.0	5,280.0	1,030.0	14,184.5	6,371.0	1,000.0	38,358.5	11%		
Challenge Fund	-	-	-	-	-	16,969.0	10,569.0	27,538.0	8%		
Adjustments	-	-	-	-	-	(16,969.0)	(10,569.0)	(27,538.0)	-8%		
Subtotal	24,661.0	34,259.0	42,201.0	39,465.0	45,482.7	50,230.0	44,859.0	281,157.7	80%		
DFIDI											
Consultancy Contract	7,241.8	14,420.3	5,438.9	12,769.1	9,578.3	11,046.4	7,910.9	68,405.9	20%		
Total (A)	31,902.8	48,679.3	47,639.9	52,234.1	55,061.1	61,276.4	52,769.9	349,563.6	100%	38%	
B. Development Costs											
Component A											
1. PPGF	8.5	2,574.7	1,882.4	2,299.5	1,801.2	1,928.5	1,928.5	12,423.3	3%		
2. VOD	515.9	6,553.6	8,209.2	8,037.9	12,669.2	10,766.3	4,932.2	51,684.3	12%		
3. Crop Technology	342.7	2,250.9	6,322.6	5,079.4	6,806.4	7,728.2	4,168.5	32,698.6	7%		
4. SWC	1,009.0	11,021.1	46,262.4	33,686.8	35,505.6	40,409.3	15,907.5	183,801.6	41%		
5. WRD	463.3	3,652.2	7,392.2	15,367.5	43,566.8	38,754.6	14,373.3	123,570.0	28%		
6. Livestock	92.8	2,388.5	3,372.4	4,258.4	6,149.1	4,354.0	2,818.5	23,433.6	5%		
7. Forestry	229.4	1,164.7	1,431.5	2,716.2	4,039.1	4,111.5	2,364.2	16,056.6	4%		
8. Migration Labour	-	-	-	-	117.9	1,288.0	1,288.0	2,693.9	1%		
Subtotal	2,661.5	29,605.7	74,872.6	71,445.7	110,655.3	109,340.5	47,780.6	446,361.9	100%	49%	
Other Development Costs											
Component B	45.0	-	1,336.6	8,148.4	17,964.2	16,510.0	9,849.2	53,853.5	44%		
Component C	29.0	1,347.0	4,235.0	2,453.0	6,419.0	10,056.0	9,000.0	33,539.0	27%		
Training Costs	1,542.0	2,291.0	2,394.0	3,338.0	3,243.9	4,798.0	5,198.0	22,804.9	18%		
Research etc	535.0	928.0	807.0	827.0	1,006.6	2,452.0	2,452.0	9,007.6	7%		
Contingencies	-	200.0	300.0	100.0	3,677.9	250.0	-	4,527.9	4%		
Subtotal	2,151.0	4,766.0	9,072.6	14,866.4	32,311.6	34,066.0	26,499.2	123,732.8	100%	13%	
Total Development Costs	4,812.5	34,371.7	83,945.2	86,312.1	142,966.8	143,406.4	74,279.8	570,094.7		62%	
Percent	0.0	0.1	0.1	0.2	0.3	0.3	0.1	1.0			
Total (A + B)	36,715.4	83,051.0	131,585.2	138,546.3	198,027.9	204,682.9	127,049.8	919,658.3		100%	
Percentage	0.0	0.1	0.1	0.2	0.2	0.2	0.2	1.0			
GVT	29,321.0	63,900.0	99,392.0	101,317.0	137,500.0	144,121.0	97,444.0	672,995.0		73%	
DFID	7,241.8	14,420.3	5,438.9	12,769.1	9,578.3	11,046.4	7,910.9	68,405.9		7%	
Community	136.8	4,254.8	24,190.3	19,154.3	28,437.1	29,419.3	12,896.3	118,488.9		13%	
Government	15.7	475.9	2,563.9	5,305.9	22,512.4	20,096.2	8,798.5	59,768.5		6%	

Source:

GVT - Actual Investment Cost 1999/00 to 2003/04 and budget 2004/05 and 2005/06.

DFIDI = Department for International Development (India).

PPGF = Participatory Planning and Group Formation.

VOD = Village Organisation and Development.

SWC = Soil and Water Conservation.

WRD = Water Resource Development.

Table AN8.4

WIRFP - Phase II: Total Investment Cost (Economic) - GVT, DFIDI, Community and Government (Rs '000).

Cost Head / Subhead	Conversion Factors		1999/00	2000/01	2001/02	2002/03	2003/04	2004/05	2005/06	Totals	(%)
	CF	SCF	Actual	Actual	Actual	Actual	Actual	Budget	Budget	(Rs'000)	
A. Administration Costs											
GVT Bhopal (PHQ)											
Staff Costs	0.90	1.00	10,288.8	20,861.1	23,421.6	26,329.5	21,640.9	30,803.4	30,803.4	164,148.7	
Office Costs	0.90	1.00	4,174.2	6,323.4	8,141.4	6,561.0	5,001.3	6,561.9	6,561.9	43,325.1	
Equipment Costs	0.90	1.00	674.1	1,262.7	1,665.9	1,701.0	1,526.3	2,107.8	2,107.8	11,045.6	
Capital Costs	0.90	1.00	7,057.8	2,385.9	4,752.0	927.0	12,766.0	5,733.9	900.0	34,522.6	
Challenge Fund	0.90	1.00	-	-	-	-	-	15,272.1	9,512.1	24,784.2	
Adjustments	0.90	1.00	-	-	-	-	-	(15,272.1)	(9,512.1)	(24,784.2)	
Subtotal			22,194.9	30,833.1	37,980.9	35,518.5	40,934.4	45,207.0	40,373.1	253,041.9	79%
DFIDI											
Consultancy Contract	1.00	1.00	7,241.8	14,420.3	5,438.9	12,769.1	9,578.3	11,046.4	7,910.9	68,405.9	21%
Total (A)			29,436.7	45,253.4	43,419.8	48,287.6	50,512.8	56,253.4	48,284.0	321,447.9	42%
B. Development Costs											
Component A											
1. PPGF	0.90	1.00	7.6	2,317.2	1,694.1	2,069.5	1,621.1	1,735.7	1,735.7	11,181.0	
2. VOD	0.90	1.00	464.3	5,898.3	7,388.3	7,234.1	11,402.3	9,689.7	4,438.9	46,515.9	
3. Crop Technology	0.90	1.00	308.4	2,025.8	5,690.3	4,571.5	6,125.7	6,955.4	3,751.6	29,428.7	
4. SWC	0.90	0.75	681.1	7,439.2	31,227.1	22,738.6	23,966.3	27,276.3	10,737.6	124,066.1	
5. WRD	0.90	0.75	312.7	2,465.2	4,989.7	10,373.1	29,407.6	26,159.4	9,702.0	83,409.7	
6. Livestock	0.90	1.00	83.5	2,149.7	3,035.1	3,832.5	5,534.2	3,918.6	2,536.6	21,090.3	
7. Forestry	0.90	1.00	206.5	1,048.2	1,288.4	2,444.6	3,635.2	3,700.3	2,127.8	14,450.9	
8. Migration Labour	0.90	1.00	-	-	-	-	106.1	1,159.2	1,159.2	2,424.5	
Subtotal			2,064.1	23,343.6	55,313.1	53,263.9	81,798.5	80,594.5	36,189.4	332,567.1	43%
Other Development Costs											
Component B	0.90	1.00	40.5	-	1,203.0	7,333.6	16,167.8	14,859.0	8,864.3	48,468.1	
Component C	0.90	1.00	26.1	1,212.3	3,811.5	2,207.7	5,777.1	9,050.4	8,100.0	30,185.1	
Training Costs	0.90	1.00	1,387.8	2,061.9	2,154.6	3,004.2	2,919.5	4,318.2	4,678.2	20,524.4	
Research etc	0.90	1.00	481.5	835.2	726.3	744.3	905.9	2,206.8	2,206.8	8,106.8	
Contingencies	0.90	1.00	-	180.0	270.0	90.0	3,310.1	225.0	-	4,075.1	
Subtotal			1,935.9	4,289.4	8,165.4	13,379.8	29,080.4	30,659.4	23,849.3	111,359.5	15%
Total Development Costs			4,000.0	27,633.0	63,478.4	66,643.7	110,878.9	111,253.9	60,038.7	443,926.6	58%
Percent											
Total (A + B)			33,436.8	72,886.4	106,898.3	114,931.3	161,391.6	167,507.3	108,322.7	765,374.5	100%
Percentage											
GVT											
DFIDI											
Community											
Government											

Source:

Cost Benefit Analysis (CBA) Study Estimates Jan 2005.

DFIDI = Department for International Development (India).

PPGF = Participatory Planning and Group Formation.

VOD = Village Organisation and Development.

SWC = Soil and Water Conservation.

WRD = Water Resource Development.

Table AN8.5

WIRFP - Phase II: Indicative Average Cost per Village (Financial) - GVT, IFFDC, DFIDI, Community and Government (Rs '000).

Cost Head / Subhead	1999/00	2000/01	2001/02	2002/03	2003/04	2004/05	2005/06	Total		
	Actual	Actual	Actual	Actual	Actual	Budget	Budget	(Rs'000)	(%)	(%)
A. Administration Costs										
GVT Bhopal (PHQ)	122.1	169.6	208.9	195.4	225.2	248.7	222.1	1,391.9		
DFIDI	35.9	71.4	26.9	63.2	47.4	54.7	39.2	338.6		
Total (A)	157.9	241.0	235.8	258.6	272.6	303.3	261.2	1,730.5	100%	38%
B. Development Costs										
Component A										
1. PPGF	0.0	12.7	9.3	11.4	8.9	9.5	9.5	61.5	3%	
2. VOD	2.6	32.4	40.6	39.8	62.7	53.3	24.4	255.9	12%	
3. Crop Technology	1.7	11.1	31.3	25.1	33.7	38.3	20.6	161.9	7%	
4. SWC	5.0	54.6	229.0	166.8	175.8	200.0	78.7	909.9	41%	
5. WRD	2.3	18.1	36.6	76.1	215.7	191.9	71.2	611.7	28%	
6. Livestock	0.5	11.8	16.7	21.1	30.4	21.6	14.0	116.0	5%	
7. Forestry	1.1	5.8	7.1	13.4	20.0	20.4	11.7	79.5	4%	
8. Migration Labour	-	-	-	-	0.6	6.4	6.4	13.3	1%	
Subtotal	13.2	146.6	370.7	353.7	547.8	541.3	236.5	2,209.7	100%	49%
Other Development Costs										
Subtotal	10.6	23.6	44.9	73.6	160.0	168.6	131.2	612.5	100%	13%
Total Development Costs	23.8	170.2	415.6	427.3	707.8	709.9	367.7	2,822.3		62%
Percent										
Total (A + B)	181.8	411.1	651.4	685.9	980.3	1,013.3	629.0	4,552.8	100%	
GVT	145.2	316.3	492.0	501.6	680.7	713.5	482.4	3,331.7	73%	
DFID	35.9	71.4	26.9	63.2	47.4	54.7	39.2	338.6	7%	
Community	0.7	21.1	119.8	94.8	140.8	145.6	63.8	586.6	13%	
Government	0.1	2.4	12.7	26.3	111.4	99.5	43.6	295.9	6%	
Core Village Entry										
Per Year	27	71	38	66	-	-	-	202		
Cumulated	27	98	136	202	202	202	202			

Source:

GVT - Actual Investment Cost 1999/00 to 2003/04 and budget 2004/05 and 2005/06.

DFIDI = Department for International Development (India).

PPGF = Participatory Planning and Group Formation.

VOD = Village Organisation and Development.

SWC = Soil and Water Conservation.

WRD = Water Resource Development.

Table AN8.5

WIRFP - Phase II: Indicative Average Cost per Village (Economic) - GVT, IFFDC, DFIDI, Community and Government (Rs '000).

Cost Head / Subhead	Conversion Factors		1999/00	2000/01	2001/02	2002/03	2003/04	2004/05	2005/06	Totals	
	CF	SCF	Actual	Actual	Actual	Actual	Actual	Budget	Budget	(Rs'000)	(%)
A. Administration Costs											
GVT Bhopal (PHQ)	0.9	1.0	109.9	152.6	188.0	175.8	202.6	223.8	199.9	1,252.7	
DFIDI	1.0	1.0	35.9	71.4	26.9	63.2	47.4	54.7	39.2	338.6	
Total (A)			145.7	461.8	319.3	239.0	250.1	278.5	239.0	1,933.4	42%
B. Development Costs											
Component A											
1. PPGF	0.90	1.00	0.3	23.6	12.5	10.2	8.0	8.6	8.6	71.8	
2. VOD	0.90	1.00	17.2	60.2	54.3	35.8	56.4	48.0	22.0	293.9	
3. Crop Technology	0.90	1.00	11.4	20.7	41.8	22.6	30.3	34.4	18.6	179.9	
4. SWC	0.90	0.75	25.2	75.9	229.6	112.6	118.6	135.0	53.2	750.1	
5. WRD	0.90	0.75	11.6	25.2	36.7	51.4	145.6	129.5	48.0	447.9	
6. Livestock	0.90	1.00	3.1	21.9	22.3	19.0	27.4	19.4	12.6	125.7	
7. Forestry	0.90	1.00	7.6	10.7	9.5	12.1	18.0	18.3	10.5	86.8	
8. Migration Labour	0.90	1.00	-	-	-	-	0.5	5.7	5.7	12.0	
Subtotal			76.4	238.2	406.7	263.7	404.9	399.0	179.2	1,968.1	43%
Other Development Costs											
Subtotal			71.7	43.8	60.0	66.2	144.0	151.8	118.1	655.6	14%
Total Development Costs			148.1	282.0	466.8	329.9	548.9	550.8	297.2	2,623.7	58%
Percent											
Total (A + B)			293.9	743.7	786.0	569.0	799.0	829.2	536.3	4,557.1	100%
GVT											
DFID											
Community											
Government											
Core Village Entry											
Per Year			27	71	38	66	-	-	-		
Cumulated			27	98	136	202	202	202	202		

Source:

Cost Benefit Analysis (CBA) Study Estimates Jan 2005.

DFIDI = Department for International Development (India).

PPGF = Participatory Planning and Group Formation.

VOD = Village Organisation and Development.

SWC = Soil and Water Conservation.

WRD = Water Resource Development.

Table AN8.6

WIRFP - Phase II: Bhopal Head Quarters Total Investment Cost (Financial) - GVT, DFID, Community and Government (Rs '000).

Cost Head / Subhead	1999/00	2000/01	2001/02	2002/03	2003/04	2004/05	2004/06	Total	
	Actual	Actual	Actual	Actual	Actual	Budget	Budget	(Rs'000)	(%)
A Administrative Cost									
GVT Bhopal (Project HQ)									
Staff Cost A	-	7,135.6	8,108.7	9,102.0	5,234.1	8,569.0	8,569.0	46,718.4	22%
Staff Cost B	-	-	-	-	-	750.0	750.0	1,500.0	1%
Office Cost	-	3,389.1	5,139.5	3,672.6	1,470.6	2,082.0	2,082.0	17,835.7	8%
Equipment Cost	-	507.4	914.6	652.7	374.8	349.0	349.0	3,147.4	1%
Capital Cost	-	1,141.3	1,076.4	163.8	3,585.1	1,748.0	600.0	8,314.7	4%
Challenge Fund	-	-	-	-	-	16,969.0	10,569.0	27,538.0	13%
Adjustment	-	-	-	-	-	(16,969.0)	(10,569.0)	(27,538.0)	-13%
Subtotal	-	12,173.3	15,239.3	13,591.1	10,664.6	13,498.0	12,350.0	77,516.2	36%
DFIDI									
Consultant Contract	7,241.8	14,420.3	5,438.9	12,769.1	9,578.3	11,046.4	7,910.9	68,405.9	32%
Total A	7,241.8	26,593.6	20,678.2	26,360.3	20,242.9	24,544.4	20,260.9	145,922.1	68%
B Development Cost									
Component A									
1. PPGF	-	-	-	-	-	-	-	-	0%
2. VOD	-	-	-	-	-	-	-	-	0%
3. Crop Technology	-	-	-	-	-	-	-	-	0%
4. SWC	-	-	-	-	-	-	-	-	0%
5. WRD \1	-	-	-	2,525.4	13,335.0	6,982.0	-	22,842.4	11%
6. Livestock	-	-	-	-	-	-	-	-	0%
7. Forestry	-	-	-	-	-	-	-	-	0%
8. Migration Support	-	-	-	-	-	-	-	-	0%
Subtotal	-	-	-	2,525.4	13,335.0	6,982.0	-	22,842.4	11%
Other Development Costs									
Component - B & Dissemination	-	-	558.0	292.8	-	-	-	850.7	0%
Component - C	-	1,347.0	4,134.0	2,336.7	6,272.4	10,056.0	9,000.0	33,146.0	15%
Training Cost	-	451.6	124.7	307.3	216.3	2,500.0	3,500.0	7,100.0	3%
Research, Evaluation & Workshop Cost	-	467.2	361.0	397.7	556.1	1,000.0	1,000.0	3,782.0	2%
Contingencies	-	-	-	-	141.8	250.0	-	391.8	0%
Subtotal	-	2,265.8	5,177.7	3,334.5	7,186.7	13,806.0	13,500.0	45,270.6	21%
Total B	-	2,265.8	5,177.7	5,859.9	20,521.6	20,788.0	13,500.0	68,113.0	32%
Total A + B	7,241.8	28,859.4	25,855.9	32,220.1	40,764.5	45,332.4	33,760.9	214,035.1	100%

Source:

\1

DFIDI = Department for International Development (India).

PPGF = Participatory Planning and Group Formation.

VOD = Village Organisation and Development.

SWC = Soil and Water Conservation.

WRD = Water Resource Development.

GVT - Actual Investment Cost 1999/00 to 2003/04 and budget 2004/05 and 2005/06.

Saguru Water and Development Foundation - large scale contracts.

Table AN8.6

WIRFP - Phase II: Bhopal Head Quarters Total Investment Cost (Economic) - GVT, DFID, Community and Government (Rs '000).

Cost Head / Subhead	CF	SCF	1999/00	2000/01	2001/02	2002/03	2003/04	2004/05	2005/06	Totals	(%)
			Actual	Actual	Actual	Actual	Actual	Budget	Budget	(Rs'000)	
A Administrative Cost											
GVT Bhopal (Project HQ)											
Staff Cost A	0.90	1.00	-	6,422.0	7,297.9	8,191.8	4,710.7	7,712.1	7,712.1	42,046.6	20%
Staff Cost B	0.90	1.00	-	-	-	-	-	675.0	675.0	1,350.0	1%
Office Cost	0.90	1.00	-	3,050.1	4,625.6	3,305.3	1,323.5	1,873.8	1,873.8	16,052.2	7%
Equipment Cost	0.90	1.00	-	456.6	823.1	587.5	337.3	314.1	314.1	2,832.7	1%
Capital Cost	0.90	1.00	-	1,027.2	968.8	147.5	3,226.6	1,573.2	540.0	7,483.2	3%
Challenge Fund	0.90	1.00	-	-	-	-	-	15,272.1	9,512.1	24,784.2	12%
Adjustment	0.90	1.00	-	-	-	-	-	(15,272.1)	(9,512.1)	(24,784.2)	-12%
Subtotal			-	10,955.9	13,715.3	12,232.0	9,598.1	12,148.2	11,115.0	69,764.6	33%
DFIDI											
Consultant Contract	1.00	1.00	7,241.8	14,420.3	5,438.9	12,769.1	9,578.3	11,046.4	7,910.9	68,405.9	32%
Total A			7,241.8	25,376.2	19,154.3	25,001.1	19,176.5	23,194.6	19,025.9	138,170.5	65%
B Development Cost											
Component A											
1. PPGF	0.90	1.00	-	-	-	-	-	-	-	-	0%
2. VOD	0.90	1.00	-	-	-	-	-	-	-	-	0%
3. Crop Technology	0.90	1.00	-	-	-	-	-	-	-	-	0%
4. SWC	0.90	0.75	-	-	-	-	-	-	-	-	0%
5. WRD \1	0.90	0.75	-	-	-	1,704.6	9,001.1	4,712.9	-	15,418.6	7%
6. Livestock	0.90	1.00	-	-	-	-	-	-	-	-	0%
7. Forestry	0.90	1.00	-	-	-	-	-	-	-	-	0%
8. Migration Support	0.90	1.00	-	-	-	-	-	-	-	-	0%
Subtotal			-	-	-	1,704.6	9,001.1	4,712.9	-	15,418.6	7%
Other Development Costs											
Component - B & Dissemination	0.90	1.00	-	-	502.2	263.5	-	-	-	765.7	0%
Component - C	0.90	1.00	-	1,212.3	3,720.6	2,103.0	5,645.1	9,050.4	8,100.0	29,831.4	14%
Training Cost	0.90	1.00	-	406.5	112.3	276.6	194.7	2,250.0	3,150.0	6,390.0	3%
Research, Evaluation & Workshop Cost	0.90	1.00	-	420.5	324.9	357.9	500.5	900.0	900.0	3,403.8	2%
Contingencies	0.90	1.00	-	-	-	-	127.7	225.0	-	352.7	0%
Subtotal			-	2,039.2	4,659.9	3,001.0	6,468.0	12,425.4	12,150.0	40,743.6	19%
Total B			-	2,039.2	4,659.9	4,705.7	15,469.1	17,138.3	12,150.0	56,162.1	26%
Total A + B			7,241.8	27,415.5	23,814.2	29,706.8	34,645.6	40,332.9	31,175.9	194,332.7	91%

Source:

Cost Benefit Analysis (CBA) Study Estimates Jan 2005.

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DFIDI = Department for International Development (India).

PPGF = Participatory Planning and Group Formation.

VOD = Village Organisation and Development.

SWC = Soil and Water Conservation.

WRD = Water Resource Development.

Table AN8.7

WIRFP - Phase II: Bhopal Head Quarters Total Indicative Investment Cost per Village (Financial) - GVT, DFIDI, Community and Government (Rs '000).

Cost Head / Subhead	1999/00	2000/01	2001/02	2002/03	2003/04	2004/05	2004/06	Total	
	Actual	Actual	Actual	Actual	Actual	Budget	Budget	(Rs'000)	(%)
A Administrative Cost									
GVT Bhopal (Project HQ)	-	60.3	75.4	67.3	52.8	66.8	61.1	383.7	36%
DFIDI	35.9	71.4	26.9	63.2	47.4	54.7	39.2	338.6	32%
Total A	35.9	131.7	102.4	130.5	100.2	121.5	100.3	722.4	68%
B Development Cost									
Component A									
1. PPGF	-	-	-	-	-	-	-	-	0%
2. VOD	-	-	-	-	-	-	-	-	0%
3. Crop Technology	-	-	-	-	-	-	-	-	0%
4. SWC	-	-	-	-	-	-	-	-	0%
5. WRD	-	-	-	12.5	66.0	34.6	-	113.1	11%
6. Livestock	-	-	-	-	-	-	-	-	0%
7. Forestry	-	-	-	-	-	-	-	-	0%
8. Migration Support	-	-	-	-	-	-	-	-	0%
Subtotal	-	-	-	12.5	66.0	34.6	-	113.1	11%
Other Development Cost									
Subtotal	-	11.2	25.6	16.5	35.6	68.3	66.8	226.2	21%
Total B	-	11.2	25.6	29.0	101.6	102.9	66.8	337.2	32%
Total A + B	-	71.5	101.1	96.3	154.4	169.7	128.0	1,059.6	100%
Core Village Entry									
Per Year	27.0	71.0	38.0	66.0	-	-	-	202.0	
Cumulated	27.0	98.0	136.0	202.0	202.0	202.0	202.0		

Source:

GVT - Actual Investment Cost 1999/00 to 2003/04 and budget 2004/05 and 2005/06.

DFIDI = Department for International Development (India).

PPGF = Participatory Planning and Group Formation.

VOD = Village Organisation and Development.

SWC = Soil and Water Conservation.

WRD = Water Resource Development.

Table AN8.7

WIRFP - Phase II: Bhopal Head Quarters Total Indicative Investment Cost per Village (Economic) - GVT, DFIDI, Community and Government (Rs '000).

Cost Head / Subhead	1999/00	2000/01	2001/02	2002/03	2003/04	2004/05	2005/06	Totals	
	Actual	Actual	Actual	Actual	Actual	Budget	Budget	(Rs'000)	(%)
A Administrative Cost									
GVT Bhopal (Project HQ)	-	54.2	67.9	60.6	47.5	60.1	55.0	345.4	
DFIDI	35.9	71.4	26.9	63.2	47.4	54.7	39.2	338.6	
Total A	35.9	125.6	94.8	123.8	94.9	114.8	94.2	684.0	71%
B Development Cost									
Component A									
1. PPGF	-	-	-	-	-	-	-	-	-
2. VOD	-	-	-	-	-	-	-	-	-
3. Crop Technology	-	-	-	-	-	-	-	-	-
4. SWC	-	-	-	-	-	-	-	-	-
5. WRD	-	-	-	8.4	44.6	23.3	-	76.3	
6. Livestock	-	-	-	-	-	-	-	-	-
7. Forestry	-	-	-	-	-	-	-	-	-
8. Migration Support	-	-	-	-	-	-	-	-	-
Subtotal	-	-	-	8.4	44.6	23.3	-	76.3	8%
Other Development Cost									
Subtotal	-	10.1	23.1	14.9	32.0	61.5	60.1	152.7	16%
Total B	-	10.1	23.1	23.3	76.6	84.8	60.1	278.0	29%
Total A + B	35.9	135.7	117.9	147.1	171.5	199.7	154.3	962.0	100%
Core Village Entry									
Per Year	27	71	38	66	0	0	0		
Cumulated	27	98	136	202	202	202	202		

Source:

Cost Benefit Analysis (CBA) Study Estimates Jan 2005.

DFIDI = Department for International Development (India).

PPGF = Participatory Planning and Group Formation.

VOD = Village Organisation and Development.

SWC = Soil and Water Conservation.

WRD = Water Resource Development.

Table AN8.8

WIRFP - Phase II: Gujarat - Dahod: Actual Investment Cost (Financial) - GVT, DFIDI, Community and Government (Rs '000).

Cost Heads / Subhead	1999/00	2000/01	2001/02	2002/03	2003/04	2004/05	2005/06	Total	
	Actual	Actual	Actual	Actual	Actual	Budget	Budget	(Rs'000)	(%)
A Administrative Cost									
GVT Bhopal (Project HQ)									
Allocation	-	1,205.3	1,508.8	1,345.7	1,055.9	1,336.4	1,222.8	7,674.9	6%
DFIDI									
Consultancy Contract	717.0	1,427.8	538.5	1,264.3	948.4	1,093.7	783.3	6,772.9	6%
Dahod Coordination Office, Gujarat									
Staff Cost A	-	5,417.0	3,510.5	2,823.8	2,749.5	1,793.0	1,793.0	18,086.7	15%
Staff Cost B	-	-	-	-	-	2,200.0	2,200.0	4,400.0	4%
Office Cost	-	1,182.9	948.3	660.8	764.7	1,269.0	1,269.0	6,094.7	5%
Equipment Cost	-	323.7	294.7	205.0	125.7	432.0	432.0	1,813.0	2%
Capital Cost	-	391.4	597.0	99.0	972.2	2,598.0	100.0	4,757.5	4%
Challenge Fund	-	-	-	-	-	-	-	-	0%
Adjustments	-	-	-	-	-	-	-	-	0%
Subtotal	-	7,314.9	5,350.4	3,788.6	4,612.0	8,292.0	5,794.0	35,151.9	29%
Total A	717.0	9,948.0	7,397.8	6,398.5	6,616.2	10,722.1	7,800.0	49,599.7	41%
B Development Cost									
Component A									
1 PPGF	1.6	765.4	306.1	439.8	416.8	282.0	282.0	2,493.6	2%
2 VOD	14.2	2,117.1	1,600.7	967.5	1,335.2	1,433.2	647.0	8,115.0	7%
3 Crop Technology	0.7	668.5	1,589.4	621.2	822.5	460.3	404.9	4,567.5	4%
4 SWC	-	2,586.9	6,651.7	5,406.0	3,828.2	2,914.9	1,253.8	22,641.5	19%
5 WRD	10.2	862.2	1,311.2	1,740.2	3,993.0	3,491.8	1,419.4	12,828.1	11%
6 Livestock	0.9	1,083.8	436.0	518.9	589.1	490.3	447.2	3,566.2	3%
7 Forestry	0.6	745.6	486.4	312.4	373.5	404.2	359.9	2,682.6	2%
8 Migration Support	-	-	-	-	11.7	338.0	338.0	687.7	1%
Subtotal	28.2	8,829.6	12,381.5	10,006.0	11,370.0	9,814.7	5,152.2	57,582.2	48%
Other Development Costs									
Component - B & Dissemination	-	-	112.8	1,724.6	3,131.1	2,302.1	1,618.8	8,889.4	7%
Component - C	-	-	101.0	116.3	146.7	-	-	364.0	0%
Training Cost	-	556.6	407.6	335.5	315.8	141.0	141.0	1,897.4	2%
Research, Evaluation & Workshop Cost	-	115.8	46.6	72.3	83.7	710.0	710.0	1,738.5	1%
Contingencies	-	-	40.5	-	754.8	-	-	795.3	1%
Subtotal	-	672.4	708.5	2,248.7	4,432.1	3,153.1	2,469.8	13,684.6	11%
Total B	28.2	9,502.0	13,090.1	12,254.6	15,802.1	12,967.8	7,622.0	71,266.8	59%
Total A + B	745.3	19,450.0	20,487.8	18,653.1	22,418.3	23,689.9	15,422.0	120,866.5	100%

Source:

GVT - Actual Investment Cost 1999/00 to 2003/04 and budget 2004/05 and 2005/06.

DFIDI = Department for International Development (India).

PPGF = Participatory Planning and Group Formation.

VOD = Village Organisation and Development.

SWC = Soil and Water Conservation.

WRD = Water Resource Development.

Table AN8.8

WIRFP - Phase II: Gujarat - Dahod: Actual Investment Cost (Economic) - GVT, DFIDI, Community and Government (Rs '000).

Cost Heads / Subhead	Conversion Factors		1999/00	2000/01	2001/02	2002/03	2003/04	2004/05	2005/06	Totals	
	CF	SCF	Actual	Actual	Actual	Actual	Actual	Budget	Budget	(Rs'000)	(%)
A Administrative Cost											
GVT Bhopal (Project HQ)											
Allocation	0.90	1.00	-	1,084.7	1,358.0	1,211.1	950.3	1,202.8	1,100.5	6,907.4	7%
DFIDI											
Consultancy Contract	1.00	1.00	717.0	1,427.8	538.5	1,264.3	948.4	1,093.7	783.3	6,772.9	7%
Dahod Coordination Office, Gujarat											
Staff Cost A	0.90	1.00	-	4,875.3	3,159.4	2,541.4	2,474.5	1,613.7	1,613.7	16,278.0	16%
Staff Cost B	0.90	1.00	-	-	-	-	-	1,980.0	1,980.0	3,960.0	4%
Office Cost	0.90	1.00	-	1,064.6	853.4	594.7	688.2	1,142.1	1,142.1	5,485.2	5%
Equipment Cost	0.90	1.00	-	291.3	265.2	184.5	113.1	388.8	388.8	1,631.7	2%
Capital Cost	0.90	1.00	-	352.2	537.3	89.1	875.0	2,338.2	90.0	4,281.8	4%
Challenge Fund	0.90	1.00	-	-	-	-	-	-	-	-	0%
Adjustments	0.90	1.00	-	-	-	-	-	-	-	-	0%
Subtotal				6,583.4	4,815.4	3,409.7	4,150.8	7,462.8	5,214.6	31,636.7	31%
Total A			717.0	9,095.9	6,711.9	5,885.1	6,049.5	9,759.3	7,098.4	45,317.0	45%
B Development Cost											
Component A											
1 PPGF	0.90	1.00	1.4	688.9	275.5	395.8	375.1	253.8	253.8	2,244.2	2%
2 VOD	0.90	1.00	12.8	1,905.4	1,440.6	870.7	1,201.7	1,289.9	582.3	7,303.5	7%
3 Crop Technology	0.90	1.00	0.6	601.7	1,430.5	559.1	740.2	414.3	364.4	4,110.8	4%
4 SWC	0.90	0.75	-	1,746.2	4,489.9	3,649.1	2,584.0	1,967.5	846.3	15,283.0	15%
5 WRD	0.90	0.75	6.9	582.0	885.1	1,174.6	2,695.3	2,357.0	958.1	8,659.0	9%
6 Livestock	0.90	1.00	0.8	975.4	392.4	467.0	530.2	441.3	402.4	3,209.6	3%
7 Forestry	0.90	1.00	0.6	671.1	437.7	281.1	336.1	363.8	323.9	2,414.4	2%
8 Migration Support	0.90	1.00	-	-	-	-	10.5	304.2	304.2	618.9	1%
Subtotal			23.1	7,170.6	9,351.7	7,397.5	8,473.2	7,391.7	4,035.5	43,843.3	43%
Other Development Costs											
Component - B & Dissemination	0.90	1.00	-	-	101.5	1,552.1	2,818.0	2,071.9	1,456.9	8,000.5	8%
Component - C	0.90	1.00	-	-	90.9	104.7	132.0	-	-	327.6	0%
Training Cost	0.90	1.00	-	500.9	366.8	301.9	284.2	126.9	126.9	1,707.6	2%
Research, Evaluation & Workshop Cost	0.90	1.00	-	104.2	42.0	65.1	75.4	639.0	639.0	1,564.6	2%
Contingencies	0.90	1.00	-	-	36.4	-	679.3	-	-	715.8	1%
Subtotal				605.1	637.7	2,023.8	3,988.9	2,837.8	2,222.8	12,316.1	12%
Total B			23.1	7,775.7	9,989.4	9,421.3	12,462.1	10,229.5	6,258.3	56,159.5	55%
Total A + B			740.1	16,871.7	16,701.3	15,306.3	18,511.6	19,988.8	13,356.7	101,476.4	100%

Source:

Cost Benefit Analysis (CBA) Study Estimates Jan 2005.

DFIDI = Department for International Development (India).

PPGF = Participatory Planning and Group Formation.

VOD = Village Organisation and Development.

SWC = Soil and Water Conservation.

WRD = Water Resource Development.

Table AN8.9

WIRFP - Phase II: Gujarat - Dahod: Indicative Investment Cost per Village (Financial) - GVT, DFIDI, Community and Government (Rs '000).

Cost Heads / Subhead	1999/00 Actual	2000/01 Actual	2001/02 Actual	2002/03 Actual	2003/04 Actual	2004/05 Budget	2005/06 Budget	Total (Rs'000)	(%)
A Administrative Cost									
GVT Bhopal Project HQ	-	60.3	75.4	67.3	52.8	66.8	61.1	383.7	6%
DFIDI Consultancy	35.9	71.4	26.9	63.2	47.4	54.7	39.2	338.6	6%
Dahod Coordination Office, Gujarat	-	365.7	267.5	189.4	230.6	414.6	289.7	1,757.6	29%
Total A	35.9	497.4	369.9	319.9	330.8	536.1	390.0	2,480.0	41%
B Development Cost									
Component A									
1 PPGF	0.1	38.3	15.3	22.0	20.8	14.1	14.1	124.7	2%
2 VOD	0.7	105.9	80.0	48.4	66.8	71.7	32.3	405.7	7%
3 Crop Technology	0.0	33.4	79.5	31.1	41.1	23.0	20.2	228.4	4%
4 SWC	-	129.3	332.6	270.3	191.4	145.7	62.7	1,132.1	19%
5 WRD	0.5	43.1	65.6	87.0	199.7	174.6	71.0	641.4	11%
6 Livestock	0.0	54.2	21.8	25.9	29.5	24.5	22.4	178.3	3%
7 Forestry	0.0	37.3	24.3	15.6	18.7	20.2	18.0	134.1	2%
8 Migration Support	-	-	-	-	0.6	16.9	16.9	34.4	1%
Subtotal	1.4	441.5	619.1	500.3	568.5	490.7	257.6	2,879.1	48%
Other Development Costs									
Subtotal	-	33.6	35.4	112.4	221.6	157.7	123.5	684.2	11%
Total B	1.4	475.1	654.5	612.7	790.1	648.4	381.1	3,563.3	59%
Total A + B	37.3	972.5	1,024.4	932.7	1,120.9	1,184.5	771.1	6,043.3	100%
Core Village Entry									
Per Year	5	15	-	-	-	-	-	20	
Cumulated	5	20	20	20	20	20	20	-	

Source:

GVT - Actual Investment Cost 1999/00 to 2003/04 and budget 2004/05 and 2005/06.

DFIDI = Department for International Development (India).
PPGF = Participatory Planning and Group Formation.
VOD = Village Organisation and Development.
SWC = Soil and Water Conservation.
WRD = Water Resource Development.

Table AN8.9

WIRFP - Phase II: Gujarat - Dahod: Indicative Investment Cost per Village (Economic) - GVT, DFIDI, Community and Government (Rs '000).

Cost Heads / Subhead	Conversion Factors		1999/00 Actual	2000/01 Actual	2001/02 Actual	2002/03 Actual	2003/04 Actual	2004/05 Budget	2005/06 Budget	Total	
	CF	SCF								(Rs'000)	(%)
A Administrative Cost											
GVT Bhopal Project HQ	0.9	1.0	-	54.2	67.9	60.6	47.5	60.1	55.0	345.4	7%
DFIDI Consultancy	1.0	1.0	35.9	71.4	26.9	63.2	47.4	54.7	39.2	338.6	7%
Dahod Coordination Office, Gujarat	0.9	1.0	-	329.2	240.8	170.5	207.5	373.1	260.7	1,581.8	31%
Total A			35.9	454.8	335.6	294.3	302.5	488.0	354.9	2,265.8	45%
B Development Cost											
Component A											
1 PPGF	0.90	1.00	0.1	34.4	13.8	19.8	18.8	12.7	12.7	112.2	2%
2 VOD	0.90	1.00	0.6	95.3	72.0	43.5	60.1	64.5	29.1	365.2	7%
3 Crop Technology	0.90	1.00	0.0	30.1	71.5	28.0	37.0	20.7	18.2	205.5	4%
4 SWC	0.90	0.75	-	87.3	224.5	182.5	129.2	98.4	42.3	764.2	15%
5 WRD	0.90	0.75	0.3	29.1	44.3	58.7	134.8	117.8	47.9	432.9	9%
6 Livestock	0.90	1.00	0.0	48.8	19.6	23.4	26.5	22.1	20.1	160.5	3%
7 Forestry	0.90	1.00	0.0	33.6	21.9	14.1	16.8	18.2	16.2	120.7	2%
8 Migration Support	0.90	1.00	-	-	-	-	0.5	15.2	15.2	30.9	1%
Subtotal			1.2	358.5	467.6	369.9	423.7	369.6	201.8	2,192.2	43%
Other Development Costs	0.9	1.0	-	30.3	31.9	101.2	199.4	141.9	111.1	615.8	12%
Subtotal			-	30.3	31.9	101.2	199.4	141.9	111.1	615.8	12%
Total B			1.2	388.8	499.5	471.1	623.1	511.5	312.9	2,808.0	55%
Total A + B			37.0	843.6	835.1	765.3	925.6	999.4	667.8	5,073.8	100%
Core Village Entry											
Per Year			5	15	-	-	-	-	-	20	
Cumulated			5	20	20	20	20	20	20		

Source:

Cost Benefit Analysis (CBA) Study Estimates Jan 2005.

DFIDI = Department for International Development (India).
PPGF = Participatory Planning and Group Formation.
VOD = Village Organisation and Development.
SWC = Soil and Water Conservation.
WRD = Water Resource Development.

Table AN8.10

WIRFP - Phase II: Gujarat - Dahod: Summary of Investment Costs Per Village - Financial / Economic (Rs'000).

Cost Head / Subhead	Financial Costs								Economic Costs							
	Gujarat Average		Jadha V1		Kasotiya		Poyali		Gujarat Average		Jadha V1		Kasotiya		Poyali	
A. Administration Costs																
GVT Bhopal (PHQ)	383.7	6%	383.7	4%	383.7	7%	383.7	6%	345.4		345.4		345.4		345.4	
DFIDI Consultancy	338.6	6%	338.6	3%	338.6	6%	338.6	5%	338.6		338.6		338.6		338.6	
Gujarat Coordination Office	1,757.6	29%	1,757.6	18%	1,757.6	32%	1,757.6	27%	1,581.8		1,581.8		1,581.8		1,581.8	
Total A	2,480.0	41%	2,480.0	25%	2,480.0	45%	2,480.0	38%	2,265.8		2,265.8		2,265.8		2,265.8	
B. Development Costs																
Component A																
1. PPGF	124.7	2%	322.5	3%	157.1	3%	185.4	3%	112.2		290.3		141.4		166.8	
2. VOD	405.7	7%	335.5	3%	346.2	6%	297.5	5%	365.2		301.9		311.6		267.7	
3. Crop Technology	228.4	4%	258.2	3%	202.0	4%	156.6	2%	205.5		232.4		181.8		140.9	
4. SWC	1,132.1	19%	3,003.4	30%	1,709.2	31%	1,976.6	31%	764.2		2,027.3		1,153.7		1,334.2	
5. WRD	641.4	11%	2,778.8	28%	312.0	6%	986.9	15%	432.9		1,875.7		210.6		666.1	
6. Livestock	178.3	3%	258.7	3%	247.5	4%	119.2	2%	160.5		232.8		222.7		107.2	
7. Forestry	134.1	2%	191.9	2%	42.7	1%	119.1	2%	120.7		172.7		38.4		107.2	
8. Migration Support	34.4	1%	235.1	2%	25.9	0%	137.8	2%	30.9		211.6		23.3		124.0	
Subtotal	2,879.1	48%	7,384.1	75%	3,042.5	55%	3,978.9	62%	2,192.2		5,344.7		2,283.5		2,914.2	
Other Development Costs																
Subtotal	684.2	11%	-	0%	-	0%	-	0%	615.8		-		-		-	
Total B	3,563.3	59%	7,384.1	75%	3,042.5	55%	3,978.9	62%	2,808.0		5,344.7		2,283.5		2,914.2	
Total A + B	6,043.3	100%	9,864.1	100%	5,522.5	100%	6,458.8	100%	5,073.8		7,610.5		4,549.4		5,180.0	
GVT			7,744.2	79%	4,053.4	73%	4,938.6	76%			N/A		N/A		N/A	
DFIDI			338.6	3%	338.6	6%	338.6	5%			N/A		N/A		N/A	
Community			1,775.2	18%	1,115.0	20%	1,180.1	18%			N/A		N/A		N/A	
Government			6.0	0%	15.5	0%	1.5	0%			N/A		N/A		N/A	
Households (No)	188		363		193		120									
Average Component A Cost Per Household (Rs'000)	15		20		16		33									

Source:

\1 Cost Benefit Analysis (CBA) Study - Field Verification.

GVT Dahod Coordination Office, Gujarat.

Cost Benefit Analysis (CBA) Study Estimates Jan 2005.

DFIDI = Department for International Development (India).

PPGF = Participatory Planning and Group Formation.

VOD = Village Organisation and Development.

SWC = Soil and Water Conservation.

WRD = Water Resource Development.

Table AN8.11

WIRFP - Phase II: Madhya Pradesh - Jabhua: Actual Investment Cost (Financial) - GVT, DFIDI, Community and Government (Rs'000).

Cost Heads / Subhead	1999/00	2000/01	2001/02	2002/03	2003/04	2004/05	2005/06	Total	
	Actual	Actual	Actual	Actual	Actual	Budget	Budget	(Rs'000)	(%)
A Administrative Cost									
GVT Bhopal (Project HQ)									
Allocation	-	4,339.0	5,431.8	4,844.4	3,801.2	4,811.2	4,402.0	27,629.5	10%
DFIDI									
Consultancy Contract	2,581.3	5,139.9	1,938.6	4,551.4	3,414.1	3,937.3	2,819.7	24,382.3	9%
Jhabua Coordination Office, M Pradesh									
Staff Cost A	-	5,129.7	6,458.5	6,838.3	6,763.7	2,787.0	2,787.0	30,764.1	11%
Staff Cost B	-	-	-	-	-	4,200.0	4,200.0	8,400.0	3%
Office Cost	-	1,159.4	1,005.6	1,045.2	1,164.0	1,285.0	1,285.0	6,944.2	2%
Equipment Cost	-	234.3	325.4	375.3	425.7	630.0	630.0	2,620.6	1%
Capital Cost	-	534.8	1,190.9	230.3	3,154.9	855.0	100.0	6,065.8	2%
Challenge Fund	-	534.8	1,190.9	230.3	3,154.9	-	-	5,110.8	2%
Adjustments	-	534.8	1,190.9	230.3	3,154.9	-	-	5,110.8	2%
Subtotal	-	8,127.7	11,362.1	8,949.5	17,818.0	9,757.0	9,002.0	65,016.4	23%
Total A	2,581.3	17,606.6	18,732.5	18,345.3	25,033.3	18,505.5	16,223.7	117,028.2	41%
B Development Cost									
Component A									
1 PPGF	6.9	740.9	362.6	527.6	326.7	515.8	515.8	2,996.4	1%
2 VOD	62.7	1,545.3	2,141.0	2,164.4	3,932.1	2,774.7	1,444.2	14,064.4	5%
3 Crop Technology	3.0	911.1	2,087.2	1,251.5	1,827.4	2,142.1	1,442.6	9,665.0	3%
4 SWC	-	3,868.3	15,582.2	8,668.3	11,383.1	12,568.6	5,288.7	57,359.2	20%
5 WRD	45.1	711.0	2,129.9	5,329.1	17,071.4	14,677.6	4,417.0	44,381.1	16%
6 Livestock	3.9	728.8	1,222.5	1,480.5	2,486.8	1,718.2	863.0	8,503.7	3%
7 Forestry	2.8	261.8	449.6	871.1	2,073.0	1,627.1	667.7	5,953.2	2%
8 Migration Support	-	-	-	-	42.0	400.0	400.0	842.0	0%
Subtotal	124.3	8,767.3	23,975.1	20,292.5	39,142.5	36,424.2	15,039.0	143,764.9	51%
Other									
Component - B & Dissemination	-	-	258.2	2,052.9	5,192.5	4,320.5	2,800.8	14,624.9	5%
Component - C	-	-	-	-	-	-	-	-	0%
Training Cost	-	691.4	888.0	1,108.1	1,246.9	810.0	610.0	5,354.4	2%
Research, Evaluation & Workshop Cost	-	160.3	119.2	138.5	72.2	290.0	290.0	1,070.1	0%
Contingencies	-	-	13.1	-	197.3	-	-	210.4	0%
Sub Total	-	851.7	1,278.5	3,299.4	6,708.9	5,420.5	3,700.8	21,259.8	8%
Total B	124.3	9,619.0	25,253.5	23,592.0	45,851.4	41,844.7	18,739.8	165,024.8	59%
Total A + B	2,705.5	27,225.6	43,986.1	41,937.2	70,884.8	60,350.2	34,963.5	282,053.0	100%

Source:

GVT - Actual Investment Cost 1999/00 to 2003/04 and budget 2004/05 and 2005/06.

DFIDI = Department for International Development (India).
PPGF = Participatory Planning and Group Formation.
VOD = Village Organisation and Development.
SWC = Soil and Water Conservation.
WRD = Water Resource Development.

Table AN8.11

WIRFP - Phase II: Madhya Pradesh - Jabhua: Actual Investment Cost (Economic) - GVT, DFIDI, Community and Government (Rs'000).

Cost Heads / Subhead	Conversion Factors		1999/00	2000/01	2001/02	2002/03	2003/04	2004/05	2005/06	Totals	
	CF	SCF	Actual	Actual	Actual	Actual	Actual	Budget	Budget	(Rs'000)	(%)
A Administrative Cost											
GVT Bhopal (Project HQ)											
Allocation	0.90	1.00	-	3,905.1	4,888.6	4,359.9	3,421.1	4,330.1	3,961.8	24,866.6	11%
DFIDI											
Consultancy Contract	1.00	1.00	2,581.3	5,139.9	1,938.6	4,551.4	3,414.1	3,937.3	2,819.7	24,382.3	10%
Jhabua Coordination Office, M Pradesh											
Staff Cost A	0.90	1.00	-	4,616.7	5,812.6	6,154.4	6,087.3	2,508.3	2,508.3	27,687.7	12%
Staff Cost B	0.90	1.00	-	-	-	-	-	3,780.0	3,780.0	7,560.0	3%
Office Cost	0.90	1.00	-	1,043.5	905.1	940.7	1,047.6	1,156.5	1,156.5	6,249.8	3%
Equipment Cost	0.90	1.00	-	210.8	292.9	337.7	383.1	567.0	567.0	2,358.6	1%
Capital Cost	0.90	1.00	-	481.3	1,071.8	207.2	2,839.4	769.5	90.0	5,459.2	2%
Challenge Fund	0.90	1.00	-	481.3	1,071.8	207.2	2,839.4	-	-	4,599.7	2%
Adjustments	0.90	1.00	-	481.3	1,071.8	207.2	2,839.4	-	-	4,599.7	2%
Subtotal			-	7,314.9	10,225.9	8,054.6	16,036.2	8,781.3	8,101.8	58,514.7	25%
Total A			2,581.3	16,359.9	17,053.2	16,965.9	22,871.4	17,048.7	14,883.3	107,763.6	46%
B Development Cost											
Component A											
1 PPGF	0.90	1.00	6.2	666.8	326.4	474.9	294.0	464.3	464.3	2,696.8	1%
2 VOD	0.90	1.00	56.4	1,390.8	1,926.9	1,948.0	3,538.9	2,497.2	1,299.8	12,657.9	5%
3 Crop Technology	0.90	1.00	2.7	820.0	1,878.5	1,126.3	1,644.7	1,927.9	1,298.4	8,698.5	4%
4 SWC	0.90	0.75	-	2,611.1	10,518.0	5,851.1	7,683.6	8,483.8	3,569.9	38,717.4	17%
5 WRD	0.90	0.75	30.4	479.9	1,437.7	3,597.2	11,523.2	9,907.4	2,981.5	29,957.2	13%
6 Livestock	0.90	1.00	3.5	656.0	1,100.2	1,332.4	2,238.1	1,546.4	776.7	7,653.3	3%
7 Forestry	0.90	1.00	2.5	235.6	404.6	784.0	1,865.7	1,464.4	600.9	5,357.9	2%
8 Migration Support	0.90	1.00	-	-	-	-	37.8	360.0	360.0	757.8	0%
Subtotal			101.7	6,860.2	17,592.3	15,113.9	28,826.0	26,651.4	11,351.3	106,496.9	46%
Other											
Component - B & Dissemination	0.90	1.00	-	-	232.4	1,847.6	4,673.3	3,888.4	2,520.7	13,162.4	6%
Component - C	0.90	1.00	-	-	-	-	-	-	-	-	0%
Training Cost	0.90	1.00	-	622.3	799.2	997.3	1,122.2	729.0	549.0	4,819.0	2%
Research, Evaluation & Workshop Cost	0.90	1.00	-	144.3	107.3	124.6	65.0	261.0	261.0	963.1	0%
Contingencies	0.90	1.00	-	-	11.8	-	177.6	-	-	189.3	0%
Sub Total			-	766.6	1,150.6	2,969.5	6,038.0	4,878.4	3,330.7	19,133.9	8%
Total B			101.7	7,626.8	18,743.0	18,083.4	34,864.0	31,529.8	14,682.0	125,630.7	54%
Total A + B			2,683.0	23,986.7	35,796.1	35,049.2	57,735.4	48,578.5	29,565.4	233,394.4	100%

Source:

Cost Benefit Analysis (CBA) Study Estimates Jan 2005.

DFIDI = Department for International Development (India).
PPGF = Participatory Planning and Group Formation.
VOD = Village Organisation and Development.
SWC = Soil and Water Conservation.
WRD = Water Resource Development.

Table AN8.12

WIRFP - Phase II: Madhya Pradesh - Jabhua: Indicative Investment Cost per Village (Financial) - GVT, DFIDI, Community and Government (Rs'000).

Cost Heads / Subhead	1999/00 Actual	2000/01 Actual	2001/02 Actual	2002/03 Actual	2003/04 Actual	2004/05 Budget	2005/06 Budget	Total	
								(Rs'000)	(%)
A Administrative Cost									
GVT Bhopal (Project HQ)	-	60.3	75.4	67.3	52.8	66.8	61.1	383.7	10%
DFIDI Consultancy	35.9	71.4	26.9	63.2	47.4	54.7	39.2	338.6	9%
Jabhua Coordination Office, M Pradesh	-	112.9	157.8	124.3	247.5	135.5	125.0	903.0	23%
Total A	35.9	244.5	260.2	254.8	347.7	257.0	225.3	1,625.4	41%
B Development Cost									
Component A									
1 PPGF	0.1	10.3	5.0	7.3	4.5	7.2	7.2	41.6	1%
2 VOD	0.9	21.5	29.7	30.1	54.6	38.5	20.1	195.3	5%
3 Crop Technology	0.0	12.7	29.0	17.4	25.4	29.8	20.0	134.2	3%
4 SWC	-	53.7	216.4	120.4	158.1	174.6	73.5	796.7	20%
5 WRD	0.6	9.9	29.6	74.0	237.1	203.9	61.3	616.4	16%
6 Livestock	0.1	10.1	17.0	20.6	34.5	23.9	12.0	118.1	3%
7 Forestry	0.0	3.6	6.2	12.1	28.8	22.6	9.3	82.7	2%
8 Migration Support	-	-	-	-	0.6	5.6	5.6	11.7	0%
Subtotal	1.7	121.8	333.0	281.8	543.6	505.9	208.9	1,996.7	51%
Other Development Costs	-	11.8	17.8	45.8	93.2	75.3	51.4	295.3	8%
Sub Total	-	11.8	17.8	45.8	93.2	75.3	51.4	295.3	8%
Total B	1.7	133.6	350.7	327.7	636.8	581.2	260.3	2,292.0	59%
Total A + B	37.6	378.1	610.9	582.5	984.5	838.2	485.6	3,917.4	100%
Core Village Entry									
Per Year	22	19	6	25	-	-	-	72	
Cumulated	22	41	47	72	72	72	72	-	

Source:

GVT - Actual Investment Cost 1999/00 to 2003/04 and budget 2004/05 and 2005/06.

DFIDI = Department for International Development (India).
PPGF = Participatory Planning and Group Formation.
VOD = Village Organisation and Development.
SWC = Soil and Water Conservation.
WRD = Water Resource Development.

Table AN8.12

WIRFP - Phase II: Madhya Pradesh - Jabhua: Indicative Investment Cost per Village (Economic) - GVT, DFIDI, Community and Government (Rs'000).

Cost Heads / Subhead	Conversion Factors		1999/00	2000/01	2001/02	2002/03	2003/04	2004/05	2005/06	Totals	
	CF	SCF	Actual	Actual	Actual	Actual	Actual	Budget	Budget	(Rs'000)	(%)
A Administrative Cost											
GVT Bhopal (Project HQ)	0.90	1.00	-	54.2	67.9	60.6	47.5	60.1	55.0	345.4	11%
DFIDI Consultancy	1.00	1.00	35.9	71.4	26.9	63.2	47.4	54.7	39.2	338.6	10%
Jabhua Coordination Office, M Pradesh	0.90	1.00	-	101.6	142.0	111.9	222.7	122.0	112.5	812.7	25%
Total A			35.9	227.2	236.8	235.6	317.7	236.8	206.7	1,496.7	46%
B Development Cost											
Component A											
1 PPGF	0.90	1.00	0.1	9.3	4.5	6.6	4.1	6.4	6.4	37.5	1%
2 VOD	0.90	1.00	0.8	19.3	26.8	27.1	49.2	34.7	18.1	175.8	5%
3 Crop Technology	0.90	1.00	0.0	11.4	26.1	15.6	22.8	26.8	18.0	120.8	4%
4 SWC	0.90	0.75	-	36.3	146.1	81.3	106.7	117.8	49.6	537.7	17%
5 WRD	0.90	0.75	0.4	6.7	20.0	50.0	160.0	137.6	41.4	416.1	13%
6 Livestock	0.90	1.00	0.0	9.1	15.3	18.5	31.1	21.5	10.8	106.3	3%
7 Forestry	0.90	1.00	0.0	3.3	5.6	10.9	25.9	20.3	8.3	74.4	2%
8 Migration Support	0.90	1.00	-	-	-	-	0.5	5.0	5.0	10.5	0%
Subtotal			1.4	95.3	244.3	209.9	400.4	370.2	157.7	1,479.1	46%
Other Development Costs	0.90	1.00	-	10.6	16.0	41.2	83.9	67.8	46.3	265.7	8%
Sub Total			-	10.6	16.0	41.2	83.9	67.8	46.3	265.7	8%
Total B			1.4	105.9	260.3	251.2	484.2	437.9	203.9	1,744.9	54%
Total A + B			37.3	333.1	497.2	486.8	801.9	674.7	410.6	3,241.6	100%
Core Village Entry											
Per Year			22	19	6	25	-	-	-	72	
Cumulated			22	41	47	72	72	72	72		

Source:

Cost Benefit Analysis (CBA) Study Estimates Jan 2005.

DFIDI = Department for International Development (India).

PPGF = Participatory Planning and Group Formation.

VOD = Village Organisation and Development.

SWC = Soil and Water Conservation.

WRD = Water Resource Development.

Table AN8.13

WIRFP - Phase II: Madhya Pradesh - Jhabua: Summary of Investment Costs Per Village - Financial (Rs'000).

Cost Head / Subhead	Madhya Pradesh		Bagoli \1		Borwa		Chemzher		Chenpura \1		Kadwapada \1		Padabanda	
	Average													
A. Administration Costs														
GVT Bhopal (PHQ)	383.7	10%	383.7	7%	383.7	13%	383.7		383.7	0%	383.7	10%	383.7	9%
DFIDI Consultancy	338.6	9%	338.6	6%	338.6	12%	338.6		338.6	6%	338.6	9%	338.6	8%
Jhabua Coordination Office	903.0	23%	903.0	16%	903.0	31%	903.0		903.0	17%	903.0	23%	903.0	20%
Total A	1,625.4	41%	1,625.4	29%	1,625.4	57%	1,625.4	30%	1,625.4	31%	1,625.4	41%	1,625.4	36%
B. Development Costs														
Component A														
1. PPGF	41.6	1%	68.4	1%	64.0	2%	57.8	1%	93.2	2%	129.7	3%	73.4	2%
2. VOD	195.3	5%	646.2	12%	222.4	8%	315.9	6%	566.8	11%	314.0	8%	316.7	7%
3. Crop Technology	134.2	3%	220.7	4%	159.0	6%	142.1	3%	358.4	7%	415.6	10%	156.1	3%
4. SWC	796.7	20%	1,495.9	27%	299.8	10%	1,406.2	26%	870.8	16%	531.1	13%	870.2	19%
5. WRD	616.4	16%	1,248.8	23%	396.8	14%	1,733.8	32%	1,218.9	23%	515.6	13%	1,255.5	28%
6. Livestock	118.1	3%	127.4	2%	53.6	2%	92.6	2%	130.9	2%	226.6	6%	129.4	3%
7. Forestry	82.7	2%	79.8	1%	45.4	2%	47.9	1%	452.5	8%	129.1	3%	37.5	1%
8. Migration Support	11.7	0%	-	0%	10.0	0%	2.1	0%	9.5	0%	81.0	2%	1.2	0%
Subtotal	1,996.7	51%	3,887.2	71%	1,250.9	43%	3,798.3	70%	3,700.9	69%	2,342.7	59%	2,840.0	64%
Other Development Costs														
Subtotal	295.3	8%	-	0%	-	0%	-	0%	-	0%	-	0%	-	0%
Total B	2,292.0	59%	3,887.2	71%	1,250.9	43%	3,798.3	70%	3,700.9	69%	2,342.7	59%	2,840.0	64%
Total A + B	3,917.4	100%	5,512.6	100%	2,876.3	100%	5,423.7	100%	5,326.3	100%	3,968.1	100%	4,465.4	100%
GVT														
DFIDI														
Community														
Government														
Households per Village (No)	107		86		36		79		160		86		37	
Average Component A Cost per Household (Rs'000)	18.7		45.2		34.7		48.1		23.1		27.2		76.8	

Source:

GVT Jhabua Coordination Office, Madhya Pradesh.

\1 Cost Benefit Analysis (CBA) Study - Field Verification.

DFIDI = Department for International Development (India).

PPGF = Participatory Planning and Group Formation.

VOD = Village Organisation and Development.

SWC = Soil and Water Conservation.

WRD = Water Resource Development.

Table AN8.13

WIRFP - Phase II: Madhya Pradesh - Jhabua: Summary of Investment Costs Per Village - Economic (Rs'000).

Cost Head / Subhead	Madhya Pradesh Average	Bagoli \1	Borwa	Chemzher	Chenpura \1	Kadwapada \1	Padabanda
A. Administration Costs							
GVT Bhopal (PHQ)	345.4	345.4	345.4	345.4	345.4	345.4	345.4
DFIDI Consultancy	338.6	338.6	338.6	338.6	338.6	338.6	338.6
Jhabua Coordination Office	812.7	812.7	812.7	812.7	812.7	812.7	812.7
Total A	1,496.7	1,496.7	1,496.7	1,496.7	1,496.7	1,496.7	1,496.7
B. Development Costs							
Component A							
1. PPGF	37.5	61.5	57.6	52.0	83.9	116.7	66.0
2. VOD	175.8	581.5	200.1	284.3	510.1	282.6	285.0
3. Crop Technology	120.8	198.6	143.1	127.9	322.6	374.0	140.5
4. SWC	537.7	1,009.7	202.4	949.2	587.8	358.5	587.4
5. WRD	416.1	843.0	267.8	1,170.3	822.7	348.0	847.5
6. Livestock	106.3	114.7	48.2	83.4	117.8	203.9	116.4
7. Forestry	74.4	71.9	40.8	43.1	407.2	116.2	33.8
8. Migration Support	10.5	-	9.0	1.9	8.6	72.9	1.1
Subtotal	1,479.1	2,880.9	969.1	2,712.0	2,860.7	1,872.9	2,077.7
Other Development Costs							
Subtotal	265.7	-	-	-	-	-	-
Total B	1,744.9	2,880.9	969.1	2,712.0	2,860.7	1,872.9	2,077.7
Total A + B	3,241.6	4,377.6	2,465.8	4,208.7	4,357.4	3,369.6	3,574.4
GVT							
DFIDI							
Community							
Government							
Households per Village (No)							
Average Component A Cost per Household (Rs'000)							

Source:

Cost Benefit Analysis (CBA) Study Estimates Jan 2005.

\1 Cost Benefit Analysis (CBA) Study - Field Verification.

DFIDI = Department for International Development (India).

PPGF = Participatory Planning and Group Formation.

VOD = Village Organisation and Development.

SWC = Soil and Water Conservation.

WRD = Water Resource Development.

Table AN8.14

WIRFP - Phase II: Rajasthan - Banswara: Actual Investment Cost (Financial) - GVT, DFIDI, Community and Government (Rs'000).

Cost Heads / Subhead	1999/00	2000/01	2001/02	2002/03	2003/04	2004/05	2005/06	Total	
	Actual	Actual	Actual	Actual	Actual	Budget	Budget	(Rs'000)	(%)
A Administrative Cost									
GVT Bhopal (Project HQ)									
Allocation	-	3,615.8	4,526.5	4,037.0	3,167.7	4,009.3	3,668.3	23,024.6	8%
DFIDI									
Consultancy Contract	2,151.0	4,283.3	1,615.5	3,792.8	2,845.1	3,281.1	2,349.8	20,318.6	7%
Banswara Coordination Office, Rajasthan									
Staff Cost A	-	5,496.8	5,915.0	5,945.0	5,286.7	2,306.0	2,306.0	27,255.6	10%
Staff Cost B	-	-	-	-	-	4,520.0	4,520.0	9,040.0	3%
Office Cost	-	1,294.6	1,368.3	1,130.9	1,113.7	1,247.0	1,247.0	7,401.6	3%
Equipment Cost	-	337.7	381.5	365.1	472.4	452.0	452.0	2,460.7	1%
Capital Cost	-	583.6	1,154.9	214.7	3,430.1	505.0	100.0	5,988.2	2%
Challenge Fund	-	-	-	-	-	-	-	-	0%
Adjustments	-	-	-	-	-	-	-	-	0%
Subtotal	-	7,712.7	8,819.8	7,655.7	10,302.8	9,030.0	8,625.0	52,146.0	19%
Total A	2,151.0	15,611.7	14,961.9	15,485.5	16,315.6	16,320.4	14,643.1	95,489.2	34%
B Development Cost									
Component A									
1 PPGF	-	1,068.3	1,180.2	861.8	801.9	755.9	755.9	5,423.9	2%
2 VOD	-	2,891.2	3,681.3	2,811.6	4,180.2	3,737.7	1,436.0	18,738.1	7%
3 Crop Technology	-	671.3	2,466.0	1,814.1	2,328.1	3,825.0	1,458.7	12,563.2	5%
4 SWC	-	4,565.9	20,864.9	12,128.6	11,156.9	11,938.6	4,855.4	65,510.3	24%
5 WRD	-	2,079.0	3,750.1	6,222.5	14,100.2	11,165.5	4,248.3	41,565.6	15%
6 Livestock	-	575.9	1,507.2	1,265.7	1,911.0	1,299.8	770.5	7,330.0	3%
7 Forestry	-	157.2	472.6	678.1	796.4	819.6	686.8	3,610.7	1%
8 Migration Support	-	-	-	-	35.0	200.0	200.0	435.0	0%
Subtotal	-	12,008.8	33,922.3	25,782.4	35,309.7	33,742.2	14,411.5	155,176.8	56%
Other Development Costs									
Component - B & Dissemination	-	-	338.8	2,640.4	6,694.6	6,202.2	2,652.5	18,528.4	7%
Component - C	-	-	-	-	-	-	-	-	0%
Training Cost	-	591.4	754.8	1,110.9	943.9	809.0	609.0	4,819.1	2%
Research, Evaluation & Workshop Cost	-	184.7	275.0	144.2	98.7	152.0	152.0	1,006.5	0%
Contingencies	-	200.0	246.4	100.0	1,346.0	-	-	1,892.4	1%
Subtotal	-	976.1	1,615.0	3,995.5	9,083.2	7,163.2	3,413.5	26,246.4	9%
Total B	-	12,984.8	35,537.3	29,777.8	44,392.9	40,905.4	17,825.0	181,423.2	66%
Total A + B	2,151.0	28,596.6	50,499.1	45,263.3	60,708.5	57,225.8	32,468.1	276,912.5	100%

Source:

GVT - Actual Investment Cost 1999/00 to 2003/04 and budget 2004/05 and 2005/06.

DFIDI = Department for International Development (India).

PPGF = Participatory Planning and Group Formation.

VOD = Village Organisation and Development.

SWC = Soil and Water Conservation.

WRD = Water Resource Development.

Table AN8.14

WIRFP - Phase II: Rajasthan - Banswara: Actual Investment Cost (Economic) - GVT, DFIDI, Community and Government (Rs'000).

Cost Heads / Subhead	Conversion Factors		1999/00	2000/01	2001/02	2002/03	2003/04	2004/05	2005/06	Totals	
	CF	SCF	Actual	Actual	Actual	Actual	Actual	Budget	Budget	(Rs'000)	(%)
A Administrative Cost											
GVT Bhopal (Project HQ)											
Allocation	0.90	1.00	-	3,254.2	4,073.9	3,633.3	2,850.9	3,608.4	3,301.5	20,722.2	7%
DFIDI											
Consultancy Contract	1.00	1.00	2,151.0	4,283.3	1,615.5	3,792.8	2,845.1	3,281.1	2,349.8	20,318.6	7%
Banswara Coordination Office, Rajasthan											
Staff Cost A	0.90	1.00	-	4,947.1	5,323.5	5,350.5	4,758.0	2,075.4	2,075.4	24,530.0	9%
Staff Cost B	0.90	1.00	-	-	-	-	-	4,068.0	4,068.0	8,136.0	3%
Office Cost	0.90	1.00	-	1,165.2	1,231.5	1,017.8	1,002.3	1,122.3	1,122.3	6,661.4	2%
Equipment Cost	0.90	1.00	-	303.9	343.4	328.6	425.2	406.8	406.8	2,214.6	1%
Capital Cost	0.90	1.00	-	525.2	1,039.4	193.2	3,087.1	454.5	90.0	5,389.4	2%
Challenge Fund	0.90	1.00	-	-	-	-	-	-	-	-	0%
Adjustments	0.90	1.00	-	-	-	-	-	-	-	-	0%
Subtotal			-	6,941.4	7,937.9	6,890.1	9,272.6	8,127.0	7,762.5	46,931.4	17%
Total A			2,151.0	14,478.9	13,627.2	14,316.2	14,968.5	15,016.5	13,413.8	87,972.2	32%
B Development Cost											
Component A											
1 PPGF	0.90	1.00	-	961.5	1,062.2	775.6	721.7	680.3	680.3	4,881.5	2%
2 VOD	0.90	1.00	-	2,602.1	3,313.1	2,530.5	3,762.2	3,364.0	1,292.4	16,864.3	6%
3 Crop Technology	0.90	1.00	-	604.1	2,219.4	1,632.7	2,095.3	3,442.5	1,312.8	11,306.9	4%
4 SWC	0.90	0.75	-	3,082.0	14,083.8	8,186.8	7,530.9	8,058.6	3,277.4	44,219.4	16%
5 WRD	0.90	0.75	-	1,403.3	2,531.3	4,200.2	9,517.6	7,536.7	2,867.6	28,056.8	10%
6 Livestock	0.90	1.00	-	518.3	1,356.5	1,139.1	1,719.9	1,169.9	693.4	6,597.0	2%
7 Forestry	0.90	1.00	-	141.5	425.3	610.3	716.8	737.7	618.1	3,249.6	1%
8 Migration Support	0.90	1.00	-	-	-	-	31.5	180.0	180.0	391.5	0%
Subtotal			-	9,312.8	24,991.7	19,075.1	26,095.9	25,169.5	10,922.0	115,567.1	42%
Other Development Costs											
Component - B & Dissemination	0.90	1.00	-	-	304.9	2,376.3	6,025.1	5,582.0	2,387.2	16,675.6	6%
Component - C	0.90	1.00	-	-	-	-	-	-	-	-	0%
Training Cost	0.90	1.00	-	532.2	679.3	999.9	849.5	728.1	548.1	4,337.1	2%
Research, Evaluation & Workshop Cost	0.90	1.00	-	166.2	247.5	129.7	88.8	136.8	136.8	905.9	0%
Contingencies	0.90	1.00	-	180.0	221.8	90.0	1,211.4	-	-	1,703.2	1%
Subtotal			-	878.5	1,453.5	3,595.9	8,174.8	6,446.9	3,072.1	23,621.8	9%
Total B			-	10,191.3	26,445.2	22,671.1	34,270.8	31,616.4	13,994.2	139,188.8	50%
Total A + B			2,151.0	24,670.2	40,072.4	36,987.3	49,239.3	46,632.9	27,407.9	227,161.0	100%

Source:

Cost Benefit Analysis (CBA) Study Estimates Jan 2005.

DFIDI = Department for International Development (India).

PPGF = Participatory Planning and Group Formation.

VOD = Village Organisation and Development.

SWC = Soil and Water Conservation.

WRD = Water Resource Development.

Table AN8.15

WIRFP - Phase II: Rajasthan - Banswara: Indicative Investment Cost per Village (Financial) - GVT, DFIDI, Community and Government (Rs'0

Cost Heads / Subhead	1999/00	2000/01	2001/02	2002/03	2003/04	2004/05	2005/06	Total	
	Actual	Actual	Actual	Actual	Actual	Budget	Budget	(Rs'000)	(%)
A Administrative Cost									
GVT Bhopal (Project HQ)	-	60.3	75.4	67.3	52.8	66.8	61.1	383.7	8%
DFIDI Consultancy	35.9	71.4	26.9	63.2	47.4	54.7	39.2	338.6	7%
Banswara Coordination Office, Rajasthan	-	128.5	147.0	127.6	171.7	150.5	143.8	869.1	19%
Total A	35.9	260.2	249.4	258.1	271.9	272.0	244.1	1,591.5	34%
B Development Cost									
Component A									
1 PPGF	-	17.8	19.7	14.4	13.4	12.6	12.6	90.4	2%
2 VOD	-	48.2	61.4	46.9	69.7	62.3	23.9	312.3	7%
3 Crop Technology	-	11.2	41.1	30.2	38.8	63.7	24.3	209.4	5%
4 SWC	-	76.1	347.7	202.1	185.9	199.0	80.9	1,091.8	24%
5 WRD	-	34.6	62.5	103.7	235.0	186.1	70.8	692.8	15%
6 Livestock	-	9.6	25.1	21.1	31.8	21.7	12.8	122.2	3%
7 Forestry	-	2.6	7.9	11.3	13.3	13.7	11.4	60.2	1%
8 Migration Support	-	-	-	-	0.6	3.3	3.3	7.3	0%
Subtotal	-	200.1	565.4	429.7	588.5	562.4	240.2	2,586.3	56%
Other Development Costs	-	16.3	26.9	66.6	151.4	119.4	56.9	437.4	9%
Subtotal	-	16.3	26.9	66.6	151.4	119.4	56.9	437.4	9%
Total B	-	216.4	592.3	496.3	739.9	681.8	297.1	3,023.7	66%
Total A + B	35.9	476.6	841.7	754.4	1,011.8	953.8	541.1	4,615.2	100%
Core Village Entry									
Per Year	-	37	14	9	-	-	-	60	
Cumulated	-	37	51	60	60	60	60	-	

Source:

GVT - Actual Investment Cost 1999/00 to 2003/04 and budget 2004/05 and 2005/06.

DFIDI = Department for International Development (India).
PPGF = Participatory Planning and Group Formation.
VOD = Village Organisation and Development.
SWC = Soil and Water Conservation.
WRD = Water Resource Development.

Table AN8.15

WIRFP - Phase II: Rajasthan - Banswara: Indicative Investment Cost per Village (Economic) - GVT, DFIDI, Community and Government (Rs'000).

Cost Heads / Subhead	Conversion Factors		1999/00	2000/01	2001/02	2002/03	2003/04	2004/05	2005/06	Totals	
	CF	SCF	Actual	Actual	Actual	Actual	Actual	Budget	Budget	(Rs'000)	(%)
A Administrative Cost											
GVT Bhopal (Project HQ)	0.9	1.0	-	54.2	67.9	60.6	47.5	60.1	55.0	345.4	9%
DFIDI Consultancy	1.0	1.0	35.9	71.4	26.9	63.2	47.4	54.7	39.2	338.6	9%
Banswara Coordination Office, Rajasthan	0.9	1.0	-	115.7	132.3	114.8	154.5	135.5	129.4	782.2	21%
Total A			35.9	241.3	227.1	238.6	249.5	250.3	223.6	1,466.2	39%
B Development Cost											
Component A											
1 PPGF	0.9	1.0	-	16.0	17.7	12.9	12.0	11.3	11.3	81.4	2%
2 VOD	0.9	1.0	-	43.4	55.2	42.2	62.7	56.1	21.5	281.1	7%
3 Crop Technology	0.9	1.0	-	10.1	37.0	27.2	34.9	57.4	21.9	188.4	5%
4 SWC	0.9	0.8	-	51.4	234.7	136.4	125.5	134.3	54.6	737.0	19%
5 WRD	0.9	0.8	-	23.4	42.2	70.0	158.6	125.6	47.8	467.6	12%
6 Livestock	0.9	1.0	-	8.6	22.6	19.0	28.7	19.5	11.6	110.0	3%
7 Forestry	0.9	1.0	-	2.4	7.1	10.2	11.9	12.3	10.3	54.2	1%
8 Migration Support	0.9	1.0	-	-	-	-	0.5	3.0	3.0	6.5	0%
Subtotal			-	155.2	416.5	317.9	434.9	419.5	182.0	1,926.1	51%
Other Development Costs	0.9	1.0	-	14.6	24.2	59.9	136.2	107.4	51.2	393.7	10%
Subtotal			-	14.6	24.2	59.9	136.2	107.4	51.2	393.7	10%
Total B			-	169.9	440.8	377.9	571.2	526.9	233.2	2,319.8	61%
Total A + B			35.9	411.2	667.9	616.5	820.7	777.2	456.8	3,786.0	100%
Core Village Entry											
Per Year											
Cumulated											

Source:

Cost Benefit Analysis (CBA) Study Estimates Jan 2005.

DFIDI = Department for International Development (India).

PPGF = Participatory Planning and Group Formation.

VOD = Village Organisation and Development.

SWC = Soil and Water Conservation.

WRD = Water Resource Development.

Table AN8.16

WIRFP - Phase II: Rajasthan - Banswara: Summary of Investment Costs Per Village - Financial (Rs'000).

Cost Head / Subhead	Rajasthan		Bakaner		Bhuripada \1		Gara \1		Merana \1		Sundripada	
	Average											
A. Administration Costs												
GVT Bhopal (PHQ)	383.7	8%	383.7	7%	383.7	7%	383.7	5%	383.7	10%	383.7	8%
DFIDI Consultancy	338.6	7%	338.6	7%	338.6	6%	338.6	5%	338.6	8%	338.6	7%
Rajasthan Coordination Office	869.1	19%	869.1	17%	869.1	16%	869.1	12%	869.1	22%	869.1	19%
Total (A)	1,591.5	34%	1,591.5	31%	1,591.5	29%	1,591.5	21%	1,591.5	40%	1,591.5	34%
B. Development Costs												
Component A												
1. PPGF	90.4	2%	223.7	4%	204.1	4%	101.4	1%	172.5	4%	235.7	5%
2. VOD	312.3	7%	375.0	7%	284.8	5%	399.2	5%	225.0	6%	228.0	5%
3. Crop Technology	209.4	5%	158.0	3%	215.6	4%	167.3	2%	170.8	4%	157.5	3%
4. SWC	1,091.8	24%	1,895.0	37%	1,949.5	35%	2,482.6	33%	971.4	24%	1,674.6	36%
5. WRD	692.8	15%	560.7	11%	1,017.3	18%	2,471.4	33%	477.9	12%	476.0	10%
6. Livestock	122.2	3%	294.6	6%	200.0	4%	236.2	3%	232.5	6%	231.1	5%
7. Forestry	60.2	1%	34.3	1%	38.3	1%	42.9	1%	150.5	4%	37.6	1%
8. Migration Support	7.3	0%	-	0%	-	0%	-	0%	-	0%	-	0%
Subtotal	2,586.3	56%	3,541.4	69%	3,909.4	71%	5,901.0	79%	2,400.7	60%	3,040.6	66%
Other Development Costs												
Subtotal	437.4	9%	-	0%	-	0%	-	0%	-	0%	-	0%
Total B	3,023.7	66%	3,541.4	69%	3,909.4	71%	5,901.0	79%	2,400.7	60%	3,040.6	66%
Total A + B	4,615.2	100%	5,132.9	100%	5,509.9	100%	7,492.5	100%	3,992.2	100%	4,632.1	100%
GVT												
DFIDI												
Community												
Government												
Households per Village (No)	140		90		160		120		147		80	
Average Component A Cost per Household (Rs'000)	18		39		24		49		16		38	

Source:

GVT Banswara Coordination Office, Rajasthan.

\1 Cost Benefit Analysis (CBA) Study - Field Verification.

DFIDI = Department for International Development (India).
PPGF = Participatory Planning and Group Formation.
VOD = Village Organisation and Development.
SWC = Soil and Water Conservation.
WRD = Water Resource Development.

Table AN8.16

WIRFP - Phase II: Rajasthan - Banswara: Summary of Investment Costs Per Village - Economic (R

Cost Head / Subhead	Rajasthan Average	Bakaner	Bhuripada \1	Gara \1	Merana \1	Sundripada
A. Administration Costs						
GVT Bhopal (PHQ)	345.4	345.4	345.4	345.4	345.4	345.4
DFIDI Consultancy	338.6	338.6	338.6	338.6	338.6	338.6
Rajasthan Coordination Office	782.2	782.2	782.2	782.2	782.2	782.2
Total (A)	1,466.2	1,466.2	1,466.2	1,466.2	1,466.2	1,466.2
B. Development Costs						
Component A						
1. PPGF	81.4	201.4	183.7	91.3	155.2	212.1
2. VOD	281.1	337.5	256.3	359.3	202.5	205.2
3. Crop Technology	188.4	142.2	194.0	150.6	153.8	141.8
4. SWC	737.0	1,279.1	1,315.9	1,675.7	655.7	1,130.4
5. WRD	467.6	378.5	686.7	1,668.2	322.6	321.3
6. Livestock	110.0	265.2	180.0	212.6	209.3	208.0
7. Forestry	54.2	30.9	34.5	38.6	135.5	33.9
8. Migration Support	6.5	-	-	-	-	-
Subtotal	1,926.1	2,634.7	2,851.0	4,196.3	1,834.5	2,252.6
Other Development Costs						
Subtotal	1,926.1	-	-	-	-	-
Total B	3,852.2	2,634.7	2,851.0	4,196.3	1,834.5	2,252.6
Total A + B	5,318.4	4,100.9	4,317.2	5,662.5	3,300.7	3,718.8
GVT						
DFIDI						
Community						
Government						
Households per Village (No)	140	90	160	120	147	80
Average Component A Cost per Household (Rs'000)	38	46	27	47	22	46

Source:

Cost Benefit Analysis (CBA) Study Estimates Jan 2005.

\1 Cost Benefit Analysis (CBA) Study - Field Verification.

DFIDI = Department for International Development (India).

PPGF = Participatory Planning and Group Formation.

VOD = Village Organisation and Development.

SWC = Soil and Water Conservation.

WRD = Water Resource Development.

Table AN8.17

WIRFP - Phase II: Rajasthan - Pratapgarh: Actual Investment Cost (Financial) - IFFDC, DFID, Community and Government (Rs'000).

Cost Heads / Subhead	1999/00	2000/01	2001/02	2002/03	2003/04	2004/05	2005/06	Total	
	Actual	Actual	Actual	Actual	Actual	Budget	Budget	(Rs'000)	(%)
A. Administration Costs									
IFFDC Head Quarters									
Allocation	1,143.2	1,579.9	2,123.0	7,607.1	7,253.9	6,364.7	6,364.7	32,436.6	33%
DFIDI									
Consultancy Contract	2,688.8	5,354.1	2,019.4	4,741.0	3,556.3	4,101.4	2,937.2	25,398.2	26%
State Coordination Office									
Staff Cost A	679.0	1,705.2	2,569.4	4,190.4	6,119.2	6,119.2	6,119.2	27,501.5	18%
Staff Cost B	-	-	-	-	-	-	-	-	0%
Office Cost	512.0	918.2	1,022.4	1,253.8	1,488.2	1,488.2	1,488.2	8,171.0	5%
Equipment Cost	1,749.4	63.5	13.8	867.3	507.7	507.7	507.7	4,217.2	3%
Capital Cost	-	-	-	-	-	-	-	-	0%
Challenge Fund	-	-	-	-	-	-	-	-	0%
Adjustments	-	-	-	-	-	-	-	-	0%
Subtotal	2,940.3	2,686.9	3,605.6	6,311.6	8,115.1	8,115.1	8,115.1	39,889.8	41%
Total A	6,772.3	9,620.9	7,748.0	18,659.6	18,825.4	18,581.3	17,417.1	97,724.6	100%
B. Development Costs									
Component A									
1. PPGF	196.1	283.8	235.7	338.2	75.2	60.2	45.1	1,234.3	2%
2. VOD	25.2	445.6	519.2	764.7	893.7	715.0	536.2	3,899.7	8%
3. Crop Technology	0.0	94.3	94.6	367.2	790.3	632.2	474.2	2,452.7	5%
4. SWC	0.1	1,234.5	1,172.4	1,257.3	297.7	238.2	178.6	4,378.7	8%
5. WRD	64.1	1,489.2	4,834.2	7,478.5	8,765.2	7,012.1	5,259.1	34,902.3	67%
6. Livestock	0.0	138.4	106.6	289.9	410.4	328.3	246.3	1,520.0	3%
7. Forestry	0.0	196.7	61.2	563.9	447.8	358.2	268.7	1,896.4	4%
8. Migration Support	-	-	-	-	-	-	-	-	0%
Subtotal	285.5	3,882.4	7,023.9	11,059.7	11,680.3	9,344.2	7,008.2	50,284.1	97%
Other Development Costs									
Component - B & Dissemination	-	-	65.2	163.7	1,210.4	-	-	1,439.3	
Component - C	-	-	-	-	-	-	-	-	
Training Cost	-	-	-	-	-	-	-	-	
Research, Evaluation & Workshop Cost	-	-	-	-	-	-	-	-	
Contingencies	-	-	-	-	-	-	-	-	
Subtotal	-	-	65.2	163.7	1,210.4	-	-	1,439.3	3%
Total B	285.5	3,882.4	7,089.1	11,223.3	12,890.7	9,344.2	7,008.2	51,723.4	100%
Total A + B	7,057.8	13,503.3	14,837.1	29,883.0	31,816.1	27,925.5	24,425.3	149,448.0	100%

Source:

IFFDC - Actual Investment Cost 1999/00 to 2003/4 and budget 2004/05 and 2005/06.

DFIDI = Department for International Development (India).
 PPGF = Participatory Planning and Group Formation.
 VOD = Village Organisation and Development.
 SWC = Soil and Water Conservation.
 WRD = Water Resource Development.

Table AN8.17

WIRFP - Phase II: Rajasthan - Pratapgarh: Actual Investment Cost (Economic) - IFFDC, DFIDI, Community and Government (Rs'000).

Cost Heads / Subhead	Conversion Factors		1999/00	2000/01	2001/02	2002/03	2003/04	2004/05	2005/06	Totals	
	CF	SCF	Actual	Actual	Actual	Actual	Actual	Budget	Budget	(Rs'000)	(%)
A. Administration Costs											
IFFDC Head Quarters											
Allocation	0.90	1.00	1,028.9	1,421.9	1,910.7	6,846.4	6,528.5	5,728.3	5,728.3	29,192.9	23%
DFIDI											
Consultancy Contract	1.00	1.00	2,688.8	5,354.1	2,019.4	4,741.0	3,556.3	4,101.4	2,937.2	25,398.2	20%
State Coordination Office											
Staff Cost A	0.90	1.00	611.1	1,534.7	2,312.5	3,771.4	5,507.3	5,507.3	5,507.3	24,751.4	19%
Staff Cost B	0.90	1.00	-	-	-	-	-	-	-	-	0%
Office Cost	0.90	1.00	460.8	826.4	920.2	1,128.4	1,339.4	1,339.4	1,339.4	7,353.9	6%
Equipment Cost	0.90	1.00	1,574.5	57.2	12.4	780.6	456.9	456.9	456.9	3,795.5	3%
Capital Cost	0.90	1.00	-	-	-	-	-	-	-	-	0%
Challenge Fund	0.90	1.00	-	-	-	-	-	-	-	-	0%
Adjustments	0.90	1.00	-	-	-	-	-	-	-	-	0%
Subtotal			2,646.3	2,418.2	3,245.1	5,689.4	7,303.6	7,303.6	7,303.6	35,900.8	28%
Total A			6,364.0	9,194.3	7,175.1	17,267.8	17,388.5	17,133.3	15,969.1	90,492.0	71%
B. Development Costs											
Component A											
1. PPGF	0.90	1.00	176.5	255.4	212.1	304.3	67.7	54.2	40.6	1,110.8	1%
2. VOD	0.90	1.00	22.7	401.1	467.3	688.2	804.3	643.5	482.6	3,509.7	3%
3. Crop Technology	0.90	1.00	0.0	84.9	95.1	330.5	711.2	569.0	428.7	2,207.4	2%
4. SWC	0.90	0.75	0.0	833.3	791.4	848.7	201.0	160.8	120.6	2,955.7	2%
5. WRD	0.90	0.75	43.2	1,005.2	3,263.1	5,048.0	5,916.5	4,733.2	3,549.9	23,559.1	18%
6. Livestock	0.90	1.00	0.0	124.5	95.9	260.9	369.4	295.5	221.6	1,368.0	1%
7. Forestry	0.90	1.00	0.0	177.0	55.1	507.5	403.0	322.4	241.8	1,706.8	1%
8. Migration Support	0.90	1.00	-	-	-	-	-	-	-	-	0%
Subtotal			242.5	2,881.3	4,970.0	7,988.1	8,473.1	6,778.5	5,083.9	36,417.4	24%
Other Development Costs											
Component - B & Dissemination	0.90	1.00	-	-	58.7	147.3	1,089.4	-	-	1,295.4	1%
Component - C	0.90	1.00	-	-	-	-	-	-	-	-	0%
Training Cost	0.90	1.00	-	-	-	-	-	-	-	-	0%
Research, Evaluation & Workshop Cost	0.90	1.00	-	-	-	-	-	-	-	-	0%
Contingencies	0.90	1.00	-	-	-	-	-	-	-	-	0%
Subtotal			-	-	58.7	147.3	1,089.4	-	-	1,295.4	1%
Total B			242.5	2,881.3	5,028.8	8,135.5	9,562.5	6,778.5	5,083.9	37,712.8	29%
Total A + B			6,606.4	12,075.6	12,203.9	25,403.2	26,950.9	23,911.7	21,053.0	128,204.8	100%

Source:

Cost Benefit Analysis (CBA) Study Estimates Jan 2005.

DFIDI = Department for International Development (India).
 PPGF = Participatory Planning and Group Formation.
 VOD = Village Organisation and Development.
 SWC = Soil and Water Conservation.
 WRD = Water Resource Development.

Table AN8.18

WIRFP - Phase II: Rajasthan - Pratappgarh: Indicative Investment Cost per Village (Financial) - IFFDC, DFIDI, Community and Government (Rs

Cost Head / Subhead	1999/00	2000/01	2001/02	2002/03	2003/04	2004/05	2005/06	Total		
	Actual	Actual	Actual	Actual	Actual	Budget	Budget	(Rs'000)	(%)	(%)
A. Administration Costs										
IFFDC Head Quarters	106.0	46.3	47.3	84.7	53.8	47.2	47.2	432.5	18%	
DFIDI Consultancy	35.9	71.4	26.9	63.2	47.4	54.7	39.2	338.6	14%	
Rajasthan Coordination Office	117.6	107.5	144.2	252.5	324.6	324.6	324.6	1,595.6	67%	
Total A	259.5	225.1	218.4	400.3	425.8	426.5	411.0	2,366.7	100%	53%
B. Development Costs										
Component A										
1. PPGF	7.8	11.4	9.4	13.5	3.0	2.4	1.8	49.4	2%	
2. VOD	1.0	17.8	20.8	30.6	35.7	28.6	21.4	156.0	8%	
3. Crop Technology	0.0	3.8	3.8	14.7	31.6	25.3	19.0	98.1	5%	
4. SWC	0.0	49.4	46.9	50.3	11.9	9.5	7.1	175.1	8%	
5. WRD	2.6	59.6	193.4	299.1	350.6	280.5	210.4	1,396.1	67%	
6. Livestock	0.0	5.5	4.3	11.6	16.4	13.1	9.9	60.8	3%	
7. Forestry	0.0	7.9	2.4	22.6	17.9	14.3	10.7	75.9	4%	
8. Migration Support	-	-	-	-	-	-	-	-	0%	
Subtotal	11.4	155.3	281.0	442.4	467.2	373.8	280.3	2,011.4	97%	45%
Other Development Costs										
Subtotal	-	-	2.6	6.5	48.4	-	-	57.6	3%	1%
Total B	11.4	155.3	283.6	448.9	515.6	373.8	280.3	2,069.0	100%	47%
Total A + B	270.9	380.4	502.0	849.3	941.5	800.3	691.3	4,435.7		100%
Core Village Entry										
Per Year	6.0	19.0	-	-	-	-	-	25.0		
Cumulated	6.0	25.0	25.0	25.0	25.0	25.0	25.0			

Source:

IFFDC - Actual Investment Cost 1999/00 to 2003/04 and budget 2004/05 and 2005/06.

DFIDI = Department for International Development (India).

PPGF = Participatory Planning and Group Formation.

VOD = Village Organisation and Development.

SWC = Soil and Water Conservation.

WRD = Water Resource Development.

Table AN8.18

WIRFP - Phase II: Rajasthan - Pratapgarh: Indicative Investment Cost per Village (Economic) - IFFDC, DFIDI, Community and Government (Rs'000).

Cost Head / Subhead	Conversion Factors		1999/00	2000/01	2001/02	2002/03	2003/04	2004/05	2005/06	Totals	
	CF	SCF	Actual	Actual	Actual	Actual	Actual	Budget	Budget	(Rs'000)	(%)
A. Administration Costs											
IFFDC Head Quarters	0.90	1.00	95.4	41.6	42.5	76.2	48.4	42.5	42.5	389.2	11%
DFIDI Consultancy	1.00	1.00	35.9	71.4	26.9	63.2	47.4	54.7	39.2	338.6	9%
Rajasthan Coordination Office	0.90	1.00	105.9	96.7	129.8	227.2	292.1	292.1	292.1	1,436.0	39%
Total A			237.1	209.8	199.3	366.6	388.0	389.3	373.8	2,163.9	59%
B. Development Costs											
Component A											
1. PPGF	0.90	1.00	7.1	10.2	8.5	12.2	2.7	2.2	1.6	44.4	1%
2. VOD	0.90	1.00	0.9	16.0	18.7	27.5	32.2	25.7	19.3	140.4	4%
3. Crop Technology	0.90	1.00	0.0	3.4	3.4	13.2	28.4	22.8	17.1	88.3	2%
4. SWC	0.90	0.75	0.0	33.3	31.7	33.9	8.0	6.4	4.8	118.2	3%
5. WRD	0.90	0.75	1.7	40.2	130.5	201.9	236.7	189.3	142.0	942.4	26%
6. Livestock	0.90	1.00	0.0	5.0	3.8	10.4	14.8	11.8	8.9	54.7	1%
7. Forestry	0.90	1.00	0.0	7.1	2.2	20.3	16.1	12.9	9.7	68.3	2%
8. Migration Support	0.90	1.00	-	-	-	-	-	-	-	-	0%
Subtotal			9.7	115.3	198.8	319.5	338.9	271.1	203.4	1,456.7	40%
Other Development Costs											
Subtotal	0.90	1.00	-	-	2.3	5.9	43.6	-	-	51.8	1%
Total B			9.7	115.3	201.2	325.4	382.5	271.1	203.4	1,508.5	41%
Total A + B			246.8	325.0	400.4	692.0	770.5	660.5	577.2	3,672.4	100%
Core Village Entry											
Per Year											
Cumulated											

Source:

Cost Benefit Analysis (CBA) Study Estimates Jan 2005.

DFIDI = Department for International Development (India).
PPGF = Participatory Planning and Group Formation.
VOD = Village Organisation and Development.
SWC = Soil and Water Conservation.
WRD = Water Resource Development.

Table AN8.19

WIRFP - Phase II: Rajasthan - Pratapgarh: Summary of Investment Costs Per Village - Financial (Rs'000).

Cost Head / Subhead	IFFDC Average	Chhayani 1 ¹	Chhota Mayanga	Dharia Kheri	Kachotia	Moti Kheri 1 ¹	Soma Ka Khera 1 ¹
A. Administration Costs							
IFFDC Head Quarters	432.5 10%	432.5 7%	432.5 9%	432.5 9%	432.5 8%	432.5 6%	432.5 10%
DFIDI	338.6 8%	338.6 5%	338.6 7%	338.6 7%	338.6 6%	338.6 5%	338.6 8%
Pratapgarh Coordination Office	1,595.6 36%	1,595.6 28%	1,595.6 33%	1,595.6 35%	1,595.6 30%	1,595.6 22%	1,595.6 36%
Total A	2,366.7 53%	2,366.7 38%	2,366.7 49%	2,366.7 51%	2,366.7 44%	2,366.7 32%	2,366.7 53%
B. Development Costs							
Component A							
1. PPG	49.4 1%	62.0 1%	31.3 1%	73.1 2%	58.6 1%	74.6 1%	39.4 1%
2. VOD	156.0 4%	505.5 8%	280.1 6%	448.1 10%	545.3 10%	749.1 10%	336.6 8%
3. Crop	98.1 2%	96.1 2%	90.2 2%	167.4 4%	167.9 3%	273.7 4%	147.0 3%
4. SWC	175.1 4%	200.3 3%	272.3 6%	196.9 4%	294.0 6%	645.1 9%	68.8 2%
5. WRD	1,396.1 31%	2,807.0 45%	1,728.3 36%	1,176.8 26%	1,641.0 31%	2,745.2 38%	1,400.9 31%
6. Livestock	60.8 1%	92.1 1%	40.8 1%	93.2 2%	121.9 2%	242.0 3%	68.7 2%
7. Forestry	75.9 2%	61.0 1%	18.9 0%	86.5 2%	127.4 2%	212.5 3%	44.2 1%
8. Migration Support	- 0%	- 0%	- 0%	- 0%	- 0%	- 0%	- 0%
Subtotal	2,011.4 45%	3,824.0 62%	2,461.9 51%	2,241.9 49%	2,956.1 56%	4,942.2 68%	2,105.5 47%
Other Development Costs							
Subtotal	57.6 1%	- 0%	- 0%	- 0%	- 0%	- 0%	- 0%
Total B	2,068.9 47%	3,824.0 62%	2,461.9 51%	2,241.9 49%	2,956.1 56%	4,942.2 68%	2,105.5 47%
Total A + B	4,435.7 100%	6,190.7 100%	4,828.7 100%	4,608.7 100%	5,322.8 100%	7,308.9 100%	4,472.3 100%
Households per Village (No)	86	60	49	80	108	112	42
Average Cost per Household (Rs'000)	52	103	99	58	49	65	106

Source: IFFDC Pratapgarh Coordination Office, Rajasthan.

1¹ Cost Benefit Analysis (CBA) Study - Field Verification.

DFIDI = Department for International Development (India).

PPG = Participatory Planning and Group Formation.

VOD = Village Organisation and Development.

SWC = Soil and Water Conservation.

WRD = Water Resource Development.

Table AN8.19

WIRFP - Phase II: Rajasthan - Pratappgarh: Summary of Investment Costs Per Village - Economic (Rs'000).

Cost Head / Subhead	IFFDC Average	Chhayana 1 ¹	Chhota Mayanga	Dharia Kheri	Kachotia	Moti Kheri 1 ¹	Soma Ka Khera 1 ¹
A. Administration Costs							
IFFDC Head Quarters	389.2	389.2	389.2	389.2	389.2	389.2	389.2
DFDI	338.6	338.6	338.6	338.6	338.6	338.6	338.6
Pratapgarh Coordination Office	1,436.0	1,436.0	1,436.0	1,436.0	1,436.0	1,436.0	1,436.0
Total A	2,163.9	2,163.9	2,163.9	2,163.9	2,163.9	2,163.9	2,163.9
B. Development Costs							
Component A							
1. PPG	44.4	55.8	28.2	65.8	52.7	67.1	35.4
2. VOD	140.4	454.9	252.0	403.3	490.8	674.2	303.0
3. Crop	88.3	86.5	81.2	150.6	151.1	246.3	132.3
4. SWC	118.2	135.2	183.8	132.9	198.5	435.4	46.4
5. WRD	942.4	1,894.7	1,166.6	794.3	1,107.7	1,853.0	945.6
6. Livestock	54.7	82.9	36.8	83.9	109.7	217.8	61.9
7. Forestry	68.3	54.9	17.0	77.9	114.7	191.2	39.7
8. Migration Support	-	-	-	-	-	-	-
Subtotal	1,456.7	2,764.9	1,765.6	1,708.7	2,225.1	3,685.1	1,564.3
Other Development Costs							
Subtotal	51.8	-	-	-	-	-	-
Total B	1,508.5	2,764.9	1,765.6	1,708.7	2,225.1	3,685.1	1,564.3
Total A + B	3,672.4	4,928.8	3,929.5	3,872.6	4,389.0	5,849.1	3,728.2
Households per Village (No)							
Average Cost per Household (Rs'000)							

Source: Cost Benefit Analysis (CBA) Study Estimates Jan 2005.

1¹ Cost Benefit Analysis (CBA) Study - Field Verification.

DFDI = Department for International Development (India).
PPG = Participatory Planning and Group Formation.
VOD = Village Organisation and Development.
SWC = Soil and Water Conservation.
WRD = Water Resource Development.



AN9 | **Self Help Groups**

AN9 | Self Help Groups

Gramin Vikas Trust

Physical and financial Information to assess the functional status of Self Help Groups (SHGs) in the three phase two districts organised by GVT is limited and barely meets the minimal evaluation criteria for SGHs suggested by National Bank for Agricultural and Rural Development (NABARD). In the absence of the availability of minimal recorded financial information, it was agreed that a limited field survey should be conducted to record the cash inflow/outflow from a randomly selected sample of SHGs based on information contained in the ledgers and bank pass books maintained at the villages. The objective being to provide a basic amount of financial information regarding the deposit levels and lending activities in the villages selected for field verification. This information is contained in Annex 9 and limited financial indicators from the GVT sample villages summarised in Table AN9.1.

Gujarat – Jadha Village

Limited financial indicators derived from the financial information covering the year end at March 2002, 2003 and 2004, recorded during the field verification at Jadha village are summarised below:

- Total membership from the six sample SHGs at Jhada village in September 2004 was 99 or on average 16 members per SHG;
- Total individual member and group savings from the sample amounted to Rs 156,904 in March 2004 representing an average of Rs 1,585 per member (US\$ 35^{1/}), accumulated over a four year period or on average Rs 396 per year or Rs 33 per month per individual member;
- The net outstanding individual and group loans as at March 2004 amount to Rs 136,947 representing an average of Rs 1,380 per member. Outstanding loans represent 58 percent of the accumulated cash inflow.

Madhya Pradesh – Kadwapada Village

Limited financial indicators derived from the financial information covering the year end at March 2002, 2003 and 2004, recorded during the field verification at Kadwapada village are summarised below:

- Total membership from the three sample SHGs at Kadwapada village in September 2004 was 51 or on average 17 members per SHG;

^{1/} Assuming an exchange rate of US\$ 1.0 = Rs 45 – December 2004.

- Total individual member and group deposits from the sample amounted to Rs 108,826 in March 2004 representing an average of Rs 2,134 per member (US\$ 47), accumulated over a four year period or on average Rs 534 per year or Rs 44 per month per individual member;
- The net outstanding individual and group loans as at March 2004 amount to Rs 100,980 representing an average of Rs 1,980 per member. Outstanding loans represent 73 percent of the accumulated cash inflow.

Table AN9.1: GVT Self Help Group Cash Flow Analysis and Financial Indicators

Item ^{1/}	Gujarat Jadha	M Pradesh Kadwapada	Rajasthan Gara
Cash Inflow			
Deposits			
▪ Member Savings	93,803	71,217	48,195
▪ Group Savings	63,101	37,609	61,613
▪ Subtotal	156,904	108,826	109,808
Group Activities (Net)	48,420	27,899	12,500
Interest Income	31,669	2,065	1,540
Total Cash Inflow	236,993	138,790	123,848
Cash Outflow			
Loans Outstanding			
▪ Individuals	131,883	100,980	53,100
▪ Group	5,064	-	500
Total Cash Outflow	136,947	100,890	53,600
Cash Balance	100,046	37,810	70,248
Key Financial Indicators			
Membership	99	51	87
▪ Average Savings / Member	1,585	2,134	1,262
▪ Annual Increase	259	547	451
Outstanding Loans			
▪ As Percent of Cash Inflow	58 percent	73 percent	49 percent
▪ Average Loan Size	1,383	1,980	616
Interest Income			
▪ As percent of Average Loans	7 percent	1 percent	4 percent

Source: Cost Benefit Analysis Study, Jan 2005 based on field interviews.

^{1/} Field data as at March 2004.

Rajasthan – Gada Village

Limited financial indicators derived from the financial information covering the year end at March 2002, 2003 and 2004, recorded during the field verification at Gara village are summarised below:

- Total membership from the five sample SHGs at Gara village in September 2004 was 87 or on average 17 members per SHG;
- Total individual member and group savings from the sample amounted to Rs 109,808 in March 2004 representing an average of Rs 1,262 per member (US\$ 28), accumulated over a four year period or on average Rs 316 per year or Rs 26 per month per individual member;
- The net outstanding individual and group loans as at March 2004 amount to Rs 53,600 representing an average of Rs 451 per member. Outstanding loans represent 49 percent of the accumulated cash inflow.

Lessons Learnt

Certain aspects of this analysis are common to many villages visited during the field verification and are itemised below:

- No breakdown of the status of the outstanding loan figure is available, thus no information is available as to the percentage of the loans for which repayments are on schedule, overdue or non performing and therefore to be written off;
- No information is recorded as to the use of the individual loans;
- It is assumed that the substantial cash balance is retained on deposit at the SHG and may indicate a reluctance on the part of the SHG membership to make loans to individuals or that there is a lack of attractive (financially viable) income generating activities (IGAs) for individuals to take up;
- Annual interest income over the period of the analysis, expressed as a percentage of the average outstanding loans during the year, is very low suggesting a very poor level of loan interest recovery probably limited mainly to bank deposit interest income.

Indian Farm Forestry Development Cooperative – Pratapgarh, Rajasthan

Physical and financial Information to assess the functional status of SHGs at Pratapgarh is adequate and is considerably in excess of the minimal evaluation criteria for SGHs suggested by National Bank for Agricultural and Rural Development. Information for the six IFFDC sample villages is contained in Annex 9

Rastastan – Moti Kheri Village

Selected key financial indicators covering the year end at March 2002, 2003 and 2004 for Moti Kheri are given in Annex 9 and summarised below:

- The total reported membership in March 2004 was 164 from a total number of 115 households of which 112 are participating in the project;
- Membership shows a small decrease over the three year period, from 180 to 164 a nine percent decrease over the period;
- Individual and group deposits total Rs 277,987, at March 2004, and represent a current average saving per member of Rs 1,695.
- The figures for average membership savings per year show a continuing increase over the period at Rs 956, Rs1,239 and Rs 1,695, representing a 23 and 27 percent annual increase respectively, indicating that the savings regime is being maintained,
- Total loans outstanding (Rs 103,038) as a percentage of total deposits (37 percent) indicates a reluctance of membership to advance loans, a reluctance of the membership to borrow or the lack of financially viable income generating activities (IGAs) to expand household income,
- Loan size remains small with only a modest increase over the period from Rs 285, 330 and 400 a 16 and three percent annual increase respectively. The annual number of loans advanced has been reduced from 194 in the year to March 2003 to 126 in the year to March 2004;
- Consumption, health and education loans account for 44, 11 and one percent respectively by value, production loans (mainly seed and fertiliser) account for a further 42 percent by value and IGAs only account for 2 percent.
- Annual interest income for the 12 months to March 2004, expressed as a percentage of the average outstanding loans during the year, is only four percent suggesting a very poor level of interest recovery probably limited mainly to bank deposit income.
- Annual operating expenditure remains very low;
- No provision is made for provision of bad and doubtful debt as the status of the outstanding loans is not available.

Lessons Learnt

Key financial figures, as at March 2004, for the six IFFDC sample villages, are summarised in Table AN9.2.

Table AN9.2: IFFDC Sample Village Self Help Group Financial Indicators

Item	Chhayyan	Chhota Manga	Dharis Kheri	Kachotia	Moti Kheri	S Ka Khera
SHG Membership (No)	87	51	94	106	164	15
Deposits (Rs)						
▪ Individual	102,150	39,536	68,493	67,206	150,852	6,002
▪ Group	45,635	30,481	22,467	32,499	127,135	727
▪ Total	147,785	70,017	90,960	99,705	277,987	6,729
▪ Average Deposit / Member	1,699	1,373	968	941	1,695	449
Loans Outstanding	156,560	36,950	31,803	37,180	103,038	5,000
Balance on Deposit	(8,775)	33,067	59,157	62,525	174,949	1,732
Income						
▪ Interest	32,307	4,379	7,315	4,270	14,889	214
▪ Penalty Interest	295	70	62	2,535	1,077	5
▪ Total	32,602	4,449	7,377	6,805	15,966	219
Expenditure	(6,940)	-	(334)	(277)	(48,500)	-
Income Less Expenditure	28,862	4,449	7,043	6,528	(30,334)	219
Cash (in hand and Bank)	20,087	37,516	66,200	69,053	144,615	1,951
Loan Portfolio						
▪ Outstanding	156,560	36,950	31,803	37,180	103,038	5,000
▪ Repaid	207,615	39,953	64,080	93,158	176,872	4,130
▪ Total	364,175	76,903	95,883	130,338	279,910	9,130
▪ Loan Numbers	896	199	227	533	824	23
▪ Average Loan Size	406	389	422	245	340	397
Loan Types (%)						
▪ Consumption	28	35	19	31	45	96
▪ Health	25	4	2	3	11	1
▪ Education	0	1	2	2	1	0
▪ Micro enterprise	4	0	0	3	1	0
▪ Production	43	60	77	61	42	3
▪ Total	100	100	100	100	100	100

Source: IFFDC Coordination Office Pratappgarh, Rajasthan
 IFFDC = Indian Farm Forestry Development Cooperative.

Key financial indicators are summarised below:

- Total membership from the six sample villages is 517 from a total number of reported households of 566 or 398 participating households;
- Total individual member and group savings from the six sample villages amounted to Rs 693,200. This represents Rs 1,341 per member (US\$ 30), accumulated over a four-year period or Rs 335 per year or Rs 30 per month per individual member. The average individual savings varies from Rs 1,699 (Chhayanne, a relatively wealthy village) to Rs 449 (S. Ka Khera, a more

recently developed SHG). Individual deposits account for 63 percent of the average membership saving with the balance held as group savings;

- Outstanding loans as at March 2004 amount to Rs 370,531 representing an average of Rs 717 or 53 percent per member. It is assumed that the balance of Rs 624 or 47 percent is retained on deposit and may indicate a reluctance on the part of the SHG membership to make loans to individuals or a lack of attractive (financially viable) income generating activities (IGAs) for individuals to take up;
- No breakdown of the status of the outstanding loan figure is available, thus no information is available as to the percentage of loan repayments which are on schedule, overdue or non performing and therefore to be written off;
- The average loan size remains small at Rs 354 (US\$ 8). Consumption, health and education loans account for 32, 15 and one percent respectively by value, production loans (mainly seed and fertiliser) account for a further 50 percent by value and IGAs only account for two percent

WIRFP - Phase II - Cost Benefit Analysis Study

Tables AN9.0: Self Help Groups

Tables AN9.2: IFFDC Pratapgarh Coordination Office Rajasthan, Self Help Groups (SHG).

Table AN9.2.1	IFFDC Rajasthan - Pratapgarh Self Help Groups - Summary (Balance as at March 2004).
Table AN9.2.2	IFFDC Rajasthan - Pratapgarh Self Help Groups - Chhayan Summary IFFDC Rajasthan - Pratapgarh Self Help Group - Chhayan 1 - Johda Bawji BS. IFFDC Rajasthan - Pratapgarh Self Help Group - Chhayan 2 - DevnarChhayan BS IFFDC Rajasthan - Pratapgarh Self Help Group - Chhayan 3 - Amba Mata BS IFFDC Rajasthan - Pratapgarh Self Help Group - Chhayan 4 - Diwag Mata BS IFFDC Rajasthan - Pratapgarh Self Help Group - Chhayan 5 - Bajrang Bali BS IFFDC Rajasthan - Pratapgarh Self Help Group - Chhayan 6 - Dev Dharma BS IFFDC Rajasthan - Pratapgarh Self Help Group - Chhayan 7 - Mahadev BS
Table AN9.2.3	IFFDC Rajasthan - Pratapgarh Self Help Groups - Moti Kheri Summary IFFDC Rajasthan - Pratapgarh Self Help Group - Moti Kheri 1 - Santoshi Mata BS IFFDC Rajasthan - Pratapgarh Self Help Group - Moti Kheri 2 - Mamadev BS IFFDC Rajasthan - Pratapgarh Self Help Group - Moti Kheri 3 - Bheru Baoji BS IFFDC Rajasthan - Pratapgarh Self Help Group - Moti Kheri 4 - Bajrang BS IFFDC Rajasthan - Pratapgarh Self Help Group - Moti Kheri 5 - Kalka Mata BS IFFDC Rajasthan - Pratapgarh Self Help Group - Moti Kheri 6 - Amba Mata BS IFFDC Rajasthan - Pratapgarh Self Help Group - Moti Kheri 7 - Gangotri BS IFFDC Rajasthan - Pratapgarh Self Help Group - Moti Kheri 8 - Ganga Mata BS IFFDC Rajasthan - Pratapgarh Self Help Group - Moti Kheri 9 - Johda Bawji BS IFFDC Rajasthan - Pratapgarh Self Help Group - Moti Kheri 10 - Mahadev BS IFFDC Rajasthan - Pratapgarh Self Help Group - Moti Kheri 11 - Vijwa Mata BS IFFDC Rajasthan - Pratapgarh Self Help Group - Moti Kheri 12 - Khagaldev BS IFFDC Rajasthan - Pratapgarh Self Help Group - Moti Kheri 13 - Dev Narayan BS
Table AN9.2.4	IFFDC Rajasthan - Pratapgarh Self Help Groups - Somawaton Ka Khera - Summary IFFDC Rajasthan - Pratapgarh Self Help Group - Somawaton Ka Khera 1 - Devnarayan BS IFFDC Rajasthan - Pratapgarh Self Help Group - Somawaton Ka Khera 2 - Parwati BS IFFDC Rajasthan - Pratapgarh Self Help Group - Somawaton Ka Khera 3 - Shri Ganesh BS

Table AN9.2.1

IFFDC Rajasthan - Pratapgarh Self Help Groups - Summary (Balance as at March 2004).

Item	Chhayanne		Chhota Mayanga		Dharia Kheri		Kachotia		Moti Kheri		Soms Ka Khera	
	Balance (as at) Mar-04		Balance (as at) Mar-04		Balance (as at) Mar-04		Balance (as at) Mar-04		Balance (as at) Mar-04		Balance (as at) Mar-04	
SGH Membership (No)	87		51		94		106		164		15	
Savings (Rs)												
Individual	102,150		39,536		68,493		67,206		150,852		6,005	
Group	45,635		30,481		22,467		32,499		127,135		727	
Total	147,785		70,017		90,960		99,705		277,987	100%	6,732	
Average Savings per member (Rs)	1,699		1,373		968		941		1,695		449	
Loans Outstanding (Rs)	156,560		36,950		31,803		37,180		103,038	37%	5,000	
Balance on Deposit (Rs)	(8,775)		33,067		59,157		62,525		174,949	63%	1,732	
Income (Rs)												
Interest	32,307		4,379		7,315		4,270		14,889		214	
Penalty	295		70		62		2,535		1,077		5	
Subtotal	32,602		4,449		7,377		6,805		15,966		219	
Grants	3,200		-		-		-		-		-	
Expenditure (RS)												
Total	6,940		-		334		277		48,500		-	
Net Income less Expenditure (Rs)	28,862		4,449		7,043		6,528		(30,334)		219	
Cash (in hand and bank) (Rs)	20,087		37,516		66,200		69,053		144,615		1,951	
Loan Portfolio (Cumulated)												
Outstanding	156,560	43%	36,950	48%	31,803	33%	37,180	29%	103,038	37%	5,000	55%
Repaid	207,615	57%	39,953	52%	64,080	67%	93,158	71%	176,872	63%	4,130	45%
Total (Rs)	364,175	100%	77,454	100%	95,883	100%	130,338	100%	279,910	100%	9,130	100%
Loan Numbers	896		199		227		533		824		23	
Average Loan Size (Rs)	406		389		422		245		340		397	
Loan Types (Rs / %):												
Consumption	88,357	28%	23,250	35%	16,461	19%	22,950	31%	84,707	44%	3,700	96%
Health	81,189	25%	2,810	4%	1,867	2%	2,600	3%	21,982	11%	50	1%
Education	1,145	0%	570	1%	1,638	2%	1,600	2%	2,118	1%	-	0%
Micro Enterprise	12,573	4%	-	0%	376	0%	2,400	3%	1,937	1%	-	0%
Production	135,942	43%	40,080	60%	67,627	77%	45,420	61%	80,741	42%	100	3%
Total	319,206	100%	66,710	100%	87,969	100%	74,970	100%	191,485	100%	3,850	100%

Source: IFFDC Pratapgarh Coordination Office, Rajasthan.

Table AN9.2.2

IFFDC Rajasthan - Pratapgarh Self Help Groups - Chhayon Summary

Item	Chhayon - Summary (7 Self Help Groups)					
	Balance (as at)	Movement (year)	Balance (as at)	Movement (year)	Balance (as at)	
	Apr-02	Apr-02 Mar-03	Mar-03	Mar-03 Mar-04	Mar-04	
Membership	111	(16)	95	(8)	87	
Savings						
Individual	44,242	27,947	72,189	29,961	102,150	
Group	13,254	8,734	21,988	23,647	45,635	
Total	57,496	36,681	94,177	53,608	147,785	
Loans						
Outstanding	36,970	37,320	74,290	82,270	156,560	
Balance	20,526	(639)	19,887	(28,662)	(8,775)	
Income						
Interest	4,300	12,509	16,808	15,499	32,307	
Penalty	196	55	250	45	295	
Subtotal	4,495	12,563	17,058	15,544	32,602	
Grants	-	-	3,200	-	3,200	
Expenditure						
Total	714	7,740	8,454	(1,514)	6,940	
Net Income less Expenditure	3,781	8,023	11,804	17,058	28,862	
Cash (in hand and bank)	24,307	7,384	31,691	(11,604)	20,087	
Cash as per Records	24,307	7,384	31,691	(17,624)	14,067	
Share & FDR	-	-	-	-	6,020	
Difference	-	-	-	-	-	
Loan Portfolio (Cumulated)						
Outstanding	36,970	37,320	74,290	82,270	156,560	
Repaid	91,117	53,478	144,595	63,020	207,615	
Total	128,087	90,798	218,885	145,290	364,175	
Loan No	644	118	762	134	896	
Average Loan Size (Rs)	199		287		406	
Loan Types:						
Consumption	42,918	43%	58,457	31%	88,357	28%
Health	21,730	22%	27,690	15%	81,189	25%
Education	845	1%	1,145	1%	1,145	0%
Micro Enterprise	1,690	2%	6,590	4%	12,573	4%
Production	33,359	33%	92,717	50%	135,942	43%
Total	100,542	100%	186,599	100%	319,206	100%

Source: IFFDC Pratapgarh Coordination Office, Rajasthan.

\1 Overdue loans reported:

Table AN9.2.2

IFFDC Rajasthan - Pratapgarh Self Help Group - Chhayon 1 - Johda Bawji BS.

Item	Chhayon 1 - Johda Bawji BS					
	Balance (as at)	Movement (year)	Balance (as at)	Movement (year)	Balance (as at)	
	Apr-02	Apr-02 Mar-03	Mar-03	Mar-03 Mar-04	Mar-04	
Membership	16	(2)	14	-	14	
Savings						
Individual	9,162	6,173	15,335	2,903	18,238	
Group	3,772	3,053	6,825	1,517	8,342	
Total	12,934	9,226	22,160	4,420	26,580	
Loans						
Outstanding	9,650	10,600	20,250	10,790	31,040	
Balance	3,284	(1,374)	1,910	(6,370)	(4,460)	
Income						
Interest	1,216	4,094	5,310	3,843	9,152	
Penalty	47	50	97	-	97	
Subtotal	1,263	4,144	5,407	3,843	9,249	
Grants	-	-	-	-	-	
Expenditure						
Total	-	841	841	361	1,202	
Net Income less Expenditure	1,263	3,303	4,566	3,482	8,047	
Cash (in hand and bank)	4,547	1,929	6,476	(2,889)	3,587	
Cash as per Records	4,547	1,929	6,476	(3,894)	2,582	
Share & FDR					1,005	
Difference	-	-	-	-	-	
Loan Portfolio (Cumulated)						
Outstanding	9,650	25%	20,250	30%	31,040	32%
Repaid	28,905	75%	46,672	70%	65,532	68%
Total	38,555	100%	66,922	100%	96,572	100%
Loan No	162		163		176	
Average Loan Size (Rs)	238		411		549	
Loan Types:						
Consumption	13,270	34%	15,785	33%	29,085	46%
Health	8,436	22%	9,206	20%	9,606	15%
Education	288	1%	588	1%	588	1%
Micro Enterprise	576	1%	576	1%	576	1%
Production	15,985	41%	20,985	45%	23,485	37%
Total	38,555	100%	47,140	100%	63,340	100%

Source: IFFDC Pratapgarh Coordination Office, Rajasthan.

\1 Overdue loans reported:

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1,350

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Table AN9.2.2

IFFDC Rajasthan - Pratapgarh Self Help Group - Chhayon 2 - DevnarChhayon BS

Item	Chhayon 2 - Devnarayan BS				
	Balance (as at)	Movement (year)	Balance (as at)	Movement (year)	Balance (as at)
	Apr-02	Apr-02 Mar-03	Mar-03	Mar-03 Mar-04	Mar-04
Membership	16	-	16	-	16
Savings					
Individual	7,978	7,003	14,981	8,576	23,557
Group	1,571	1,129	2,700	4,782	7,482
Total	9,549	8,132	17,681	13,358	31,039
Loans					
Outstanding	7,240	7,360	14,600	21,900	36,500
Balance	2,309	772	3,081	(8,542)	(5,461)
Income					
Interest	865	2,479	3,344	4,444	7,788
Penalty	5	5	10	-	10
Subtotal	870	2,484	3,354	4,444	7,798
Grants	-	3,200	3,200	-	3,200
Expenditure					
Total	-	5,393	5,393	(3,987)	1,406
Net Income less Expenditure	870	291	1,161	8,431	9,592
Cash (in hand and bank)	3,179	1,063	4,242	(111)	4,131
Cash as per Records	3,179	1,063	4,242	(2,116)	2,126
Share & FDR					2,005
Difference	-	-	-	-	-
Loan Portfolio (Cumulated)					
Outstanding	7,240	32%	14,600	32%	36,500 44%
Repaid	15,247	68%	30,985	68%	46,315 56%
Total	22,487	100%	45,585	100%	82,815 100%
Loan No	95		135		171
Average Loan Size (Rs)	237		338		484
Loan Types:					
Consumption	9,712	43%	13,412	32%	19,612 30%
Health	1,525	7%	3,075	7%	3,575 5%
Education	287	1%	287	1%	287 0%
Micro Enterprise	573	3%	573	1%	1,573 2%
Production	10,390	46%	25,043	59%	40,323 62%
Total	22,487	100%	42,390	100%	65,370 100%

Source: IFFDC Pratapgarh Coordination Office, Rajasthan.

\1 Overdue loans reported:

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Table AN9.2.2

IFFDC Rajasthan - Pratapgarh Self Help Group - Chhayon 3 - Amba Mata BS

Item	Chhayon 3 - Amba Mata BS					
	Balance (as at)	Movement (year)	Balance (as at)	Movement (year)	Balance (as at)	
	Apr-02	Apr-02 Mar-03	Mar-03	Mar-03 Mar-04	Mar-04	
Membership	16	(2)	14	(2)	12	
Savings						
Individual	4,093	3,890	7,983	3,761	11,744	
Group	888	2,056	2,944	4,823	7,767	
Total	4,981	5,946	10,927	8,584	19,511	
Loans						
Outstanding	1,900	2,740	4,640	13,810	18,450	
Balance	3,081	3,206	6,287	(5,226)	1,061	
Income						
Interest	190	758	948	1,101	2,049	
Penalty	-	5	5	-	5	
Subtotal	190	763	953	1,101	2,054	
Grants	-	-	-	-	-	
Expenditure						
Total	-	420	420	100	520	
Net Income less Expenditure	190	343	533	1,001	1,534	
Cash (in hand and bank)	3,271	3,549	6,820	(4,225)	2,595	
Cash as per Records	3,271	3,549	6,820	(5,230)	1,590	
Share & FDR					1,005	
Difference	-	-	-	-	-	
Loan Portfolio (Cumulated)						
Outstanding	1,900	62%	4,640	52%	18,450	67%
Repaid	1,170	38%	4,230	48%	9,030	33%
Total	3,070	100%	8,870	100%	27,480	100%
Loan No	57		69		84	
Average Loan Size (Rs)	54		129		327	
Loan Types:						
Consumption	1,706	56%	3,106	32%	10,306	16%
Health	555	18%	555	6%	41,554	64%
Education	58	2%	58	1%	58	0%
Micro Enterprise	117	4%	2,617	27%	5,600	9%
Production	584	19%	3,274	34%	7,474	11%
Total	3,020	100%	9,610	100%	64,992	100%

Source: IFFDC Pratapgarh Coordination Office, Rajasthan.

\1 Overdue loans reported:

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Table AN9.2.2

IFFDC Rajasthan - Pratapgarh Self Help Group - Chhayon 4 - Diwag Mata BS

Item	Chhayon 4 - Diwag Mata BS					
	Balance (as at)	Movement (in year)	Balance (as at)	Movement (in year)	Balance (as at)	
	Apr-02	Apr-02 Mar-03	Mar-03	Mar-03 Mar-04	Mar-04	
Membership	20	(6)	14	(1)	13	
Savings						
Individual	7,112	2,624	9,736	4,482	14,218	
Group	2,501	974	3,475	4,367	7,842	
Total	9,613	3,598	13,211	8,849	22,060	
Loans						
Outstanding	6,040	6,750	12,790	12,710	25,500	
Balance	3,573	(3,152)	421	(3,861)	(3,440)	
Income						
Interest	677	2,067	2,744	2,162	4,906	
Penalty	64	5	69	15	84	
Subtotal	741	2,072	2,813	2,177	4,990	
Grants	-	-	-	-	-	
Expenditure						
Total	357	(357)	-	726	726	
Net Income less Expenditure	384	2,429	2,813	1,451	4,264	
Cash (in hand and bank)	3,957	(723)	3,234	(2,410)	824	
Cash as per Records	3,957	(723)	3,234	(2,410)	824	
Share & FDR					-	
Difference	-	-	-	-	-	
Loan Portfolio (Cumulated)						
Outstanding	6,040	26%	12,790	35%	25,500	44%
Repaid	16,970	74%	23,790	65%	33,080	56%
Total	23,010	100%	36,580	100%	58,580	100%
Loan No	116		137		161	
Average Loan Size (Rs)	198		267		364	
Loan Types:						
Consumption	6,810	47%	10,210	30%	10,860	23%
Health	4,462	31%	5,282	15%	10,482	22%
Education	96	1%	96	0%	96	0%
Micro Enterprise	192	1%	1,392	4%	1,392	3%
Production	2,900	20%	17,110	50%	24,610	52%
Total	14,460	100%	34,090	100%	47,440	100%

Source: IFFDC Pratapgarh Coordination Office, Rajasthan.

\1 Overdue loans reported:

Table AN9.2.2

IFFDC Rajasthan - Pratapgarrh Self Help Group - Chhayon 5 - Bajrang Bali BS

Item	Chhayon 5 - Bajrang Bali BS					
	Balance (as at)	Movement (in year)	Balance (as at)	Movement (in year)	Balance (as at)	
	Apr-02	Apr-02 Mar-03	Mar-03	Mar-03 Mar-04	Mar-04	
Membership	14	(1)	13	(3)	10	
Savings						
Individual	3,844	2,703	6,547	1,225	7,772	
Group	707	630	1,337	872	2,209	
Total	4,551	3,333	7,884	2,097	9,981	
Loans						
Outstanding	1,900	1,620	3,520	(400)	3,120	
Balance	2,651	1,713	4,364	2,497	6,861	
Income						
Interest	180	134	314	376	690	
Penalty	-	-	-	-	-	
Subtotal	180	134	314	376	690	
Grants	-	-	-	-	-	
Expenditure						
Total	-	-	-	1,829	1,829	
Net Income less Expenditure	180	134	314	(1,453)	(1,139)	
Cash (in hand and bank)	2,831	1,847	4,678	1,044	5,722	
Cash as per Records	2,831	1,847	4,678	39	4,717	
Share & FDR					1,005	
Difference	-	-	-	-	-	
Loan Portfolio (Cumulated)						
Outstanding	1,900	61%	3,520	67%	3,120	52%
Repaid	1,200	39%	1,750	33%	2,850	48%
Total	3,100	100%	5,270	100%	5,970	100%
Loan No	25		35		37	
Average Loan Size (Rs)	124		151		161	
Loan Types:						
Consumption	1,960	81%	2,060	60%	2,560	62%
Health	190	8%	340	10%	340	8%
Education	20	1%	20	1%	20	0%
Micro Enterprise	40	2%	40	1%	40	1%
Production	200	8%	990	29%	1,190	29%
Total	2,410	100%	3,450	100%	4,150	100%

Source: IFFDC Pratapgarrh Coordination Office, Rajasthan.

\1 Overdue loans reported:

Table AN9.2.2

IFFDC Rajasthan - Pratapgargh Self Help Group - Chhayon 6 - Dev Dharma BS

Item	Chhayon 6 - Dev Dharma BS					
	Balance (as at)	Movement (in year)	Balance (as at)	Movement (in year)	Balance (as at)	
	Apr-02	Apr-02 Mar-03	Mar-03	Mar-03 Mar-04	Mar-04	
Membership	9	1	10	(1)	9	
Savings						
Individual	4,941	2,930	7,871	4,532	12,403	
Group	1,314	(82)	1,232	2,919	4,151	
Total	6,255	2,848	9,103	7,451	16,554	
Loans						
Outstanding	4,200	1,500	5,700	10,750	16,450	
Balance	2,055	1,348	3,403	(3,299)	104	
Income						
Interest	495	910	1,405	1,412	2,816	
Penalty	16	(16)	-	15	15	
Subtotal	510	895	1,405	1,427	2,831	
Grants	-	-	-	-	-	
Expenditure						
Total	-	1,800	1,800	(1,269)	531	
Net Income less Expenditure	510	(906)	(396)	2,696	2,300	
Cash (in hand and bank)	2,565	443	3,008	(604)	2,404	
Cash as per Records	2,565	443	3,008	(1,604)	1,404	
Share & FDR					1,000	
Difference	-		-		-	
Loan Portfolio (Cumulated)						
Outstanding	4,200	28%	5,700	30%	16,450	48%
Repaid	10,655	72%	13,378	70%	17,728	52%
Total	14,855	100%	19,078	100%	34,178	100%
Loan No	73		86		106	
Average Loan Size (Rs)	203		222		322	
Loan Types:						
Consumption	2,650	51%	3,674	23%	5,074	19%
Health	2,100	41%	3,950	25%	5,150	19%
Education	-	0%	-	0%	-	0%
Micro Enterprise	-	0%	-	0%	2,000	8%
Production	400	8%	8,205	52%	14,250	54%
Total	5,150	100%	15,829	100%	26,474	100%

Source: IFFDC Pratapgargh Coordination Office, Rajasthan.

\1 Overdue loans reported:

Table AN9.2.2

IFFDC Rajasthan - Pratappgarh Self Help Group - Chhayon 7 - Mahadev BS

Item	Chhayon 7 - Mahadev BS					
	Balance (as at)	Movement (in year)	Balance (as at)	Movement (in year)	Balance (as at)	
	Apr-02	Apr-02 Mar-03	Mar-03	Mar-03 Mar-04	Mar-04	
Membership	14	1	15	(1)	14	
Savings						
Individual	2,010	4,522	6,532	5,226	11,758	
Group	121	845	966	3,755	4,721	
Total	2,131	5,367	7,498	8,981	16,479	
Loans						
Outstanding	1,550	5,400	6,950	9,050	16,000	
Balance	581	(33)	548	(69)	479	
Income						
Interest	181	997	1,178	1,744	2,922	
Penalty	9	(9)	-	-	-	
Subtotal	190	988	1,178	1,744	2,922	
Grants	-	-	-	-	-	
Expenditure						
Total	9	91	100	440	540	
Net Income less Expenditure	181	897	1,078	1,304	2,382	
Cash (in hand and bank)	762	864	1,626	1,235	2,861	
Cash as per Records	762	864	1,626	230	1,856	
Share & FDR					1,005	
Difference	-		-		-	
Loan Portfolio (Cumulated)						
Outstanding	1,550	49%	6,950	47%	16,000	52%
Repaid	1,589	51%	7,989	53%	14,589	48%
Total	3,139	100%	14,939	100%	30,589	100%
Loan No	20		48		84	
Average Loan Size (Rs)	157		311		364	
Loan Types:						
Consumption	1,345	43%	1,445	15%	5,095	30%
Health	1,300	41%	2,200	23%	4,700	28%
Education	-	0%	-	0%	-	0%
Micro Enterprise	-	0%	-	0%	-	0%
Production	494	16%	5,994	62%	7,094	42%
Total	3,139	100%	9,639	100%	16,889	100%

Source: IFFDC Pratappgarh Coordination Office, Rajasthan.

\1 Overdue loans reported:

Table AN9.2.3

IFFDC Rajasthan - Pratapgarh Self Help Groups - Moti Kheri Summary

Item	IFFDC Rajasthan - Pratapgarh Self Help Groups - Moti Kheri Summary							
	Balance (as at)	Movement (year)		Balance (as at)	Movement (year)		Balance (as at)	
	Apr-02	Apr-02 Mar-03	Mar-03	Mar-03 Mar-04	Mar-04			
Membership	180	(10)	170	(6)	164			
Savings								
Individual	110,461	19,606	130,067	20,785	150,852			
Group	61,625	18,893	80,518	46,617	127,135			
Total	172,086	38,499	210,585	67,402	277,987			
Loans								
Outstanding	60,420	57,373	117,793	(14,755)	103,038			
Balance	111,666	(18,874)	92,792	82,157	174,949			
Income								
Interest (includes bank Int)	8,386	2,037	10,423	4,466	14,889			
Penalty	1,057	(243)	814	263	1,077			
Subtotal	9,443	1,794	11,237	4,729	15,966			
Grants	8,900		2,200		2,200			
Expenditure								
Total	8,343	39,370	47,713	787	48,500			
Net Income less Expenditure	10,000	(44,276)	(34,276)	3,942	(30,334)			
Cash (in hand and bank)	121,666	(63,150)	58,516	86,099	144,615			
Cash as per Records	113,509		53,253	89,070	142,323			
Share & FDR	8,157		5,263		2,292			
Difference	-		-	-	-			
Loan Portfolio (Cumulated)								
Outstanding	60,420	42%	57,373	117,793	51%	(14,755)	103,038	37%
Repaid	83,008	58%	29,262	112,270	49%	64,602	176,872	63%
Total	143,428	100%	86,635	230,063	100%	49,847	279,910	100%
Loan No	504		194	698		126	824	
Average Loan Size (Rs)	285			330			340	
Loan Types:								
Consumption	45,505	41%		72,918	40%		84,707	44%
Health	14,396	13%		21,919	12%		21,982	11%
Education	2,164	2%		2,047	1%		2,118	1%
Micro Enterprise	2,028	2%		1,793	1%		1,937	1%
Production	48,152	43%		83,256	46%		80,741	42%
Total	112,245	100%		181,933	100%		191,485	100%

Source: IFFDC Pratapgarh Coordination Office, Rajasthan.

\1 Overdue loans reported:

Table AN9.2.3

IFFDC Rajasthan - Pratapgarh Self Help Group - Moti Kheri 1 - Santoshi Mata BS

Item	IFFDC Rajasthan - Pratapgarh Self Help Group - Moti Kheri 1 - Santoshi Mata BS					
	Balance (as at)	Movement (year)	Balance (as at)	Movement (year)	Balance (as at)	
	Apr-02	Apr-02 Mar-03	Mar-03	Mar-03 Mar-04	Mar-04	
Membership	12	-	12	-	12	
Savings						
Individual	5,735	3,161	8,896	2,616	11,512	
Group	2,106	6,185	8,291	4,481	12,772	
Total	7,841	9,346	17,187	7,097	24,284	
Loans						
Outstanding	2,400	3,845	6,245	(2,953)	3,292	
Balance	5,441	5,501	10,942	10,050	20,992	
Income						
Interest (includes bank Int)	302	438	740	440	1,180	
Penalty	55	(55)	-	-	-	
Subtotal	357	383	740	440	1,180	
Grants	-	-	-	-	-	
Expenditure						
Total	-	5,808	5,808	(4,193)	1,615	
Net Income less Expenditure	357	(5,425)	(5,068)	4,633	(435)	
Cash (in hand and bank)	5,798	76	5,874	14,683	20,557	
Cash as per Records	5,798	76	5,874	13,678	19,552	
Share & FDR					1,005	
Difference	-	-	-	-	-	
Loan Portfolio (Cumulated)						
Outstanding	2,400	37%	6,245	41%	3,292	19%
Repaid	4,155	63%	9,083	59%	13,681	81%
Total	6,555	100%	15,328	100%	16,973	100%
Loan No	30		58		63	
Average Loan Size (Rs)	219		264		269	
Loan Types:						
Consumption	1,150	55%	8,278	59%	10,778	65%
Health	-	0%	350	2%	350	2%
Education	-	0%	-	0%	-	0%
Micro Enterprise	-	0%	-	0%	-	0%
Production	950	45%	5,506	39%	5,505	33%
Total	2,100	100%	14,134	100%	16,633	100%

Source: IFFDC Pratapgarh Coordination Office, Rajasthan.

\1 Overdue loans reported:

1,900

1,350

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Table AN9.2.3

IFFDC Rajasthan - Pratapgarh Self Help Group - Moti Kheri 2 - Mamadev BS

Item	IFFDC Rajasthan - Pratapgarh Self Help Group - Moti Kheri 2 - Mamadev BS					
	Balance (as at)	Movement (year)	Balance (as at)	Movement (year)	Balance (as at)	
	Apr-02	Apr-02 Mar-03	Mar-03	Mar-03 Mar-04	Mar-04	
Membership	7		7	-	7	
Savings						
Individual	5,507	1,604	7,111	1,786	8,897	
Group	4,574	926	5,500	4,931	10,431	
Total	10,081	2,530	12,611	6,717	19,328	
Loans						
Outstanding	1,360	5,162	6,522	15,433	21,955	
Balance	8,721	(2,632)	6,089	(8,716)	(2,627)	
Income						
Interest (includes bank Int)	347	238	585	502	1,087	
Penalty	80	(80)	-	53	53	
Subtotal	427	158	585	555	1,140	
Grants	-	-	-	-	-	
Expenditure						
Total	-	489	489	203	692	
Net Income less Expenditure	427	(331)	96	352	448	
Cash (in hand and bank)	9,148	(2,963)	6,185	(8,364)	(2,179)	
Cash as per Records	9,148	(2,963)	6,185	2,746	8,931	
Share & FDR					(11,110)	
Difference	-	-	-	-	-	
Loan Portfolio (Cumulated)						
Outstanding	1,360	34%	6,522	66%	21,955	55%
Repaid	2,600	66%	3,304	34%	17,867	45%
Total	3,960	100%	9,826	100%	39,822	100%
Loan No	17		25		94	
Average Loan Size (Rs)	233		393		424	
Loan Types:						
Consumption	250	6%	6,256	65%	6,256	50%
Health	-	0%	-	0%	2,200	18%
Education	-	0%	-	0%	-	0%
Micro Enterprise	-	0%	-	0%	-	0%
Production	3,610	94%	3,410	35%	4,050	32%
Total	3,860	100%	9,666	100%	12,506	100%

Source: IFFDC Pratapgarh Coordination Office, Rajasthan.

\1 Overdue loans reported:

1,360

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Table AN9.2.3

IFFDC Rajasthan - Pratapgarh Self Help Group - Moti Kheri 3 - Bheru Baoji BS

Item	IFFDC Rajasthan - Pratapgarh Self Help Group - Moti Kheri 3 - Bheru Baoji BS					
	Balance (as at)	Movement (year)	Balance (as at)	Movement (year)	Balance (as at)	
	Apr-02	Apr-02 Mar-03	Mar-03	Mar-03 Mar-04	Mar-04	
Membership	20	-	20	(2)	18	
Savings						
Individual	15,303	2,566	17,869	2,521	20,390	
Group	18,161	2,590	20,751	130	20,881	
Total	33,464	5,156	38,620	2,651	41,271	
Loans						
Outstanding	14,151	6,237	20,388	(8,743)	11,645	
Balance	19,313	(1,081)	18,232	11,394	29,626	
Income						
Interest (includes bank Int)	1,532	34	1,566	34	1,600	
Penalty	545	30	575	200	775	
Subtotal	2,077	64	2,141	234	2,375	
Grants	-	-	-	-	-	
Expenditure						
Total	1,470	11,750	13,220	(248)	12,972	
Net Income less Expenditure	607	(11,686)	(11,079)	482	(10,597)	
Cash (in hand and bank)	19,920	(12,767)	7,153	11,876	19,029	
Cash as per Records	19,920	(13,772)	6,148	11,876	18,024	
Share & FDR			1,005		1,005	
Difference	-	-	-	-	-	
Loan Portfolio (Cumulated)						
Outstanding	14,151	49%	20,388	43%	11,645	29%
Repaid	15,026	51%	27,419	57%	29,056	71%
Total	29,177	100%	47,807	100%	40,701	100%
Loan No	70		100		101	
Average Loan Size (Rs)	417		478		403	
Loan Types:						
Consumption	13,447	51%	15,917	55%	16,917	56%
Health	4,100	16%	4,100	14%	4,100	14%
Education	357	1%	357	1%	357	1%
Micro Enterprise	714	3%	714	2%	714	2%
Production	7,618	29%	8,090	28%	8,090	27%
Total	26,236	100%	29,178	100%	30,178	100%

Source: IFFDC Pratapgarh Coordination Office, Rajasthan.

\1 Overdue loans reported:

940

Table AN9.2.3

IFFDC Rajasthan - Pratapgarh Self Help Group - Moti Kheri 4 - Bajrang BS

Item	IFFDC Rajasthan - Pratapgarh Self Help Group - Moti Kheri 4 - Bajrang BS						
	Balance (as at)	Movement (in year)		Balance (as at)	Movement (in year)		Balance (as at)
	Apr-02	Apr-02 Mar-03	Mar-03	Mar-03 Mar-04	Mar-04	Mar-04	
Membership	11	(1)	10	1	11		
Savings							
Individual	6,868	1,327	8,195	940	9,135		
Group	3,919	754	4,673	1,186	5,859		
Total	10,787	2,081	12,868	2,126	14,994		
Loans							
Outstanding	2,560	4,430	6,990	(1,435)	5,555		
Balance	8,227	(2,349)	5,878	3,561	9,439		
Income							
Interest (includes bank Int)	341	100	441	-	441		
Penalty	106	-	106	-	106		
Subtotal	447	100	547	-	547		
Grants	-	-	-	-	-		
Expenditure							
Total	539	1,065	1,604	1,200	2,804		
Net Income less Expenditure	(92)	(965)	(1,057)	(1,200)	(2,257)		
Cash (in hand and bank)	8,135	(3,314)	4,821	2,361	7,182		
Cash as per Records	8,135	(3,314)	4,821	2,361	7,182		
Share & FDR							
Difference	-	-	-	-	-		
Loan Portfolio (Cumulated)							
Outstanding	2,560	31%	6,990	51%	5,555	39%	
Repaid	5,820	69%	6,850	49%	8,835	61%	
Total	8,380	100%	13,840	100%	14,390	100%	
Loan No	81		89		94		
Average Loan Size (Rs)	103		156		153		
Loan Types:							
Consumption	-	0%	2,375	18%	2,375	18%	
Health	-	0%	200	2%	200	2%	
Education	-	0%	-	0%	-	0%	
Micro Enterprise	-	0%	-	0%	-	0%	
Production	7,870	100%	10,265	80%	10,265	80%	
Total	7,870	100%	12,840	100%	12,840	100%	

Source: IFFDC Pratapgarh Coordination Office, Rajasthan.

\1 Overdue loans reported:

Table AN9.2.3

IFFDC Rajasthan - Pratapgarh Self Help Group - Moti Kheri 5 - Kalka Mata BS

Item	IFFDC Rajasthan - Pratapgarh Self Help Group - Moti Kheri 5 - Kalka Mata BS					
	Balance (as at)	Movement (in year)	Balance (as at)	Movement (in year)	Balance (as at)	
	Apr-02	Apr-02 Mar-03	Mar-03	Mar-03 Mar-04	Mar-04	
Membership	20	(7)	13	(3)	10	
Savings						
Individual	12,155	(5,608)	6,547	(286)	6,261	
Group	6,007	(4,670)	1,337	872	2,209	
Total	18,162	(10,278)	7,884	586	8,470	
Loans						
Outstanding	8,510	(4,990)	3,520	(400)	3,120	
Balance	9,652	(5,288)	4,364	986	5,350	
Income						
Interest (includes bank Int)	478	(164)	314	376	690	
Penalty	160	(160)	-	-	-	
Subtotal	638	(324)	314	376	690	
Grants	-	-	-	-	-	
Expenditure						
Total	1,406	(1,406)	-	318	318	
Net Income less Expenditure	(768)	1,082	314	58	372	
Cash (in hand and bank)	8,884	(4,206)	4,678	1,044	5,722	
Cash as per Records	8,884	(4,206)	4,678	39	4,717	
Share & FDR					1,005	
Difference	-	-	-	-	-	
Loan Portfolio (Cumulated)						
Outstanding	8,510	62%	3,520	67%	3,120	52%
Repaid	5,200	38%	1,750	33%	2,850	48%
Total	13,710	100%	5,270	100%	5,970	100%
Loan No	55		35		37	
Average Loan Size (Rs)	249		151		161	
Loan Types:						
Consumption	5,228	46%	2,060	60%	2,560	62%
Health	2,006	18%	340	10%	340	8%
Education	137	1%	20	1%	20	0%
Micro Enterprise	275	2%	40	1%	40	1%
Production	3,774	33%	990	29%	1,190	29%
Total	11,420	100%	3,450	100%	4,150	100%

Source: IFFDC Pratapgarh Coordination Office, Rajasthan.

\1 Overdue loans reported:

Table AN9.2.3

IFFDC Rajasthan - Pratappgarh Self Help Group - Moti Kheri 6 - Amba Mata BS

Item	IFFDC Rajasthan - Pratappgarh Self Help Group - Moti Kheri 6 - Amba Mata BS						
	Balance (as at)	Movement (in year)		Balance (as at)	Movement (in year)		Balance (as at)
	Apr-02	Apr-02 Mar-03	Mar-03	Mar-03 Mar-04	Mar-04		Mar-04
Membership	14	-	14	(1)	13		
Savings							
Individual	6,315	2,107	8,422	364	8,786		
Group	1,262	591	1,853	5,911	7,764		
Total	7,577	2,698	10,275	6,275	16,550		
Loans							
Outstanding	2,710	4,960	7,670	(4,475)	3,195		
Balance	4,867	(2,262)	2,605	10,750	13,355		
Income							
Interest (includes bank Int)	322	128	450	-	450		
Penalty	-	-	-	-	-		
Subtotal	322	128	450	-	450		
Grants	-	-	-	-	-		
Expenditure							
Total	917	410	1,327	361	1,688		
Net Income less Expenditure	(595)	(282)	(877)	(361)	(1,238)		
Cash (in hand and bank)	4,272	(2,544)	1,728	10,389	12,117		
Cash as per Records	4,272	(2,544)	1,728	10,389	12,117		
Share & FDR							
Difference	-	-	-	-	-		
Loan Portfolio (Cumulated)							
Outstanding	2,710	43%	7,670	62%	3,195	25%	
Repaid	3,635	57%	4,785	38%	9,410	75%	
Total	6,345	100%	12,455	100%	12,605	100%	
Loan No	30		63		66		
Average Loan Size (Rs)	212		198		191		
Loan Types:							
Consumption	1,400	30%	2,870	29%	3,170	31%	
Health	355	8%	1,625	16%	1,625	16%	
Education	-	0%	-	0%	-	0%	
Micro Enterprise	-	0%	-	0%	-	0%	
Production	2,860	62%	5,420	55%	5,420	53%	
Total	4,615	100%	9,915	100%	10,215	100%	

Source: IFFDC Pratappgarh Coordination Office, Rajasthan.

\1 Overdue loans reported:

Table AN9.2.3

IFFDC Rajasthan - Pratapgarh Self Help Group - Moti Kheri 7 - Gangotri BS

Item	IFFDC Rajasthan - Pratapgarh Self Help Group - Moti Kheri 7 - Gangotri BS					
	Balance (as at)	Movement (in year)	Balance (as at)	Movement (in year)	Balance (as at)	
	Apr-02	Apr-02 Mar-03	Mar-03	Mar-03 Mar-04	Mar-04	
Membership	14	-	14	-	14	
Savings						
Individual	10,438	2,731	13,169	3,476	16,645	
Group	5,949	527	6,476	3,224	9,700	
Total	16,387	3,258	19,645	6,700	26,345	
Loans						
Outstanding	5,942	9,398	15,340	(10,890)	4,450	
Balance	10,445	(6,140)	4,305	17,590	21,895	
Income						
Interest (includes bank Int)	867	167	1,034	1,228	2,262	
Penalty	75	-	75	-	75	
Subtotal	942	167	1,109	1,228	2,337	
Grants	-	-	-	-	-	
Expenditure						
Total	1,388	(347)	1,041	-	1,041	
Net Income less Expenditure	(446)	514	68	1,228	1,296	
Cash (in hand and bank)	9,999	(5,626)	4,373	18,818	23,191	
Cash as per Records	9,999	(5,626)	4,373	16,438	20,811	
Share & FDR					2,380	
Difference	-	-	-	-	-	
Loan Portfolio (Cumulated)						
Outstanding	5,942	45%	15,340	68%	4,450	15%
Repaid	7,258	55%	7,320	32%	25,620	85%
Total	13,200	100%	22,660	100%	30,070	100%
Loan No	29		45		48	
Average Loan Size (Rs)	455		504		626	
Loan Types:						
Consumption	3,500	43%	5,260	25%	10,360	37%
Health	1,993	24%	1,993	9%	1,993	7%
Education	210	3%	210	1%	210	1%
Micro Enterprise	420	5%	420	2%	420	2%
Production	2,098	26%	13,257	63%	14,757	53%
Total	8,221	100%	21,140	100%	27,740	100%

Source: IFFDC Pratapgarh Coordination Office, Rajasthan.

\1 Overdue loans reported:

3,100

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Table AN9.2.4

IFFDC Rajasthan - Pratapgarh Self Help Groups - Somawaton Ka Khera - Summary

Item	IFFDC Rajasthan - Pratapgarh Self Help Groups - Somawaton Ka Khera - Summary					
	Balance (as at)	Movement (year)	Balance (as at)	Movement (year)	Balance (as at)	
	Apr-02	Apr-02 Mar-03	Mar-03	Mar-03 Mar-04	Mar-04	
Membership	33	-	33	12	45	
Savings						
Individual	15,906	10,966	26,872	17,378	44,250	
Group	4,444	4,027	8,471	9,790	18,261	
Total	20,350	14,993	35,343	27,168	62,511	
Loans						
Outstanding	9,660	19,415	29,075	18,950	48,025	
Balance	10,690	(4,422)	6,268	8,218	14,486	
Income						
Interest	1,087	2,318	3,405	4,988	8,392	
Penalty	196	60	256	5	261	
Subtotal	1,283	2,378	3,661	4,993	8,653	
Grants	-	-	3,595	-	2,482	
Expenditure						
Total	-	1,820	1,820	2,892	4,712	
Net Income less Expenditure	1,283	4,153	5,436	988	6,423	
Cash (in hand and bank)	11,973	(270)	11,704	9,206	20,909	
Cash as per Records	11,973	4,153	11,704	988	20,504	
Share & FDR	-	-	-	-	405	
Difference	-	-	-	-	-	
Loan Portfolio (Cumulated)						
Outstanding	9,660	19,415	29,075	18,950	48,025	
Repaid	10,250	25,465	35,715	41,250	76,965	
Total	19,910	44,880	64,790	60,200	124,990	
Loan No	85	57	142	83	225	
Average Loan Size (Rs)	234	222	456	99	556	
Loan Types:						
Consumption	1,675	29%	15,674	31%	63,848	59%
Health	590	10%	790	2%	1,760	2%
Education	200	3%	1,950	4%	1,200	1%
Micro Enterprise	-	0%	300	1%	-	0%
Production	3,250	57%	32,145	63%	41,880	39%
Total	5,715	100%	50,859	100%	108,688	100%

Source: IFFDC Pratapgarh Coordination Office, Rajasthan.

11 Overdue loans reported:

Table AN9.2.4

IFFDC Rajasthan - Pratapgarh Self Help Group - Somawatn Ka Khera 1 - Devnarayan BS

Item	IFFDC Rajasthan - Pratapgarh Self Help Group - Somawatn Ka Khera 1 - Devnarayan BS					
	Balance (as at)	Movement (year)	Balance (as at)	Movement (year)	Balance (as at)	
	Apr-02	Apr-02 Mar-03	Mar-03	Mar-03 Mar-04	Mar-04	
Membership	15	-	15		15	
Savings						
Individual	7,494	5,647	13,141	6,053	19,194	
Group	2,226	2,273	4,499	4,624	9,123	
Total	9,720	7,920	17,640	10,677	28,317	
Loans						
Outstanding	6,205	8,870	15,075	3,950	19,025	
Balance	3,515	(950)	2,565	6,727	9,292	
Income						
Interest	556	1,319	1,875	1,382	3,257	
Penalty	105	45	150	-	150	
Subtotal	661	1,364	2,025	1,382	3,407	
Grants	-		3,595		2,482	
Expenditure						
Total	-	1,820	1,820	2,892	4,712	
Net Income less Expenditure	661	3,139	3,800	(2,623)	1,177	
Cash (in hand and bank)	4,176	2,189	6,365	4,104	10,469	
Cash as per Records	4,176	2,189	6,365	3,104	9,469	
Share & FDR					1,000	
Difference	-	-	-	-	-	
Loan Portfolio (Cumulated)						
Outstanding	6,205	58%	15,075	45%	19,025	42%
Repaid	4,460	42%	18,320	55%	26,520	58%
Total	10,665	100%	33,395	100%	45,545	100%
Loan No	39		62		101	
Average Loan Size (Rs)	273		539		451	
Loan Types:						
Consumption	925	51%	11,274	42%	30,074	57%
Health	-	0%	-	0%	855	2%
Education	-	0%	500	2%	600	1%
Micro Enterprise	-	0%	-	0%	-	0%
Production	900	49%	14,890	56%	20,890	40%
Total	1,825	100%	26,664	100%	52,419	100%

Source: IFFDC Pratapgarh Coordination Office, Rajasthan.

\1 Overdue loans reported:

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5,695

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Table AN9.2.4

IFFDC Rajasthan - Pratapgarh Self Help Group - Somawaton Ka Khera 2 - Parwati BS

Item	IFFDC Rajasthan - Pratapgarh Self Help Group - Somawaton Ka Khera 2 - Parwati BS					
	Balance (as at)	Movement (year)	Balance (as at)	Movement (year)	Balance (as at)	
	Apr-02	Apr-02 Mar-03	Mar-03	Mar-03 Mar-04	Mar-04	
Membership	18		18	(3)	15	
Savings						
Individual	8,412	5,319	13,731	5,320	19,051	
Group	2,218	1,754	3,972	4,439	8,411	
Total	10,630	7,073	17,703	9,759	27,462	
Loans						
Outstanding	3,455	10,545	14,000	10,000	24,000	
Balance	7,175	(3,472)	3,703	(241)	3,462	
Income						
Interest	531	999	1,530	3,392	4,921	
Penalty	91	15	106	-	106	
Subtotal	622	1,014	1,636	3,392	5,027	
Grants	-	-	-	-	-	
Expenditure						
Total	-	-	-	-	-	
Net Income less Expenditure	622	1,014	1,636	3,392	5,027	
Cash (in hand and bank)	7,797	(2,459)	5,339	3,151	8,489	
Cash as per Records	7,797	(2,459)	5,339	3,746	9,084	
Share & FDR					(595)	
Difference	-	-	-	-	-	
Loan Portfolio (Cumulated)						
Outstanding	3,455	37%	14,000	45%	24,000	39%
Repaid	5,790	63%	17,395	55%	46,315	74%
Total	9,245	100%	31,395	100%	62,300	100%
Loan No	46		80		101	
Average Loan Size (Rs)	201		392		617	
Loan Types:						
Consumption	750	19%	4,400	18%	30,074	57%
Health	590	15%	790	3%	855	2%
Education	200	5%	1,450	6%	600	1%
Micro Enterprise	-	0%	300	1%	-	0%
Production	2,350	60%	17,255	71%	20,890	40%
Total	3,890	100%	24,195	100%	52,419	100%

Source: IFFDC Pratapgarh Coordination Office, Rajasthan.

\1 Overdue loans reported:

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5,500

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Table AN9.2.4

IFFDC Rajasthan - Pratapgarh Self Help Group - Somawaton Ka Khera 3 - Shri Ganesh BS

Item	IFFDC Rajasthan - Pratapgarh Self Help Group - Somawaton Ka Khera 3 - Shri Ganesh BS				
	Balance (as at)	Movement (year)	Balance (as at)	Movement (year)	Balance (as at)
	Apr-02	Apr-02 Mar-03	Mar-03	Mar-03 Mar-04	Mar-04
Membership	-	-	-	15	15
Savings					
Individual	-	-	-	6,005	6,005
Group	-	-	-	727	727
Total	-	-	-	6,732	6,732
Loans					
Outstanding	-	-	-	5,000	5,000
Balance	-	-	-	1,732	1,732
Income					
Interest	-	-	-	214	214
Penalty	-	-	-	5	5
Subtotal	-	-	-	219	219
Grants	-	-	-	-	-
Expenditure					
Total	-	-	-	-	-
Net Income less Expenditure	-	-	-	219	219
Cash (in hand and bank)	-	-	-	1,951	1,951
Cash as per Records	-	-	-	1,951	1,951
Share & FDR	-	-	-	-	-
Difference	-	-	-	-	-
Loan Portfolio (Cumulated)					
Outstanding	-	-	-	5,000	55%
Repaid	-	-	-	4,130	45%
Total	-	-	-	9,130	100%
Loan No	-	-	-	23	
Average Loan Size (Rs)	#DIV/0!	#DIV/0!	#DIV/0!	397	
Loan Types:					
Consumption	-	-	-	3,700	96%
Health	-	-	-	50	1%
Education	-	-	-	-	0%
Micro Enterprise	-	-	-	-	0%
Production	-	-	-	100	3%
Total	-	-	-	3,850	100%

Source: IFFDC Pratapgarh Coordination Office, Rajasthan.

\1 Overdue loans reported:

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940

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AN10 | **Income Generating Activities**

AN10 | Income Generating Activities

Income Generating Activities

Income generating activities (IGAs) are supported under the village organisation and development intervention. As part of the SHG start-up process, funds, in the form of seed capital, are made available by the implementing agencies to SHGs for onlending as small loans (up to Rs 5,000) to individual members for identified IGAs. In addition, funds are also made available to groups of SHG members for larger IGAs projects. As part of the cost benefit analysis field verification programme, field data was collected to assess the financial viability of both small individual and group IGAs. One private flourmill operator was interviewed.

Financial Analysis

Methodology

Field data for 12 representative IGAs was tabulated in the form of a 12-month cash flow forecast. Details of individual IGAs are given in Annex 10 and key financial indicators summarised in Table A10.1. Capital investment costs are identified together with a financing plan indicating equity and loan contributions to finance the capital investment. Sales income and expenditure, often extracted from records maintained by the individual / group, was recorded on a monthly basis to show a 12 month seasonal cash flow before finance charges. This incremental cash flow, inclusive of the capital investment and adjusted for any residual asset value in month 12, formed the basis for calculating the financial internal rate of return (FIRR).

Financial charges, both monthly interest and monthly principal repayment costs were less clearly defined. Monthly, interest charges agreed by the SHG membership varied considerably as did principal repayment with both grace periods and the number of repayment periods, varying widely. For the purpose of evaluating all IGAs on a common basis, it has been assumed that interest would be charged on a monthly basis at 1.5 percent per month on the outstanding loan balance and that realistic principal repayments would be made only during those months when sufficient cash flow was being generated.

The funding mechanism for payments advanced for group IGAs are different. Funds are first passed to the group SHG bank account and then withdrawn to make the purchase of the asset, namely the diesel engine, irrigation pump and pipes, in the case of the two-recorded models. As the asset belongs to the group, a hire charge is made to cover the direct operating costs of the equipment and the remuneration of the *jankar* responsible for the asset. Generally, no financing charge is made to cover interest foregone or a principle payment as a deposit towards replacement of the asset at the end of its useful life. To make a comparison with the individual IGA, financing charges are calculated in a similar manor.

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Financial Results

Financing Plan

Of the nine individual IGAs analysed, all had loans within the prescribed limit of Rs 5,000. The group SHGs advances for irrigation equipment and the private individual, were considerably larger at Rs 20 to 25,000. The loan amount accounted for between 25 and 50 percent of the asset value.

Cash Flow (Before Financing)

The individual and group IGAs had a cash income before financing, (a measure of the potential cash income after the loan has been repaid), that ranged from a low of Rs 1,240 to a high of Rs 9,330. The financial rate of return (FIRR) on this cash flow adjusted for the capital investment costs (in period zero) and any asset residual value (in period 12), ranged from an equivalent annual rate of zero percent (group irrigation pumps) to 18 percent (the village grocery shop) and should be assessed against the average SHG rate for these IGA loans of 1.5 percent per month or 18 percent per annum.

Financing Charges and Net Cash Flow

For the individual IGAs, finance charges range from a low of Rs 646 to a high of Rs 3,231 and between Rs 7 to 8,000 for the group and private models. The resulting net cash flows range from a low of Rs 600 to a high of Rs 3,238 but negative in the case of the group irrigation pump models. These incremental results should be compared with the average annual household crop net margin of Rs 5,463 (Annex 11 Table A11.1) and livestock net margin of Rs 2,006 (Annex 11 Table A11.2). The exception being the private flour mill operation where the indicative annual income is estimated at Rs 20,000.

Returns to Labour

Average monthly family labour requirements were also identified during the field survey. The resulting average seasonal return per person day generated by the IGA ranges from a low of Rs 10 to 69, cash only, or Rs 41 282 if the residual value the asset is included. These returns can be compared with reported daily rural wage rates in the project area, varying from Rs 40 to 50 per day in the *khalif* season and Rs 20 to 30 in the *rabi* season. Average seasonal migration labour wage rates are the subject of an ongoing survey in the project area (Gujarat).

Lessons Learnt

A number of conclusions are drawn from the analysis of IGAs:

- a selected number of individual IGA are financially viable and provide a useful addition to household income. Such opportunities could not be developed without access to loan finance at reasonable interest rates and with a flexible principal repayment schedule;

- concern was expressed about service orientated IGAs which had failed due to an over supply in the local village with no realistic outlet to neighbouring markets (sewing machines and village stores were sited as examples);
- livestock rearing (buffalo and goats) are less dependent on the immediate village market and might therefore be considered more attractive. However, the activity is dependent on local veterinary services being readily available;
- some poultry IGAs had failed due to the high mortality of young (up to one week) chicks. It is considered unreasonable to introduce activities without providing the necessary technical and veterinary support;
- information provided by the resource team confirms that the number of successful individual IGAs, per village, are limited;
- it is recognised that the group irrigation (and flour mill) activities provide an essential service within the village. However, based on the financial analysis undertaken, the financial costs required to service the loan, are not being covered by the hire costs recovered. This suggests that, either the charge rate per application or the number of application during the short *rabi* season, need to be increased, and
- group IGA should be supported by a business plan identifying both expenditure and financing costs and therefore the resulting levels of income from hire charges necessary to achieve financial viability.

Table A10.1: Income Generating Activities: Summary of Key Financial Indicators

IGA Activity	Status	Financing Plan			Cash Flow (before finance)			Finance	Net	Return to Labour		FIRR
		Equity	Loan	Total	Income	Expend	Cash	Charge	Cash	P/Days	Return	
		Rs'000			Rs'000			Rs'000	Rs'000	No/Yr	Rs/day	%
Service												
Electric Motor Repairs	Individual	4.0	3.0	7.0	12.7	6.8	5.9	1.7	4.2	60	70	8%
Grocery Shop	Individual	1.5	3.0	4.5	23.3	14.0	9.3	3.1	6.2	120	52	17%
Irrigation Pump (A)	Individual	12.0	4.0	16.0	9.0	3.0	6.0	2.5	3.5	50	70	2%
Sewing Machine	Individual	0.7	2.5	3.2	8.0	1.3	6.7	2.7	4.0	80	50	18%
Tailoring	Individual	1.2	2.0	3.2	4.1	1.1	3.0	1.3	1.7	69	25	8%
Vegetable Marketing	Individual	1.5	3.5	5.0	18.7	14.6	4.1	1.6	2.5	108	23	8%
Livestock Production												
Buffalo Rearing	Individual	1.0	5.0	6.0	10.8	6.4	4.4	3.2	1.2	60	20	6%
Goat Rearing	Individual	1.0	1.0	2.0	1.4	0.1	1.3	0.6	0.7	60	12	9%
Poultry Production	Individual	0.1	0.9	1.0	6.5	2.2	4.3	1.1	3.2	60	53	13%
Crop Production												
Irrigation Pump (B)	Group	2.0	20.0	22.0	9.3	5.0	4.3	7.3	(3.0)	N/A	N/A	0%
Irrigation Pump (C)	Group	3.0	25.0	28.0	6.0	2.0	4.0	7.1	(3.1)	N/A	N/A	0%
Service												
Flour Mill	Private	16.5	20.0	36.5	127.2	98.2	29.0	8.2	20.8	240	87	7%

Source: Cost Benefit Analysis (CBA) Study Estimates January 2005

N/A = Not analysed, Jankar allowance covered under expenditure.

AN10-4

WIRFP - Phase II - Cost Benefit Analysis Study

Tables AN10.0: Income Generating Activities

Table AN10.1	Income Generating Activity: Summary of Key Financial Indicators.
Table AN10.2	Income Generating Activity: Electric Motor Repairs - SHG Individual (M Pradesh, Village Chenpura).
Table AN10.3	Income Generating Activity: Grocery Store - SHG Individual (M Pradesh, Village Chenpura).
Table AN10.4	Income Generating Activity: Irrigation Pump A - SHG Individual (Rajasthan, Village S Ka Khedi).
Table AN10.5	Income Generating Activity: Sewing Machine - SHG Individual (M Pradesh, Village Chenpura).
Table AN10.6	Income Generating Activity: Tailoring - SHG Individual (Rajasthan, Village Chhayan).
Table AN10.7	Income Generating Activity: Vegetable Marketing - SHG Individual (M Pradesh, Village Kadwapada).
Table AN10.8	Income Generating Activity: Buffalo Rearing - SHG Individual (Rajasthan, Village Chhayan).
Table AN10.9	Income Generating Activity: Goat Rearing - SHG Individual (Rajasthan, Village S Ka Khedi).
Table AN10.10	Income Generating Activity: Poultry - SHG Individual (M Pradesh, Village Chenpura).
Table AN10.11	Income Generating Activity: Irrigation Pump B - SHG Group (Gujarat, Village Jadha).
Table AN10.12	Income Generating Activity: Irrigation Pump C - SHG Group (M Pradesh, Village Kadwapada).
Table AN10.13	Income Generating Activity: Flour Mill - Private (Gujarat, Village Jadha).

Table AN10.1 Income Generating Activity: Summary of Key Financial Indicators.

Income Generating Activity (IGA)	IGA Status	Financing Plan			Cash Flow (before financing)			Financing Charges			Net Cash Flow (Rs/Year)	Return to Labour (person/days)			FIRR (%)
		Equity (Rs'000)	Loan (Rs'000)	Total (Rs'000)	Income (Rs/Year)	Expenditure (Rs/Year)	Cash Flow (Rs/Year)	Interest (Rs/Year)	Principal (Rs/Year)	Total (Rs/Year)		Days/year (No/Year)	Cash (Rs/P/day)	Cash / Asset (Rs/P/day)	
Service															
Electric Motor Repairs	SHG - Individual	4,000	3,000	7,000	12,700	6,813	5,887	480	1,250	1,730	4,157	60	69	143	8%
Grocery Shop	SHG - Individual	1,500	3,000	4,500	23,345	14,015	9,330	378	2,700	3,078	6,252	120	52	85	17%
Irrigation Pump (A)	SHG - Individual	12,000	4,000	16,000	9,013	3,063	5,950	436	2,000	2,436	3,514	50	70	282	2%
Sewing Machine	SHG - Individual	700	2,500	3,200	7,980	1,245	6,735	244	2,500	2,744	3,991	80	50	82	18%
Tailoring	SHG - Individual	1,200	2,000	3,200	4,118	1,080	3,038	293	1,000	1,293	1,745	69	25	49	8%
Vegetable Marketing	SHG - Individual	1,500	3,500	5,000	18,720	14,570	4,150	481	1,167	1,648	2,502	108	23	41	8%
Livestock Production															
Buffalo Rearing	SHG - Individual	1,000	5,000	6,000	10,795	6,400	4,395	731	2,500	3,231	1,164	60	19	57	6%
Goat Rearing	SHG - Individual	1,000	1,000	2,000	1,350	110	1,240	146	500	646	594	60	10	72	9%
Poultry Production	SHG - Individual	100	900	1,000	6,500	2,200	4,300	162	900	1,062	3,238	60	54	65	13%
Crop Production															
Irrigation Pump (B)	SHG - Group	2,000	20,000	22,000	9,265	4,988	4,277	3,090	4,240	7,330	(3,053)	N/A	N/A	N/A	0%
Irrigation Pump (C)	SHG - Group	3,000	25,000	28,000	5,992	2,032	3,961	2,100	5,000	7,100	(3,140)	N/A	N/A	N/A	0%
Service															
Flour Mill	Private	16,500	20,000	36,500	127,200	98,232	28,968	1,542	6,667	8,208	20,760	240	86	182	7%

Source: Cost Benefit Analysis (CBA) Study Estimates Jan 2005.
FIRR = Financial Internal Rate of Return.

Table AN10.2 Income Generating Activity: Electric Motor Repairs - SHG Individual (M Pradesh, Village Chenpura).

Item	Units	Period	Quantity (No)	Unit Price (Rs)	Value (Rs/Period)	IGA Asset	Month 1 Dec-03	Month 2 Jan-04	Month 3 Feb-04	Month 4 Mar-04	Month 5 Apr-04	Month 6 May-04	Month 7 Jun-04	Month 8 Jul-04	Month 9 Aug-04	Month 10 Sep-04	Month 11 Oct-04	Month 12 Nov-04	Total	
Capital Investment \1																				
Workshop Refurbishment	Sum		1.0	1,500.0	1,500	1,500	-	-	-	-	-	-	-	-	-	-	-	-	-	1,350
Specialist Tools	Sum		1.0	3,500.0	3,500	3,500	-	-	-	-	-	-	-	-	-	-	-	-	-	2,800
Working Capital - Materials	Sum		1.0	2,000.0	2,000	2,000	-	-	-	-	-	-	-	-	-	-	-	-	-	2,000
Total Capital Investment					7,000	7,000	-	-	-	-	-	-	-	-	-	-	-	-	-	6,150
Sales Income \2																				
Repairs 3HP Motor	No	5 Month	6.0	600.0	3,600		720	720	720	720	720	-	-	-	-	-	-	-	-	3,600
Repairs 5HP Motor	No	5 Month	6.0	800.0	4,800		960	960	960	960	960	-	-	-	-	-	-	-	-	4,800
Repairs 1 Phase Motor	No	5 Month	3.0	400.0	1,200		240	240	240	240	240	-	-	-	-	-	-	-	-	1,200
Repairs Starter Motor	No	5 Month	3.0	100.0	300		60	60	60	60	60	-	-	-	-	-	-	-	-	300
Used Wire Sales	Sum	5 Month	28.0	100.0	2,800		560	560	560	560	560	-	-	-	-	-	-	-	-	2,800
Total Sales Income					12,700	-	2,540	2,540	2,540	2,540	2,540	-	-	-	-	-	-	-	-	12,700
Expenditure																				
Direct Costs																				
Wire Purchase	Kg	5 Month	28.0	220.0	6,160		1,232	1,232	1,232	1,232	1,232	-	-	-	-	-	-	-	-	6,160
Paper	Sum	5 Month	1.0	25.0	25		5	5	5	5	5	-	-	-	-	-	-	-	-	25
Glue	Sum	5 Month	1.0	10.0	10		2	2	2	2	2	-	-	-	-	-	-	-	-	10
Varnish	Sum	5 Month	1.0	15.0	15		3	3	3	3	3	-	-	-	-	-	-	-	-	15
Cotton Tape	Sum	5 Month	1.0	3.0	3		1	1	1	1	1	-	-	-	-	-	-	-	-	3
Starter Motors	No	5 Month	2.0	50.0	100		20	20	20	20	20	-	-	-	-	-	-	-	-	100
Total Direct Costs					6,313	-	1,263	1,263	1,263	1,263	1,263	-	-	-	-	-	-	-	-	6,313
Overhead Costs																				
Transport Costs etc	Sum	Month	4.0	100.0	400		100	100	100	100	100	-	-	-	-	-	-	-	-	500
Total Overhead Costs					400	-	100	100	100	100	100	-	-	-	-	-	-	-	-	500
Total Expenditure					6,713	-	1,363	1,363	1,363	1,363	1,363	-	-	-	-	-	-	-	-	6,813
Cash Flow (before financing)					5,987	(7,000)	1,177	1,177	1,177	1,177	1,177	-	-	-	-	-	-	-	-	5,887
Financing Plan																				
Equity Capital					4,000	4,000														
Loan					3,000	3,000														
Total Financing					7,000	7,000														
Finance Charges \2																				
Interest	Percent	Month	1.50%				45	55	50	45	40	35	35	35	35	35	35	35	35	480
Principal	Period	Months	12				250	250	250	250	250	-	-	-	-	-	-	-	-	1,250
Total Finance Charges							295	305	300	295	290	35	35	35	35	35	35	35	35	(1,750)
Cash Flow (after financing)						-	882	872	877	882	887	(35)	(35)	(35)	(35)	(35)	(35)	(35)	(35)	4,157
Family Labour Input \3	Days	Month	5.0	12	60		12	12	12	12	12	-	-	-	-	-	-	-	-	60
Return to Family Labour (Rs/p/day)							74	73	73	74	74	-	-	-	-	-	-	-	-	69

Source: Cost Benefit Analysis (CBA) Study - Field Verification.

\1 Depreciation of workshop refurbishment over 10 years and equipment over 5 years.

\2 Finance charges calculated at a monthly interest of 1.5% on outstanding loan, with the loan repaid over 2 years.

\3 Five months only, as also cropping vegetables during kharif and rabi season.

Financial Internal Rate of Return (FIRR) (7,000) 1,177 1,177 1,177 1,177 1,177 - - - - - - - 6,150 8%

Table AN10.3 Income Generating Activity: Grocery Store - SHG Individual (M Pradesh, Village Chenpura).

Item	Units	Period	Quantity (No)	Unit Price (Rs)	Value (Rs/Period)	IGA Assets	Month 1 Apr-02	Month 2 May-02	Month 3 Jun-02	Month 4 Jul-02	Month 5 Aug-02	Month 6 Sep-02	Month 7 Oct-02	Month 8 Nov-02	Month 9 Dec-02	Month 10 Jan-03	Month 11 Feb-03	Month 12 Mar-03	Total	IGA Assets	
Capital Investment \1																					
Grocery Shop Refurbishment	Sum		1.0	2,000.0	2,000	2,000														1,800	
Working Capital	Sum		1.0	2,500.0	2,500	2,500														2,500	
Total Capital Investment					4,500	4,500														4,300	
Sales Income																					
Takings per month \2	Sum	Year	1.0	23,345.0	23,345		1,970	2,925	2,495	1,365	1,470	1,610	1,915	2,695	1,455	1,555	1,945	1,945	23,345		
Total Sales Income					23,345		1,970	2,925	2,495	1,365	1,470	1,610	1,915	2,695	1,455	1,555	1,945	1,945	23,345		
Expenditure																					
Direct Costs																					
Purchase of goods	Sum	Year	1.0	13,535.0	13,535		1,170	1,925	1,595	465	970	910	1,200	1,600	900	800	1,000	1,000	13,535		
Total Direct Costs					13,535		1,170	1,925	1,595	465	970	910	1,200	1,600	900	800	1,000	1,000	13,535		
Overhead Costs																					
Transport to town	Trips	Month	2.0	20.0	40		40	40	40	40	40	40	40	40	40	40	40	40	40	480	
Total Overhead Costs					40		40	40	40	40	40	40	40	40	40	40	40	40	40	480	
Total Expenditure							1,210	1,965	1,635	505	1,010	950	1,240	1,640	940	840	1,040	1,040	14,015		
Cash Flow (before financing)							(4,500)	760	960	860	860	460	660	675	1,055	515	715	905	905	9,330	4,300
Financing Plan																					
Equity Capital					1,500	1,500															
Loan					3,000	3,000															
Total Finance					4,500	4,500															
Finance Charges \3																					
Interest	Percent	Month	1.50%				45	45	45	45	41	36	32	27	23	18	14	9	378		
Principal \4	Periods	Months	10.0				-	-	-	300	300	300	300	300	300	300	300	300	2,700	(300)	
Total Financing Charges							-	45	45	45	345	341	336	332	327	323	318	314	309	3,078	(300)
Cash Flow (after financing)							-	715	915	815	515	120	324	344	728	193	397	592	596	6,252	4,000
Family Labour Input	Day equiv	Month	10.0	12	120		10	10	10	10	10	10	10	10	10	10	10	10	120	120	
Return to Family Labour							72	92	82	52	12	32	34	73	19	40	59	60	52	85	

Source: Cost Benefit Analysis (CBA) Study - Field Verification.

\1 Depreciation of capital assets over ten years.

\2 Based on recorded daily figures for ten months prepared by owners son.

\3 Finance charges calculated at a monthly interest of 1.5% on outstanding loan, with the loan repaid over 1 year.

\4 Verified in group pass book.

Financial Internal Rate of Return (FIRR)

(4,500) 760 960 860 860 460 660 675 1,055 515 715 905 5,205 17%

Table AN10.4 Income Generating Activity: Irrigation Pump A - SHG Individual (Rajastan, Village S Ka Khedi).

Item	Units	Period	Quantity (No)	Unit Price (Rs)	Value (Rs/Period)	IGA Assets	Month 1 Sep-03	Month 2 Oct-03	Month 3 Nov-03	Month 4 Dec-03	Month 5 Jan-04	Month 6 Feb-04	Month 7 Mar-04	Month 8 Apr-04	Month 9 May-04	Month 10 Jun-04	Month 11 Jul-04	Month 12 Aug-04	Total	IGA Asset
Capital Investment \1																				
Diesel Engine (Kasan 6.5 HP)	No		1.0	13,000.0	13,000	13,000														10,400
Irrigation Pump	No		1.0	1,500.0	1,500	1,500														1,200
Pipes	Sum		1.0	1,500.0	1,500	1,500														1,000
Total Capital Investment					16,000	16,000														12,600
Sales Income \2																				
October Hire Income	Hours	Month	141	25.0	3,525		-	3,525	-	-	-	-	-	-	-	-	-	-	-	3,525
November Hire Income	Hours	Month	84	25.0	2,088		-	-	2,088	-	-	-	-	-	-	-	-	-	-	2,088
December Hire Income	Hours	Month	60	25.0	1,488		-	-	-	1,488	-	-	-	-	-	-	-	-	-	1,488
January Hire Income	Hours	Month	30	25.0	750		-	-	-	-	750	-	-	-	-	-	-	-	-	750
February Hire Income	Hours	Month	47	25.0	1,163		-	-	-	-	-	1,163	-	-	-	-	-	-	-	1,163
Total Sales Income			361		9,013		-	3,525	2,088	1,488	750	1,163	-	-	-	-	-	-	-	9,013
Expenditure																				
Direct Costs																				
Fuel \3	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Total Direct Costs																				
Overhead Costs																				
Oil	Sum	Month	5.0	200.0	1,000		-	200	200	200	200	200	-	-	-	-	-	-	-	1,000
Spares and Repairs	Sum	Year	1.0	2,500.0	2,500		-	313	313	313	313	313	-	-	-	-	-	-	500	2,063
Total Overhead Costs					3,500		-	513	513	513	513	513	-	-	-	-	-	-	500	3,063
Total Expenditure					3,500		-	513	513	513	513	513	-	-	-	-	-	-	500	3,063
Cash Flow (before financing)					5,513	(16,000)	-	3,013	1,575	975	238	650	-	-	-	-	-	-	(500)	5,950
Financing Plan																				
Equity Capital					12,000	12,000														
Loan					4,000	4,000														
Total Financing					16,000	16,000														
Finance Charges \4																				
Interest	Percent	Month	1.5%				60	59	52	45	39	32	26	25	25	25	24	24	24	436
Principal	Period	Months	10.0	400			-	400	400	400	400	400	-	-	-	-	-	-	-	2,000
Total Financing Charges							60	459	452	445	439	432	26	25	25	25	24	24	24	2,436
Cash Flow (after financing)							-	(60)	2,553	1,123	530	(201)	218	(26)	(25)	(25)	(25)	(24)	(524)	3,514
Family Labour Input	Days	Month	5.0	10	50		-	15	15	10	5	5	-	-	-	-	-	-	-	50
Return to Family Labour							-	170	75	53	(40)	44	-	-	-	-	-	-	-	70

Source: Cost Benefit Analysis (CBA) Study - Field Verification.

\1 Depreciation of reconditioned diesel engine and pump over five years and irrigation pipes over 3 years.

\2 Field records show some 55 percent of hire usage within family.

\3 Fuel costs paid by hirer (estimated at 1.4 litres per hour at Rs 28.50 / litre).

\4 Repayment over 2 years, at five months per year (10 periods), interest charged at 1.5% per month on the outstanding loan balance.

Financial Internal Rate of Return (FIRR) (16,000) - 3,013 1,575 975 238 650 - - - - - 12,100 2%

Table AN10.5 Income Generating Activity: Sewing Machine - SHG Individual (M Pradesh, Village Chenpura).

Item	Units	Period	Quantity (No)	Unit Price (Rs)	Value (Rs/Period)	IGA Assets	Month 1 Apr-03	Month 2 May-03	Month 3 Jun-03	Month 4 Jul-03	Month 5 Aug-03	Month 6 Sep-03	Month 7 Oct-03	Month 8 Nov-03	Month 9 Dec-03	Month 10 Jan-04	Month 11 Feb-04	Month 12 Mar-04	Total	IGA Assets	
Capital Investment \1																					
Sewing Machine	No	-	1.0	3,000.0	3,000	3,000														2,400	
Training Course	No		1.0	200.0	200	200														160	
Total Capital Investment					3,200	3,200	-	-	-	-	-	-	-	-	-	-	-	-	-	2,560	
Sales Income																					
School Uniform \2	Contract	Month	1.0	1,980.0	1,980			1,980												1,980	
General Work	Days	Month	10.0	75.0	750		750					750	750	750	750	750	750	750	750	6,000	
Total Sales Income					2,730		750	1,980				750	750	750	750	750	750	750	750	7,980	
Expenditure																					
Direct Costs																					
Material \3	-	-	-	-	-															-	
Contract Costs	Sum	Month	1.0	120.0	120			120												120	
Total Direct Costs					120			120												120	
Overhead Costs																					
Thread / Needles etc	Sum	Month	1.0	100.0	100		100	100				100	100	100	100	100	100	100	100	900	
Repair and Maintenance	Sum	Month	9.0	25.0	225		25	25				25	25	25	25	25	25	25	25	225	
Total Overhead Costs					100		125	125				125	125	125	125	125	125	125	125	1,125	
Total Expenditure					220		125	245				125	125	125	125	125	125	125	125	1,245	
Cash Flow (before financing)						(3,200)	625	1,735				625	625	625	625	625	625	625	625	6,735	2,560
Financing Plan																					
Equity Capital					700	700															
Loan					2,500	2,500															
Total Finance					3,200	3,200															
Finance Charges \4																					
Interest	Percent	Month	1.50%				38	34	31	28	25	22	19	16	13	9	6	3		244	
Principal	Periods	Months	12				208	208	208	208	208	208	208	208	208	208	208	208	208	2,500	
Total Financing Charges							246	243	240	236	233	230	227	224	221	218	215	211	211	2,744	
Cash Flow (after financing)							379	1,492	(240)	(236)	(233)	395	398	401	404	407	410	414	414	3,991	2,560
Family Labour Input	Days	Month	8.0	10	80		10	10				10	10	10	10	10	10			80	80
Return to Family Labour (Rs/P/day)							38	149				39	40	40	40	41	41			50	82

Source: Cost Benefit Analysis (CBA) Study - Field Verification.

\1 Depreciation of capital assets over 5 years.

\2 Contract 1 School Uniform Items Contract 90.0 22.0 1,980.0

Contract 2 School Uniform Items Contract 110.0 22.0 2,420.0

\3 Material provided by client.

\4 Finance charges calculated at a monthly interest of 1.5% on outstanding loan, with the loan repaid over 1 year.

Financial Internal Rate of Return (FIRR) (3,200) 625 1,735 - - - 625 625 625 625 625 625 3,185 18%

Table AN10.6 Income Generating Activity: Tailoring - SHG Individual (Rajastan, Village Chhayan).

Item	Units	Period	Quantity (No)	Unit Price (Rs)	Value (Rs/Period)	IGA Assets	Month 1 Jan-03	Month 2 Feb-03	Month 3 Mar-03	Month 4 Apr-03	Month 5 May-03	Month 6 Jun-03	Month 7 Jul-03	Month 8 Aug-03	Month 9 Sep-03	Month 10 Oct-03	Month 11 Nov-03	Month 12 Dec-03	Total	IGA Asset	
Capital Investment 11																					
Refurbishment of Shop	Sum		1.0	500.0	500	500														450	
Sewing Machine (Rita) 12	No		1.0	2,000.0	2,000	2,000														1,600	
Other Equipment	Sum		1.0	700.0	700	700														560	
Total Capital Investment					3,200	3,200	-	-	-	-	-	-	-	-	-	-	-	-	-	2,610	
Sales Income 13																					
Garment Cutting and Stitching	Garments	-	275	15.0	4,118		533	465	398	503	435	128	120	368	360	345	270	195	4,118		
Total Sales Income					4,118	-	533	465	398	503	435	128	120	368	360	345	270	195	4,118		
Expenditure																					
Direct Costs																					
Material 14	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	
Total Direct Costs					-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	
Overhead Costs																					
Thread, needles etc	Sum	Month	12.0	75.0	900		75	75	75	75	75	75	75	75	75	75	75	75	900		
Utilities	Sum	Month	12.0	15.0	180		15	15	15	15	15	15	15	15	15	15	15	15	180		
Total Overhead Costs					1,080	-	90	90	90	90	90	90	90	90	90	90	90	90	90	1,080	-
Total Expenditure					1,080	-	90	90	90	90	90	90	90	90	90	90	90	90	90	1,080	-
Cash Flow (before financing)					3,038	(3,200)	443	375	308	413	345	38	30	278	270	255	180	105	3,038	2,610	
Financing Plan																					
Equity Capital					1,200																
Loan					2,000																
Total Financing					3,200																
Finance Charges 15																					
Interest	Percent	Month	1.50%				30	30	30	29	27	26	24	23	21	20	18	17	293		
Principal	Sum	Month	20	100	2,000		-	-	100	100	100	100	100	100	100	100	100	100	1,000	(1,000)	
Total Finance Charges							30	30	130	129	127	126	124	123	121	120	118	117	1,293	(1,000)	
Cash Flow (after financing)						-	413	345	178	284	218	(88)	(94)	155	149	136	62	(12)	1,745	1,610	
Family Labour Input																					
	Days	Month	5.7	-	69		9	8	7	8	7	2	2	6	6	6	5	3	69	69	
Return to Family Labour (Rs/P/day)							46	45	27	34	30	(41)	(47)	25	25	24	14	(4)	25	49	

Source: Cost Benefit Analysis (CBA) Study - Field Verification.

11 Depreciation of shop refurbishment over 10 years and sewing machine and equipment over 5 years.

12 Machine provided as grant for handicapped person.

13 Based on recorded figures for 18 months.

14 Material provided by client.

15 Finance charges calculated at a monthly interest of 1.5% on outstanding loan, with the loan repaid over 20 months over 2 years.

Financial Internal Rate of Return (FIRR)

(3,200) 443 375 308 413 345 38 30 278 270 255 180 2,715 8%

Table AN10.7 Income Generating Activity: Vegetable Marketing - SHG Individual (M Pradesh, Village Kadwapada).

Item	Units	Period	Quantity (No)	Unit Price (Rs)	Value (Rs/Period)	IGA Asset	Month 1 Nov-03	Month 2 Dec-03	Month 3 Jan-04	Month 4 Feb-04	Month 5 Mar-04	Month 6 Apr-04	Month 7 May-04	Month 8 Jun-04	Month 9 Jul-04	Month 10 Aug-04	Month 11 Sep-04	Month 12 Oct-04	Total	IGA Asset	
Capital Investment \1																					
Vegetable Cart	No		1.0	2,000	2,000	2,000														1,600	
Weight and Balance	No		1.0	1,500	1,500	1,500														1,200	
Working Capital			1.0	1,500	1,500	1,500														1,500	
Total Capital Investment					5,000	5,000														4,300	
Sales Income																					
Vegetable Sales	Days	Month	13.0	240	3,120		3,120	3,120	3,120	3,120	3,120	3,120	-	-	-	-	-	-	-	18,720	
Total Sales Income					3,120	-	3,120	3,120	3,120	3,120	3,120	3,120	-	-	-	-	-	-	-	18,720	
Expenditure																					
Direct Costs																					
Vegetable Purchases	Days	Month	13.0	160	2,080		2,080	2,080	2,080	2,080	2,080	2,080	-	-	-	-	-	-	-	12,480	
Municiple Market Fee	Days	Month	13.0	5	65		65	65	65	65	65	65	-	-	-	-	-	-	-	390	
Purchased Food	Days	Month	13.0	10	130		130	130	130	130	130	130	-	-	-	-	-	-	-	780	
Hired Labour	Days	Month	2.0	60	120		120	120	120	120	120	120	-	-	-	-	-	-	-	720	
Total Direct Costs					2,395	-	2,395	2,395	2,395	2,395	2,395	2,395	-	-	-	-	-	-	-	14,370	
Overhead Costs																					
Repairs	Sum	Month	1.0	33	33		33	33	33	33	33	33	-	-	-	-	-	-	-	200	
Total Overhead Costs					33	-	33	33	33	33	33	33	-	-	-	-	-	-	-	200	
Total Expenditure					2,428	-	2,428	2,428	2,428	2,428	2,428	2,428	-	-	-	-	-	-	-	14,570	
Cash Flow (before financing)					692	(5,000)	692	692	692	692	692	692	-	-	-	-	-	-	-	4,150	4,300
Financing Plan																					
Equity Capital					1,500	1,500															
Loan					3,500	3,500															
Total Finance					5,000	5,000															
Finance Charges \2																					
Interest	Percent	Month	1.50%				53	50	47	44	41	38	35	35	35	35	35	35	35	481	-
Principal	Periods	Months	18.0				194	194	194	194	194	194	-	-	-	-	-	-	-	1,167	(2,333)
Total Finance Charges							247	244	241	238	235	232	35	35	35	35	35	35	35	1,648	(2,333)
Cash Flow (after financing)							445	448	451	453	456	459	(35)	(35)	(35)	(35)	(35)	(35)	(35)	2,502	1,967
Family Labour Input	Days	Month	18.0	6	108		18	18	18	18	18	18	-	-	-	-	-	-	-	108	108
Return to Family Labour							25	25	25	25	25	26	-	-	-	-	-	-	-	23	41

Source: Cost Benefit Analysis (CBA) Study - Field Verification.

\1 Depreciation of capital assets over 5 years.

\2 Finance charges calculated at a monthly interest of 1.5% on outstanding loan, with the loan repaid over 3 years (6 months per year).

Financial Internal Rate of Return (FIRR)

(5,000.0) 691.7 691.7 691.7 691.7 691.7 691.7 - - - - - 4,300.0 8%

Table AN10.8 Income Generating Activity: Buffalo Rearing - SHG Individual (Rajasthan, Village Chhayan).

Item	Units	Period	Quantity (No)	Unit Price (Rs)	Value (Rs/Period)	L'stock Asset	Month 1 Apr-03	Month 2 May-03	Month 3 Jun-03	Month 4 Jul-03	Month 5 Aug-03	Month 6 Sep-03	Month 7 Oct-03	Month 8 Nov-03	Month 9 Dec-03	Month 10 Jan-04	Month 11 Feb-04	Month 12 Mar-04	Totals	L'stock Asset
Livestock Asset Value																				
Female \1	head		1	6,000.0	6,000	6,000	-	-	-	-	-	-	-	-	-	-	-	-	-	5,250
Youngstock (calf)	head		1	650.0	650	-	-	650	-	-	-	-	-	-	-	-	-	-	-	650
Total Livestock Assets					6,650	6,000	-	650	-	-	-	-	-	-	-	-	-	-	-	5,900
Sales Income																				
Milk	litres	7 month	945	11.0	10,395	-	1,299	1,299	1,299	1,299	1,299	1,299	1,299	1,299	1,299	-	-	-	-	10,395
Dung	cart	year	1	400.0	400	-	-	-	-	-	-	-	-	-	-	-	400	-	-	400
Draught	days	year	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Transport	days	year	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Total Sales Income					10,795	-	-	1,299	1,299	1,299	1,299	1,299	1,299	1,299	1,299	-	400	-	10,795	-
Expenditure																				
Direct Costs																				
Feeding Forage	sum	month	12.0	300.0	3,600	-	300	300	300	300	300	300	300	300	300	300	300	300	300	3,600
Feeding Concentrate	sum	month	8.0	420.0	3,360	-	280	280	280	280	280	280	280	280	-	-	-	-	-	2,240
Vet and Med	sum	year	2.0	50.0	100	-	-	50	-	-	-	-	-	50	-	-	-	-	-	100
Other (grazing)	sum	month	12.0	30.0	360	-	30	30	30	30	30	30	30	30	30	30	30	30	30	360
Total Direct Costs					7,420	-	610	660	610	610	610	610	610	660	330	330	330	330	6,300	-
Overhead Costs																				
Building / Equipment Repairs	sum	year	1.0	100.0	100	-	-	100	-	-	-	-	-	-	-	-	-	-	-	100
Total Overhead Costs					100	-	-	100	-	-	-	-	-	-	-	-	-	-	-	100
Total Expenditure					7,520	-	610	760	610	610	610	610	610	660	330	330	330	330	6,400	-
Cash Flow (before finance)						(6,000)	(610)	539	689	689	689	689	689	639	969	(330)	70	(330)	4,395	5,900
Financing Plan																				
Equity Capital					1,000															
Loan					5,000															
Total Financing					6,000															
Finance Charges \5																				
Interest	Percent	month	1.50%				75	75	75	71	68	64	60	56	53	49	45	41	731	
Principal	Periods	months	20.0	250.0	5,000		-	-	250	250	250	250	250	250	250	250	250	250	2,500	(2,500)
Total Finance Charges							75	75	325	321	318	314	310	306	303	299	295	291	3,231	(2,500)
Cash Flow (after financing)							(685)	464	364	368	372	376	379	333	667	(629)	(225)	(621)	1,164	3,400
Family Labour Input	Days	Month	12.0	5	60		5	5	5	5	5	5	5	5	5	5	5	5	60	60
Return to Family Labour							(137)	93	73	74	74	75	76	67	133	(126)	(45)	(124)	19	57

Source: Cost Benefit Analysis (CBA) Study - Field Verification.

\1 In calf purchase price of adult female, with life expectancy estimated at eight years.

\2 Finance charges calculated at a monthly interest of 1.5% on outstanding loan, with the loan repaid over 20 months over 2 years.

Financial Internal Rate of Return (FIRR) (6,000) (610) 539 689 689 689 689 689 639 969 (330) 70 5,570 6%

Table AN10.9 Income Generating Activity: Goat Rearing - SHG Individual (Rajastan, Village S Ka Khedi).

Item	Units	Period	Quantity (No)	Unit Price (Rs)	Value (Rs/Period)	L'stock Assets	Month 1 Oct-02	Month 2 Nov-02	Month 3 Dec-02	Month 4 Jan-03	Month 5 Feb-03	Month 6 Mar-03	Month 7 Apr-03	Month 8 May-03	Month 9 Jun-03	Month 10 Jul-03	Month 11 Aug-03	Month 12 Sep-03	Totals	L'stock Assets
Livestock Asset Value						Opening														Closing
Female (pregnant)	head		2	1,000.0	2,000	2,000	-	-	-	-	-	-	-	-	-	-	-	-	-	3,200
Youngstock (kid)	head		4	150.0	600	-	-	300	-	-	-	-	-	-	300	-	-	-	-	600
Total Livestock Assets					2,600	2,000	-	-	300	-	-	-	-	-	300	-	-	-	-	3,800
Sales Income																				
Milk	litres	year	150	10.0	1,500		-	-	150	150	150	150	150	-	150	150	150	150	1,350	
Dung	sum	year	-	-	-		-	-	-	-	-	-	-	-	-	-	-	-	-	-
Sales	no	year	1	-	-		-	-	-	-	-	-	-	-	-	-	-	-	-	-
Other	-	-	-	-	-		-	-	-	-	-	-	-	-	-	-	-	-	-	-
Total Sales Income					1,500		-	-	150	150	150	150	150	-	150	150	150	150	1,350	
Expenditure																				
Direct Costs																				
Feeding	kg	4 month	7.5	5.0	38		-	-	-	-	9	9	9	9	-	-	3	3	44	
Vet and Med	sum	year	1.0	36.0	36		-	-	18	-	-	-	-	-	18	-	-	-	36	
Total Direct Costs					74		-	-	18	-	9	9	9	9	18	-	3	3	80	
Overhead Costs																				
Repairs to shed	sum	year	1.0	30.0	30		-	-	-	-	-	-	30	-	-	-	-	-	30	
Total Overhead Costs					30		-	-	-	-	-	-	30	-	-	-	-	-	30	
Total Expenditure					104		-	-	18	-	9	9	9	39	18	-	3	3	110	
Cash Flow (before financing) (cumulated)					1,397	(2,000)	-	-	132	150	141	141	141	(39)	132	150	147	147	1,240	3,800
Financing Plan																				
Equity Capital					1,000	1,000														
Loan					1,000	1,000														
Total Financing					2,000	2,000														
Finance Charges ¹²																				
Interest	Percent	month	1.50%				15	15	15	14	14	13	12	11	11	10	9	8	146	
Principal	Periods	months	20.0	50.0	1,000		-	-	50	50	50	50	50	50	50	50	50	50	500	(500)
Total Finance Charges							15	15	65	64	64	63	62	61	61	60	59	58	646	(500)
Cash Flow (after financing)							(15)	(15)	67	86	77	78	79	(101)	72	90	88	89	594	4,300
Family Labour Input	Days	Month	5.0	-	60		5	5	5	5	5	5	5	5	5	5	5	5	60	60
Return to Family Labour							(3)	(3)	13	17	15	16	16	(20)	14	18	18	18	10	72

Source: Cost Benefit Analysis (CBA) Study - Field Verification.

¹ In kid purchase price of adult female, with life expectancy estimated at five years.

² Finance charges calculated at a monthly interest of 1.5% on outstanding loan, with the loan repaid over 20 months over 2 years.

Financial Internal Rate of Return (FIRR) (2,000) - - 132 150 141 141 141 (39) 132 150 147 3,947 9%

Table AN10.11 Income Generating Activity: Irrigation Pump B - SHG Group (Gujarat, Village Jadha).

Item	Units	Period	Quantity (No)	Unit Price (Rs)	Value (Rs/Period)	IGA Asset	Month 1 Sep-03	Month 2 Oct-03	Month 3 Nov-03	Month 4 Dec-03	Month 5 Jan-04	Month 6 Feb-04	Month 7 Mar-04	Month 8 Apr-04	Month 9 May-04	Month 10 Jun-04	Month 11 Jul-04	Month 12 Aug-04	Total	IGA Asset
Capital Investment \1																				
Diesel Engine (10 HP)	No		1.0	14,000.0	14,000	14,000														12,000
Irrigation Pump	No		1.0	6,000.0	6,000	6,000														5,143
Irrigation Pipes	Sum		1.0	2,000.0	2,000	2,000														1,600
Total Capital Investment					22,000	22,000														18,743
Sales Income \2																				
October Hiring	Hours	Month	43.0	85.0	3,655		-	3,655	-	-	-	-	-	-	-	-	-	-	-	3,655
November Hiring	Hours	Month	40.0	85.0	3,400		-	-	3,400	-	-	-	-	-	-	-	-	-	-	3,400
December Hiring	Hours	Month	26.0	85.0	2,210		-	-	-	2,210	-	-	-	-	-	-	-	-	-	2,210
Total Sales Income					9,265	-	-	3,655	3,400	2,210	-	-	-	-	-	-	-	-	-	9,265
Expenditure																				
Direct Costs																				
Engine oil	Litre	-	8.1	80.0	648		-	216	216	216	-	-	-	-	-	-	-	-	-	648
Diesel Fuel	Litre	-	75.0	28.0	2,100		-	700	700	700	-	-	-	-	-	-	-	-	-	2,100
Transport	Sum	-	1.0	750.0	750		-	250	250	250	-	-	-	-	-	-	-	-	-	750
Operator fee (Jankar)	Hour	-	109.0	10.0	1,090		-	430	400	260	-	-	-	-	-	-	-	-	-	1,090
Total Direct Costs					4,588	-	-	1,596	1,566	1,426	-	-	-	-	-	-	-	-	-	4,588
Overhead Costs																				
Spares and repairs	Sum	-	1.0	400.0	400		-	200	200	-	-	-	-	-	-	-	-	-	-	400
Total Overhead Costs					400	-	-	200	200	-	-	-	-	-	-	-	-	-	-	400
Total Expenditure					4,988	-	-	1,796	1,766	1,426	-	-	-	-	-	-	-	-	-	4,988
Cash Flow (before financing)					4,277	(22,000)	-	1,859	1,634	784	-	-	-	-	-	-	-	-	-	4,277
Financing Plan																				
Equity Capital					2,000	2,000														
Loan					20,000	20,000														
Total Financing					22,000	22,000														
Finance Charges \3																				
Interest	Percent	Month	1.50%				300	300	285	270	255	240	240	240	240	240	240	240	240	3,090
Principal	Periods	Months	20.0				-	1,000	1,000	1,000	1,000	-	-	-	-	-	-	-	-	240
Total Financing							300	1,300	1,285	1,270	1,255	240	240	240	240	240	240	240	240	480
Cash Flow (after financing)						-	(300)	559	349	(486)	(1,255)	(240)	(240)	(240)	(240)	(240)	(240)	(240)	(480)	(3,053)
Family Labour Input	Days	Month	3.0	10.0	30.0		-	10	10	10	-	-	-	-	-	-	-	-	-	30
Return to Family Labour							-	56	35	(49)	-	-	-	-	-	-	-	-	-	(102)

Source: Cost Benefit Analysis (CBA) Study - Field Verification.

\1 Depreciation of diesel engine and pump over seven years and irrigation pipes over 5 years.

\2 Based on jankar field records.

\3 Finance charges calculated at a monthly interest of 1.5% on the outstanding loan, with the loan repaid over 5 years.

Financial Internal Rate of Return (FIRR) (22,000) - 1,859 1,634 784 - - - - - - - - 18,743 0%

Table AN10.12 Income Generating Activity: Irrigation Pump C - SHG Group (M Pradesh, Village Kadwapada).

Item	Units	Period	Quantity (No)	Unit Price (Rs)	Value (Rs/Period)	IGA Asset	Month 1 Sep-04	Month 2 Oct-04	Month 3 Nov-04	Month 4 Dec-04	Month 5 Jan-05	Month 6 Feb-05	Month 7 Mar-05	Month 8 Apr-05	Month 9 May-05	Month 10 Jun-05	Month 11 Jul-05	Month 12 Aug-05	Total	IGA Asset	
Capital Investment \1																					
Honda Diesel Engine	No	N/A	1	20,000.0	20,000	20,000														17,143	
Irrigation Pump	No	N/A	1	5,000.0	5,000	5,000														4,286	
Irrigation Pipes	No	N/A	1	3,000.0	3,000	3,000														2,400	
Total Capital Investment					28,000	28,000														23,829	
Sales Income																					
Hire Income (members) \2	Hrs	Year	171	25.0	4,280		-	1,960	1,480	580	120	140	-	-	-	-	-	-	-	4,280	
Hire Income (non members)	Hrs	Year	43	40.0	1,712		-	784	592	232	48	56	-	-	-	-	-	-	-	1,712	
Total Sales Income					5,992	-	-	2,744	2,072	812	168	196	-	-	-	-	-	-	-	5,992	
Expenditure																					
Direct Costs																					
Priming fuel and oil	Sum	Year	1	1,444.0	1,444		-	661	499	196	40	47	-	-	-	-	-	-	-	1,444	
Jankar Costs	Sum	Year	214	5.0	1,070		-	490	370	145	30	35	-	-	-	-	-	-	-	1,070	
Total Direct Costs					1,444	-	-	661	499	196	40	47	-	-	-	-	-	-	-	1,444	
Overhead Costs																					
Repairs	Sum	Year	1	587.5	588		-	118	118	118	118	118	-	-	-	-	-	-	450	588	
Total Overhead Costs					588	-	-	118	118	118	118	118	-	-	-	-	-	-	450	588	
Total Expenditure					2,032	-	-	779	617	313	158	165	-	-	-	-	-	-	450	2,032	
Cash Flow (before financing)					3,961	(28,000)	-	1,965	1,455	499	10	31	-	-	-	-	-	-	(450)	3,961	23,829
Financing Plan																					
Equity Capital					3,000	3,000															
Loan					25,000	25,000															
Total Financing					28,000	28,000															
Finance Charges \3																					
Interest	Percent	Month	1.5%				-	375	375	360	345	330	315	300	300	300	300	300	2,100		
Principal	Periods	Months	25.0	1,000			-	1,000	1,000	1,000	1,000	1,000	-	-	-	-	-	-	5,000	(20,000)	
Total Financing							-	1,375	1,375	1,360	1,345	1,330	315	300	300	300	300	300	7,100	(20,000)	
Cash Flow (after financing)							-	590	80	(861)	(1,335)	(1,299)	(315)	(300)	(300)	(300)	(300)	(750)	(3,140)	3,829	
Family Labour Input \4	Days	Month	N/A	-	NA		-	-	-	-	-	-	-	-	-	-	-	-	-	-	
Return to Family Labour							-	-	-	-	-	-	-	-	-	-	-	-	-	-	

Source: Cost Benefit Analysis (CBA) Study - Field Verification.

\1 Depreciation of diesel engine and pump over seven years and irrigation pipes over 5 years.

\2 Total hours over 5 months rabi period

Members

Non members

\3 Repayment over five years, at five months per year (25 periods), interest charged at 1.5% per month on the outstanding loan balance.

\4 Jankar fees included in direct costs.

Financial Internal Rate of Return (FIRR)

(28,000) - 1,965 1,455 499 10 31 - - - - - 23,379 0%



AN11 | **Incremental Benefits**

AN11 | Incremental Benefits

Introduction

The identification of the overall arable cultivated area, within a village that has benefited from the crop technology development activity, was difficult to ascertain with any degree of certainty. Similarly, areas directly benefiting exclusively from SWC and WRD activities were again difficult to define and separate from the benefit derived from the village crop technology activity. Estimation of yields, variable, overhead and labour costs associated with the three activities would require a very detailed survey over a representative sample of villages. This was not practicable in terms of the financial and human resources allocated or within the reporting timescale of the present study. It was proposed in the CBA scoping report^{1/} and confirmed by the CBA consultants, that use should be made of the primary data collected during the GVT 'Net Income Study.'^{2/} This recommendation was accepted at the inception workshop (September 2004).

Crop Incremental Benefits

For the Net Income Study, crop output data (yield, byproduct and price) were recorded on a unit area basis but variable costs and labour costs recorded on a household basis. Thus data was available on a unit area or household basis. No attempt was made to differentiate between areas under SWC or WRD activities. In using this data to measure the benefits, it has to be assumed that the randomly selected household sample was representative of all three-development activities. Incremental benefits for the three development activities are based on a household net margin adjusted for the well being ranking (WBR) of the village at the time of entry (village profile) multiplied by the number of households, in the village, participating the programme. The quantified benefits from all three development activities are therefore measured as the crop net margin^{3/} for the 'with/after project' situation less the 'without/before project' situation, the incremental benefit. The number of participating households within the village in relation to the overall investment in these three development activities will have a substantial effect on the cost benefit analysis and the resulting village economic internal rate of return (EIRR) and the net present value (NPV) of the net incremental benefit stream.

The sample for the income survey was conducted in one randomly selected phase two village in each of the three GVT operational states of Gujarat, Madhya Pradesh and Rajasthan, and covered all four of GVT household WBR types. The study fieldwork was carried out in September 2002 for the *khalif* crop and

^{1/} Scoping Mission: Cost-Benefit and Cost-Effectiveness Study, March 2004.

^{2/} Study of Impact of WIRFP on Net Incomes of Targeted Households, January 2004.

^{3/} Crop net margin represents the crop output (crop and byproduct) less the variable costs of production, overhead costs and family labour measured at economic farm gate prices.

February 2003 for the *rabi* crop, and data for both the current (after / with project) situation and the before (without project) situation was recorded.

As part of this study, a survey, again covering all WBR type households, was conducted in a village where activities had been conducted under phase one of the project.

Details of the household incremental net margins for the 'before/without' and 'after/with' project situation for the *khalif* and *rabi* crops for the phase two villages in Gujarat, Madhya Pradesh and Rajasthan are given in Annex 11 and summarised in Table A11.1. The phase two results are compared with the results obtained by the phase one household incremental net margins. In order to prepare the comparison between the one phase one and three phase two villages from the three different states, it has been assumed that the four WBR types are equally distributed. For the analysis of the individual village, the WBR, as determined for the village profile, has been used.

The results highlight two key issues namely the significant difference between the incremental crop net margin from Rajasthan (Rs 2,656 per household) when compared with that of Gujarat (Rs 6,435 per household) and Madhya Pradesh (Rs 6,796 per household) and the substantial difference when compared with the equivalent figure for the phase one village (Rs 10,102 per household). These differences in the incremental household net margins based on the primary data extracted from the Net Income Study, were highlighted during the final presentations to DFIDI, GVT and IFFDC. There appeared little justification to differentiate between the results from the three GVT operational areas therefore it was proposed that the crop benefits should be averaged across the three states to give an average per WBR type but that this average should be weighted by the individual village WBR as determined by the village profile.

It was suggested that the differential between the phase one and phase two household incremental crop net margin reflected the selection, in phase two, of villages with significantly poorer resources. However, it is reasonable to assume that the household incremental crop net margin of the phase two villages can be expected to increase to the net margin levels approaching those recorded for the phase one households given a longer period for the adoption of crop technology in association with SWC and WRD interventions. The effect of this further increase over and above the net margin recorded in the phase two villages is tested in the sensitivity analysis.

Table AN11.1: Incremental Crop Net Margin per Household Rs/HH (Economic)

Phase	Gujarat		M Pradesh		Rajasthan		Average
	(%)	(Rs/HH)	(%)	(Rs/HH)	(%)	(Rs/HH)	(Rs/HH)
Phase I Village			Naganwot Choti				
WBR - Weighted				10,102			10,102
Phase II Villages	Lakhana		Bagoli		Merana		Average
WBR - Very Poor	12	3,380	25	2,434	12	3,286	2,193
	12	515		-	12	1,351	
WBR - Poor	25	6,479	25	2,824	38	3,367	4,223
WBR - Moderate	25	4,955	25	5,319	-	-	5,136
WBR - Better Off	25	12,359	25	16,608	38	1,927	10,298
WBR - Weighted	100	6,435	100	6,796	100	2,565	5,463

Source: Cost Benefit Analysis Study Jan 2005 estimates (based on primary data collected for the Net Income Study).

WBR = Well Being Ranking

Livestock Incremental Benefits

Details of the household incremental livestock net margins for the 'before/without' and 'after/with' project situation for the phase two villages in Gujarat, Madhya Pradesh and Rajasthan are given in Annex 11 and summarised in Table A11.2 and compared with results from the phase one household incremental livestock net margin. As with the crop net margin, in order to prepare the comparison between the one phase one and three phase two villages from the three different states, it has been assumed that the four WBR types are equally distributed in deriving an average incremental crop net margin.

In contrast to the household crop net margin results, there is relatively little variation between the three phase two villages from the three states of Gujarat, Madhya Pradesh and Rajasthan and again little difference between the phase one village and the phase two villages. In estimating the livestock benefits, for reasons of consistency, the average value per WBR type for the three phase two villages has been used but weighted by the individual village WBR as per the village profile.

Livestock numbers owned and estimates of their market values costs were recorded in the survey and the resulting herd valuation calculated for the without and with project situations. The resulting average annual increase in the herd valuation over a five period was determined. This increase has not been incorporated into the annual increment benefit stream, as it is unrealistic to assume that it would continue on an annual basis during the period of the project analysis. It has, however, been incorporated as a sensitivity test.

Table A11.2: Incremental Livestock Net Margin per Household Rs/HH (Economic)

Phase	Gujarat		M Pradesh		Rajasthan		Average
	(%)	(Rs/HH)	(%)	(Rs/HH)	(%)	(Rs/HH)	(Rs/HH)
Phase I Village			Naganwot Choti				
WBR - Weighted				1,409			1,409
Phase II Villages	Lakhana		Bagoli		Merana		Average
WBR – Very Poor	12	2,316	25	3,185	12	(1,325)	1,297
	13	795		-	12	1,515	
WBR - Poor	12	1,950	25	2,695	38	542	2,157
	13	3,440					
WBR - Moderate	25	1,140	25	1,289	-	-	1,214
WBR – Better Off	25	4,955	25	440	38	4,670	3,355
WBR - Weighted	100	2,586	100	1,902	100	1,978	2,006

Source: Cost Benefit Analysis Study Jan 2005 estimates (based on primary data collected for the Net Income Study)

WBR = Well Being Ranking

Conversion of Financial Household Net Margins to Economic Values

It is assumed that crop inputs and outputs are locally traded and that as such the financial prices recorded during the interviews for the Net Income Study generally reflect their economic values. Possible exceptions include the cotton crop and fertiliser inputs but effects were considered insignificant and disaggregation of data to make such adjustment was considered impractical.

Seasonal agricultural wage rates were determined during the collection of primary data for the Net Income Study. For crop activities, the recorded wage rates ranged from Rs 40 to 50 per person day during the *khalif* season and Rs 20 to 40 during the *rabi* season. It is concluded that these rates reflect the real value of rural seasonal labour and have as such been incorporated into the calculation of household crop net margins used in the economic analysis.

Labour requirement for the livestock operations was generally less well recorded and reflects a general view in the household that there is no real financial cost for such family labour. In deriving an economic value for family labour (adult or child) an indicative person day requirement has been estimated, to take account of the level of activity, and valued at Rs 25 per person day. This reflects an average annual value in rural areas where under employment is prevalent, particularly in the *rabi* season, and extensive use is made of children's labour.

Lessons Learnt

The identification and quantification of project benefits raised a number of issues, which are listed below:

- The current emphasis of the M and E programme has been to measure primarily physical achievements. This study has highlighted the need for the

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identification of key indicators, physical and/or financial, necessary to verify and quantify in financial terms the incremental benefits achieved by project.

- The existing data (Net Income Study) used to quantify benefits proved very general in relation to determining the specific incremental benefits from the crop technology, SWC and WRD activities.
- It is suggested that a small number of more detailed individual village case studies could be might be conducted to determine more accurately the specific crop areas benefiting from SWC and WRD development intervention and that crop area budgets, as opposed to household budgets, based on focal group discussions, applied to the specific area.

WIRFP - Phase II - Cost Benefit Analysis Study

Tables AN11.0 Incremental Benefits

Tables AN11.1 GVT Net Income Study Net Margin Data - Summary

- Table AN11.1.1 GVT Net Income Survey Summary: Phase I and II - Summary of Incremental Crop Net Margin per Household (Economic).
- Table AN11.1.2 GVT Net Income Survey Summary: Phase I and II - Detail of Incremental Crop Net Margin per Household (Economic).
- Table AN11.1.3 GVT Net Income Survey Summary: Phase I and II - Weighted Crop Net Margin per Household and Area (Economic).
- Table AN11.1.4 GVT Net Income Survey Summary: Phase I and II - Summary of Incremental Livestock Net Margin per Household (Economic).
- Table AN11.1.5 GVT Net Income Survey Summary: Phase I and II - Detail of Incremental Livestock Net Margin per Household (Economic).

Table AN11.1.1 GVT Net Income Survey Summary: Phase I and II - Summary of Incremental Crop Net Margin per Household (Economic).

Well Being Ranking	Gujarat		Madhya Pradesh		Rajasthan		Mean
	Weight (%)	Increment (Rs/HH)	Weight (%)	Increment (Rs/HH)	Weight (%)	Increment (Rs/HH)	Increment (Rs/HH)
Phase I - Village Madhya Pradesh - WBR Weighted Data Households Surveyed Household Crop Net Margin (Rs)	Naganwot Choti						
				1			1
				#REF!			#REF!
Phase II - Village Very Poor Households Surveyed Household Crop Net Margin (Rs) Household Crop Net Margin (Rs)	Lakhana		Bagoli		Merana		
		2		1		2	5
	12.5%	3,380.4	25.0%	2,433.5	12.5%	3,286.0	
	12.5%	(548.5)			12.5%	1,350.9	1,980.5
Poor Households Surveyed Household Crop Net Margin (Rs) Household Crop Net Margin (Rs)		2		1		1	3
	0.0%	(5,904.4) \1	25.0%	2,824.0	37.5%	3,367.0	4,386.0
	25.0%	6,967.0					
Moderate Households Surveyed Household Crop Net Margin (Rs)		1		1		-	2
	25.0%	4,955.2	25.0%	5,317.5	0.0%	-	5,136.4
Better Off Households Surveyed Household Crop Net Margin (Rs)		1		1		1	3
	25.0%	12,358.5	25.0%	16,608.0	37.5%	1,926.5	10,297.7
Phase II - WBR Weighted Data Household Crop Net Margin (Rs)	100%	6,424.2	100%	6,795.7	100%	2,564.7	5,450.1

Source: Study of Impact of WIRFP on Net Incomes of Target Households, Jan 2004.

WBR = GVT Well Being Ranking

\1 Excluded from analysis.

Table AN11.1.2 GVT Net Income Survey Summary: Phase I and II - Detail of Incremental Crop Net Margin per Household (Economic).

Well Being Ranking	Weight (%)	Before			After			Increment		
		Khalif	Rabi	Total	Khalif	Rabi	Total	Khalif	Rabi	Total
Phase I - Village										
Madhya Pradesh - WBR Weighted Data										
Households Surveyed		6								
Household Crop Net Margin (Rs)	100%	#REF!	#REF!	#REF!	#REF!	#REF!	#REF!	#REF!	#REF!	#REF!
Phase II - Village										
Very Poor										
Households Surveyed		5								
G Household Crop Net Margin (Rs)		936.0	-	936.0	3,159.5	1,156.9	4,316.4	2,223.5	1,156.9	3,380.4
G Household Crop Net Margin (Rs)		3,305.5	-	3,305.5	2,757.0	-	2,757.0	(548.5)	-	(548.5)
M Household Crop Net Margin (Rs)		239.5	-	239.5	2,673.0	-	2,673.0	2,433.5	-	2,433.5
R Household Crop Net Margin (Rs)		(15.0)	-	(15.0)	206.0	3,065.0	3,271.0	221.0	3,065.0	3,286.0
R Household Crop Net Margin (Rs)		(293.0)	512.5	219.5	453.4	1,117.0	1,570.4	746.4	604.5	1,350.9
Average	25%	834.6	102.5	937.1	1,849.8	1,067.8	2,917.6	1,015.2	965.3	1,980.5
Poor										
Households Surveyed		3								
G Household Crop Net Margin (Rs)		2,810.0	-	2,810.0	9,167.0	610.0	9,777.0	6,357.0	610.0	6,967.0
M Household Crop Net Margin (Rs)		128.0	-	128.0	2,952.0	-	2,952.0	2,824.0	-	2,824.0
R Household Crop Net Margin (Rs)		(1,025.0)	-	(1,025.0)	2,290.0	52.0	2,342.0	3,315.0	52.0	3,367.0
Average	25%	637.7	-	637.7	4,803.0	220.7	5,023.7	4,165.3	220.7	4,386.0
Moderate										
Households Surveyed		2								
G Household Crop Net Margin (Rs)		1,953.0	178.5	2,131.5	3,778.2	3,308.5	7,086.7	1,825.2	3,130.0	4,955.2
M Household Crop Net Margin (Rs)		35.0	-	35.0	3,644.5	1,708.0	5,352.5	3,609.5	1,708.0	5,317.5
Average	25%	994.0	89.3	1,083.3	3,711.4	2,508.3	6,219.6	2,717.4	2,419.0	5,136.4
Better Off										
Households Surveyed		3								
G Household Crop Net Margin (Rs)		7,892.0	5,270.0	13,162.0	19,402.5	6,118.0	25,520.5	11,510.5	848.0	12,358.5
M Household Crop Net Margin (Rs)		4,485.1	-	4,485.1	21,093.1	-	21,093.1	16,608.0	-	16,608.0
R Household Crop Net Margin (Rs)		6,165.5	-	6,165.5	8,092.0	-	8,092.0	1,926.5	-	1,926.5
Average	25%	6,180.9	1,756.7	7,937.5	16,195.9	2,039.3	18,235.2	10,015.0	282.7	10,297.7
Phase II - WBR Weighted Data										
Household Crop Net Margin (Rs)	100%	2,161.8	487.1	2,648.9	6,640.0	1,459.0	8,099.0	4,478.2	971.9	5,450.1

Source: Study of Impact of WIRFP on Net Incomes of Target Households, Jan 2004.

WBR = GVT Well Being Ranking

\1 Excluded from analysis.

Table AN11.1.3 GVT Net Income Survey Summary: Phase I and II - Weighted Crop Net Margin per Household and Area (Economic).

Item	WBR (%)	Before / Without Project			After / With Project			Increment		
		Khalif	Rabi	Total	Khalif	Rabi	Total	Khalif	Rabi	Total
Unit Area Analysis (Economic):										
Phase I	100%									
Madhya Pradesh - WBR Weighted Data										
Household Crop Net Margin (Rs)		#REF!	#REF!	#REF!	#REF!	#REF!	#REF!	#REF!	#REF!	#REF!
Net Margin / bigha		#REF!	#REF!	#REF!	#REF!	#REF!	#REF!	#REF!	#REF!	#REF!
Net Margin / hectare \2		#REF!	#REF!	#REF!	#REF!	#REF!	#REF!	#REF!	#REF!	#REF!
Phase II										
Gujarat - WBR Weighted Data	33.3%									
Household Crop Net Margin (Rs)		3,693.9	1,362.1	5,056.1	8,826.5	2,653.7	11,480.2	5,132.6	1,291.6	6,424.2
Net Margin / bigha		982.2	340.5	1,322.7	2,247.3	656.2	2,894.8	1,265.1	315.7	1,580.8
Net Margin / hectare \2		4,911.1	1,702.7	6,613.7	11,236.7	3,281.0	14,473.9	6,325.7	1,578.4	7,860.1
Madhya Pradesh - WBR Weighted Data	33.3%									
Household Crop Net Margin (Rs)		1,221.9	-	1,221.9	7,590.6	427.0	8,017.6	6,368.7	427.0	6,795.7
Net Margin / bigha		167.7	-	167.7	1,198.3	85.4	1,283.7	1,030.6	85.4	1,116.0
Net Margin / hectare \2		838.4	-	838.4	5,991.6	427.0	6,418.6	5,153.1	427.0	5,580.1
Rajasthan - WBR Weighted Data	33.3%									
Household Crop Net Margin (Rs)		1,889.2	64.1	1,953.3	3,975.7	542.3	4,517.9	2,086.5	478.2	2,564.7
Net Margin / bigha		49.8	42.7	92.5	429.7	304.1	733.9	379.9	261.4	641.3
Net Margin / hectare \2		249.0	213.5	462.6	2,148.6	1,520.7	3,669.3	1,899.5	1,307.2	3,206.7
Phase II - WBR Weighted Data	100%									
Household Crop Net Margin (Rs)		2,268.1	475.3	2,743.5	6,796.9	1,207.5	8,004.5	4,528.8	732.2	5,261.0
Net Margin / bigha		399.9	127.7	527.6	1,291.7	348.5	1,637.3	891.8	220.8	1,112.6
Net Margin / hectare \2		1,999.3	638.7	2,638.0	6,458.3	1,742.7	8,186.4	4,459.0	1,104.1	5,548.5

Source: Study of Impact of WIRFP on Net Incomes of Target Households, Jan 2004.

WBR = GVT Well Being Ranking

\1 One hectare equivalent to bigha = 5.0

Table AN11.1.4 GVT Net Income Survey Summary: Phase I and II - Summary of Incremental Livestock Net Margin per Household (Economic).

Well Being Ranking	Gujarat		Madhya Pradesh		Rajasthan		Mean
	Weight (%)	Increment (Rs/HH)	Weight (%)	Increment (Rs/HH)	Weight (%)	Increment (Rs/HH)	Increment (Rs/HH)
Phase I - Village Madhya Pradesh - WBR Weighted Data Households Surveyed Household Livestock Net Margin (Rs)	Naganwot Choti						
				6			6
				#REF!			#REF!
Phase II - Village Very Poor Households Surveyed Household Livestock Net Margin (Rs) Household Livestock Net Margin (Rs)	Lakhana		Bagoli		Merana		
		2		1		2	5
	12.5%	2,316.0	25.0%	3,185.0	12.5%	(1,325.0)	
	12.5%	795.0			12.5%	1,515.0	1,297.2
Poor Households Surveyed Household Livestock Net Margin (Rs) Household Livestock Net Margin (Rs)		2		1		1	4
	12.5%	1,950.0	25.0%	2,695.0	37.5%	542.0	2,156.8
	12.5%	3,440.0		-		-	
Moderate Households Surveyed Household Livestock Net Margin (Rs)		1		1		-	2
	25.0%	1,140.0	25.0%	1,288.8	0.0%	-	1,214.4
Better Off Households Surveyed Household Livestock Net Margin (Rs)		1		1		1	3
	25.0%	4,955.0	25.0%	440.0	37.5%	4,670.0	3,355.0
Phase II - WBR Weighted Data Household Livestock Net Margin (Rs)	100%	2,586.4	100%	1,902.2	100%	1,978.3	2,005.8

Source: Study of Impact of WIRFP on Net Incomes of Target Households, Jan 2004.

WBR = GVT Well Being Ranking

\1 Excluded from analysis.

Table AN11.1.5 GVT Net Income Survey Summary: Phase I and II - Detail of Incremental Livestock Net Margin per Household (Economic).

Well Being Ranking	Weight (%)	Before / Without Project		After / With Project		Increment \1	
		Herd Value	Net Margin	Herd Value	Net Margin	Herd Value	Net Margin
Phase I - Village Madhya Pradesh - WBR Weighted Data Households Surveyed Household Livestock Net Margin (Rs)	100%	6 #REF!	#REF!	#REF!	#REF!	#REF!	#REF!
Phase II - Village Very Poor Households Surveyed		5					
G Household Livestock Net Margin (Rs)		3,400	(1,144.0)	24,300	1,172.0	4,180	2,316.0
G Household Livestock Net Margin (Rs)		880	(135.0)	2,400	660.0	304	795.0
M Household Livestock Net Margin (Rs)		5,200	(175.0)	5,650	3,010.0	90	3,185.0
R Household Livestock Net Margin (Rs)		15,000	2,565.0	11,000	1,240.0	(800)	(1,325.0)
R Household Livestock Net Margin (Rs)		4,300	(365.0)	11,500	1,150.0	1,440	1,515.0
Average	25%	5,756	149.2	10,970	1,446.4	1,043	1,297.2
Poor Households Surveyed		4					
G Household Livestock Net Margin (Rs)		20,000	1,970.0	35,000	3,920.0	3,000	1,950.0
G Household Livestock Net Margin (Rs)		14,560	70.0	21,990	3,510.0	1,486	3,440.0
M Household Livestock Net Margin (Rs)		7,000	20.0	25,825	2,715.0	3,765	2,695.0
R Household Livestock Net Margin (Rs)		10,950	1,348	21,100	1,890	2,030	542.0
Average	25%	13,128	852.0	25,979	3,008.8	2,570	2,156.8
Moderate Households Surveyed		2					
G Household Livestock Net Margin (Rs)		19,200	260.0	38,800	1,400.0	3,920	1,140.0
M Household Livestock Net Margin (Rs)		7,850	7,810.3	15,240	9,099.0	1,478	1,288.8
Average	25%	13,525	4,035.1	27,020	5,249.5	2,699	1,214.4
Better Off Households Surveyed		3					
G Household Livestock Net Margin (Rs)		21,000	(6,505.0)	56,400	(1,550.0)	7,080	4,955.0
M Household Livestock Net Margin (Rs)		5,800	5,040.0	38,900	5,480.0	6,620	440.0
R Household Livestock Net Margin (Rs)		11,300	(880.0)	30,320	3,790.0	3,804	4,670.0
Average	25%	12,700	(781.7)	41,873	2,573.3	5,835	3,355.0
Phase II - WBR Weighted Data Household Livestock Net Margin (Rs)	100%	11,277	1,063.7	26,461	3,069.5	3,037	2,005.8

Source: Study of Impact of WIRFP on Net Incomes of Target Households, Jan 2004.

\1 Herd value increment averaged over five years.

WBR = GVT Well Being Ranking

WIRFP - Phase II - Cost Benefit Analysis Study

Tables AN11.0 Incremental Benefits

Tables AN11.2 Net Income Study Crop and Livestock Net Margin Data: Phase 1 - Madhya Pradesh - Village Naganwat Choti

- Table AN11.2.1 Madhya Pradesh - Village Naganwat Choti: Weighted Crop Net Margin Summary (Economic).
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- Table AN11.2.3 A. Madhya Pradesh - Village Naganwat Choti: Summary of Crop Net Margin per Household and Area.
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D. Madhya Pradesh - Village Naganwat Choti: Crop Net Margin per Household and Area - WBR - Poor (1).
E. Madhya Pradesh - Village Naganwat Choti: Crop Net Margin per Household and Area - WBR - Poor (2).
F. Madhya Pradesh - Village Naganwat Choti: Crop Net Margin per Household and Area - WBR - Moderate.
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- Table AN11.2.9 Madhya Pradesh - Village Naganwat Choti: Individual Household Detailed Data: WBR - Better Off.
- Table AN11.2.10 Madhya Pradesh - Village Naganwat Choti: Individual Household Livestock Detailed Data: WBR - Very Poor (1).
- Table AN11.2.11 Madhya Pradesh - Village Naganwat Choti: Individual Household Livestock Detailed Data: WBR - Very Poor (2).
- Table AN11.2.12 Madhya Pradesh - Village Naganwat Choti: Individual Household Livestock Detailed Data: WBR - Poor (1).
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- Table AN11.2.15 Madhya Pradesh - Village Naganwat Choti: Individual Household Livestock Detailed Data: WBR - Better Off.

Table AN11.2.1

Madhya Pradesh - Village Naganwat Choti: Weighted Crop Net Margin Summary (Economic).

Item		Before / Without Project			After / With Project			Increment		
		Khalif	Rabi	Total	Khalif	Rabi	Total	Khalif	Rabi	Total
Household and Unit Area Analysis										
WBR - Very Poor 1	12.5%									
Household Crop Net Margin (Rs)		968	535	1,503	4,093	2,149	6,242	3,125	1,614	4,739
Area Planted (bigha)		3.0	2.0	5.0	3.0	3.0	6.0	-	1.0	1.0
Crop Net Margin / bigha		323	178	501	1,364	716	2,081	1,042	538	1,580
Crop Net Margin / hectare \2		1,613	892	2,505	6,822	3,582	10,403	5,208	2,690	7,898
WBR - Very Poor 2	12.5%									
Household Crop Net Margin (Rs)		(96)	-	(96)	3,640	1,189	4,829	3,736	1,189	4,924
Area Planted (bigha)		3.0	-	3.0	3.0	3.0	6.0	-	3.0	3.0
Crop Net Margin / bigha		(32)	-	(32)	1,213	396	1,610	1,245	396	1,641
Crop Net Margin / hectare \2		(159)	-	(159)	6,067	1,981	8,048	6,226	1,981	8,207
WBR - Poor 1	12.5%									
Household Crop Net Margin (Rs)		199	1,005	1,204	13,152	7,092	20,244	12,953	6,087	19,040
Area Planted (bigha)		10.0	5.0	15.0	10.0	10.0	20.0	-	5.0	5.0
Crop Net Margin / bigha		20	201	221	1,315	709	2,024	1,295	508	1,803
Crop Net Margin / hectare \2		100	1,005	1,105	6,576	3,546	10,122	6,477	2,541	9,017
WBR - Poor 2	12.5%									
Household Crop Net Margin (Rs)		773	310	1,083	7,120	4,289	11,409	6,348	3,979	10,327
Area Planted (bigha)		5.0	1.0	6.0	5.0	3.0	8.0	-	2.0	2.0
Crop Net Margin / bigha		155	62	217	1,424	858	2,282	1,270	796	2,065
Crop Net Margin / hectare \2		773	310	1,083	7,120	4,289	11,409	6,348	3,979	10,327
WBR - Moderate	25%									
Household Crop Net Margin (Rs)		986	3,385	4,371	9,458	5,195	14,653	8,471	1,810	10,281
Area Planted (bigha)		6.0	4.0	10.0	9.0	4.0	13.0	3.0	-	3.0
Crop Net Margin / bigha		164	846	1,011	1,051	1,299	2,350	886	453	1,339
Crop Net Margin / hectare \2		822	4,231	5,053	5,254	6,494	11,748	4,432	2,263	6,695
WBR - Better Off	25%									
Household Crop Net Margin (Rs)		2,778	937	3,715	4,915	9,560	14,475	2,137	8,623	10,760
Area Planted (bigha)		5	3	8	5	5	10	-	2	2
Crop Net Margin / bigha		556	312	868	983	1,912	2,895	427	1,600	2,027
Crop Net Margin / hectare \2		2,778	1,562	4,340	4,915	9,560	14,475	2,137	7,998	10,135
WBR - Weighted										
Household Crop Net Margin (Rs)		1,172	1,312	2,483	7,094	5,529	12,622	5,922	4,217	10,139
Crop Net Margin / bigha		238	345	583	1,173	1,138	2,311	935	793	1,728
Crop Net Margin / hectare \2		1,191	1,724	2,915	5,865	5,688	11,553	4,675	3,964	8,639

Source: Study of Impact of WIRFP on Net Incomes of Target Households, Jan 2004.

\1 One hectare equivalent to bigha = 5.0

Table AN11.2.2 Madhya Pradesh - Village Naganwat Choti: Weighted Livestock Net Margin Summary (Economic).

Item	WBR (%)	Before / Without Project		After / With Project		Increment	
		Herd	Net Margin	Herd	Net Margin	Herd \1	Net Margin
Household Livestock Analysis							
Well Being Ranking - Very Poor (1)	12.5%						
Household L'stock Net Margin (financial) (Rs)		1,160	(70.0)	5,900	770.0	948	840.0
Labour Input / Year (person days)			12.0		36.0		24.0
Labour Input (Rs) /2			300.0		900.0		600.0
Household L'stock Net Margin (economic) (Rs)			(370.0)		(130.0)		240.0
Well Being Ranking - Very Poor (2)	12.5%						
Household L'stock Net Margin (financial) (Rs)		-	-	5,400	1,855.0	-	1,855.0
Labour Input / Year (person days)			-		36.0		36.0
Labour Input (Rs) /2			-		900.0		900.0
Household L'stock Net Margin (economic) (Rs)			-		955.0		955.0
Well Being Ranking - Poor (1)	12.5%						
Household L'stock Net Margin (financial) (Rs)		-	-	5,900	2,527.0	1,180	2,527.0
Labour Input / Year (person days)			-		48.0		48.0
Labour Input (Rs) /2			-		1,200.0		1,200.0
Household L'stock Net Margin (economic) (Rs)			-		1,327.0		1,327.0
Well Being Ranking - Poor (2)	12.5%						
Household L'stock Net Margin (financial) (Rs)		4,700	2,265.0	10,600	4,155.0	1,180	1,890.0
Labour Input / Year (person days)			12.0		48.0		36.0
Labour Input (Rs) /2			300.0		1,200.0		900.0
Household L'stock Net Margin (economic) (Rs)			1,965.0		2,955.0		990.0
Well Being Ranking - Moderate	25.0%						
Household L'stock Net Margin (financial) (Rs)		14,700	7,030.0	1,900	3,720.0	1,900	(3,310.0)
Labour Input / Year (person days)			12.0		36.0		24.0
Labour Input (Rs) /2			300.0		900.0		600.0
Household L'stock Net Margin (economic) (Rs)			6,730.0		2,820.0		(3,910.0)
Well Being Ranking - Better Off	25.0%						
Household L'stock Net Margin (financial) (Rs)		15,580	3,600.0	14,600	12,590.0	(196)	8,990.0
Labour Input / Year (person days)			24.0		72.0		48.0
Labour Input (Rs) /2			600.0		1,800.0		1,200.0
Household L'stock Net Margin (economic) (Rs)			3,000.0		10,790.0		7,790.0
Well Being Ranking - Weighted	100%						
Household L'stock Net Margin (financial) (Rs)		8,303	2,931.9	7,600	5,240.9	840	2,309.0
Household L'stock Net Margin (economic) (Rs)			2,631.9		4,040.9		1,409.0

Source: Study of Impact of WIRFP on Net Incomes of Target Households, Jan 2004.

\1 Herd value increment averaged over five years.

\2 Average annual daily value of family labour assumed = Rs/c 25.0

Table AN11.2.3

A. Madhya Pradesh - Village Naganwat Choti: Summary of Crop Net Margin per Household and Area.

Item	Well Being Ranking					
	Very Poor (1)	Very Poor (2)	Poor (1)	Poor (2)	Moderate	Better Off
	<u>Increment</u>	<u>Increment</u>	<u>Increment</u>	<u>Increment</u>	<u>Increment</u>	<u>Increment</u>
	Total	Total	Total	Total	Total	Total
Household Analysis:						
Crop Revenue						
Crop	5,670	8,828	21,470	11,805	11,750	16,530
Residue	2,300	1,995	2,608	1,525	1,835	2,010
Total Crop Revenue	7,970	10,823	24,078	13,330	13,585	18,540
Production Costs						
Variable Costs	2,161	3,771	3,418	2,374	1,774	5,210
Gross Margin (Financial)	5,809	7,052	20,660	10,957	11,811	13,330
Labour Input (person days)	(5)	31	9	8	37	12
Return per Person Day (Rs/p/day)	(1,162)	231	2,296	1,370	319	1,111
Labour Costs (Economic)	1,070	2,128	1,620	630	1,530	2,570
Total Production Costs	3,231	5,899	5,038	3,004	3,304	7,780
Net Margin (Economic) \1	4,739	4,924	19,040	10,327	10,281	10,760
Area planted (bigha)	1	3.0	5.0	2	3.0	2.0
Cropping Intensity (percent)						
Unit Area Analysis (Economic):						
Net Margin / bigha	1,580	1,641	1,803	2,065	1,339	2,027
Net Margin / hectare \2	7,898	8,207	9,017	10,327	6,695	10,135

Source:

Study of Impact of WIRFP on Net Incomes of Target Households, Jan 2004.

Table AN11.2.3

B. Madhya Pradesh - Village Naganwat Choti: Crop Net Margin per Household and Area - WBR - Very Poor (1)

Item	Well Being Ranking - Very Poor (1)								
	Before / Without Project			After / With Project			Increment		
	Khalif	Rabi	Total	Khalif	Rabi	Total	Khalif	Rabi	Total
Household Analysis:									
Crop Revenue									
Crop	1,890	1,500	3,390	4,560	4,500	9,060	2,670	3,000	5,670
Residue	360	90	450	2,150	600	2,750	1,790	510	2,300
Total Crop Revenue	2,250	1,590	3,840	6,710	5,100	11,810	4,460	3,510	7,970
Production Costs									
Variable Costs	772	635	1,407	1,507	2,061	3,568	735	1,426	2,161
Gross Margin (Financial)	1,478	955	2,433	5,203	3,039	8,242	3,725	2,084	5,809
Labour Input (person days)	32	21	53	29	19	48	(3)	(2)	(5)
Return per Person Day (Rs/p/day)	46	45	46	179	160	172	(1,242)	(1,042)	(1,162)
Labour Costs (Economic)	510	420	930	1,110	890	2,000	600	470	1,070
Total Production Costs	1,282	1,055	2,337	2,617	2,951	5,568	1,335	1,896	3,231
Net Margin (Economic) \1	968	535	1,503	4,093	2,149	6,242	3,125	1,614	4,739
Area planted (bigha)	3.0	2.0	5.0	3.0	3.0	6.0	-	1.0	1.0
Cropping Intensity (percent)	100%	67%	167%	100%	100%	200%	0%	50%	33%
Unit Area Analysis (Economic):									
Net Margin / bigha	323	178	501	1,364	716	2,081	1,042	538	1,580
Net Margin / hectare \2	1,613	892	2,505	6,822	3,582	10,403	5,208	2,690	7,898

Source:

Study of Impact of WIRFP on Net Incomes of Target Households, Jan 2004.

\1 Adjusted for labour costs.

\2 One hectare equivalent to bigha =

5.0

Table AN11.2.3

C. Madhya Pradesh - Village Naganwat Choti: Crop Net Margin per Household and Area - WBR - Very Poor (2).

Item	Well Being Ranking - Very Poor (2)								
	Before / Without Project			After / With Project			Increment		
	Khalif	Rabi	Total	Khalif	Rabi	Total	Khalif	Rabi	Total
Household Analysis:									
Crop Revenue									
Crop	613	-	613	5,040	4,400	9,440	4,428	4,400	8,828
Residue	120	-	120	1,440	675	2,115	1,320	675	1,995
Total Crop Revenue	733	-	733	6,480	5,075	11,555	5,748	5,075	10,823
Production Costs									
Variable Costs	418	-	418	1,615	2,574	4,189	1,197	2,574	3,771
Gross Margin (Financial)	315	-	315	4,865	2,501	7,366	4,551	2,501	7,052
Labour Input (person days)	26	-	26	30	27	57	4	27	31
Return per Person Day (Rs/p/day)	12	-	12	162	94	130	1,138	94	231
Labour Costs (Economic)	410	-	410	1,225	1,313	2,538	815	1,313	2,128
Total Production Costs	828	-	828	2,840	3,887	6,727	2,012	3,887	5,899
Net Margin (Economic) \1	(96)	-	(96)	3,640	1,189	4,829	3,736	1,189	4,924
Area planted (bigha)	3.0	-	3.0	3.0	3.0	6.0	-	3.0	3.0
Cropping Intensity (percent)	100%	0%	100%	100%	100%	200%	0%	#DIV/0!	100%
Unit Area Analysis (Economic):									
Net Margin / bigha	(32)	-	(32)	1,213	396	1,610	1,245	396	1,641
Net Margin / hectare \2	(159)	-	(159)	6,067	1,981	8,048	6,226	1,981	8,207

Source:

Study of Impact of WIRFP on Net Incomes of Target Households, Jan 2004.

\1 Adjusted for labour costs.

Gini Curve

Table AN11.2.3

D. Madhya Pradesh - Village Naganwat Choti: Crop Net Margin per Household and Area - WBR - Poor (1).

Item	Well Being Ranking - Poor (1)								
	Before / Without Project			After / With Project			Increment		
	Khalif	Rabi	Total	Khalif	Rabi	Total	Khalif	Rabi	Total
Household Analysis:									
Crop Revenue									
Crop	1,330	2,100	3,430	14,700	10,200	24,900	13,370	8,100	21,470
Residue	225	280	505	2,500	613	3,113	2,275	333	2,608
Total Crop Revenue	1,555	2,380	3,935	17,200	10,813	28,013	15,645	8,433	24,078
Production Costs									
Variable Costs	656	815	1,471	2,528	2,361	4,889	1,872	1,546	3,418
Gross Margin (Financial)	899	1,565	2,464	14,672	8,452	23,124	13,773	6,887	20,660
Labour Input (person days)	39	28	67	42	34	76	3	6	9
Return per Person Day (Rs/p/day)	23	56	37	349	249	304	4,591	1,148	2,296
Labour Costs (Economic)	700	560	1,260	1,520	1,360	2,880	820	800	1,620
Total Production Costs	1,356	1,375	2,731	4,048	3,721	7,769	2,692	2,346	5,038
Net Margin (Economic) \1	199	1,005	1,204	13,152	7,092	20,244	12,953	6,087	19,040
Area planted (bigha)	10.0	5.0	15.0	10.0	10.0	20.0	-	5.0	5.0
Cropping Intensity (percent)	100%	50%	150%	100%	100%	200%			167%
Unit Area Analysis (Economic):									
Net Margin / bigha	20	201	221	1,315	709	2,024	1,295	508	1,803
Net Margin / hectare \2	100	1,005	1,105	6,576	3,546	10,122	6,477	2,541	9,017

Source:

Study of Impact of WIRFP on Net Incomes of Target Households, Jan 2004.

Table AN11.2.3

E. Madhya Pradesh - Village Naganwat Choti: Crop Net Margin per Household and Area - WBR - Poor (2).

Item	Well Being Ranking - Poor (2)								
	Before / Without Project			After / With Project			Increment		
	Khalif	Rabi	Total	Khalif	Rabi	Total	Khalif	Rabi	Total
Household Analysis:									
Crop Revenue									
Crop	1,750	750	2,500	8,680	5,625	14,305	6,930	4,875	11,805
Residue	300	75	375	1,500	400	1,900	1,200	325	1,525
Total Crop Revenue	2,050	825	2,875	10,180	6,025	16,205	8,130	5,200	13,330
Production Costs									
Variable Costs	758	255	1,013	2,220	1,166	3,386	1,463	911	2,374
Gross Margin (Financial)	1,293	570	1,863	7,960	4,859	12,819	6,668	4,289	10,957
Labour Input (person days)	32	13	45	34	19	53	2	6	8
Return per Person Day (Rs/p/day)	40	44	41	234	256	242	3,334	715	1,370
Labour Costs (Economic)	520	260	780	840	570	1,410	320	310	630
Total Production Costs	1,278	515	1,793	3,060	1,736	4,796	1,783	1,221	3,004
Net Margin (Economic) 11	773	310.0	1,083	7,120	4,289	11,409	6,348	3,979	10,327
Area planted (bigha)	5.0	1.0	6.0	5.0	3.0	8.0	-	2.0	2.0
Cropping Intensity (percent)	100%	20%	120%	100%	60%	160%			67%
Unit Area Analysis (Economic):									
Net Margin / bigha	155	62	217	1,424	858	2,282	1,270	796	2,065
Net Margin / hectare 12	773	310	1,083	7,120	4,289	11,409	6,348	3,979	10,327

Source:

Study of Impact of WIRFP on Net Incomes of Target Households, Jan 2004.

Table AN11.2.3

F. Madhya Pradesh - Village Naganwat Choti: Crop Net Margin per Household and Area - WBR - Moderate.

Item	Well Being Ranking - Moderate								
	Before / Without Project			After / With Project			Increment		
	Khalif	Rabi	Total	Khalif	Rabi	Total	Khalif	Rabi	Total
Household Analysis:									
Crop Revenue									
Crop	2,800	4,500	7,300	11,700	7,350	19,050	8,900	2,850	11,750
Residue	360	280	640	1,900	575	2,475	1,540	295	1,835
Total Crop Revenue	3,160	4,780	7,940	13,600	7,925	21,525	10,440	3,145	13,585
Production Costs									
Variable Costs	1,634	1,035	2,669	2,493	1,950	4,443	859	915	1,774
Gross Margin (Financial)	1,526	3,745	5,271	11,108	5,975	17,083	9,581	2,230	11,811
Labour Input (person days)	31	18	49	60	26	86	29	8	37
Return per Person Day (Rs/p/day)	49	208	108	185	230	199	330	279	319
Labour Costs (Economic)	540	360	900	1,650	780	2,430	1,110	420	1,530
Total Production Costs	2,174	1,395	3,569	4,143	2,730	6,873	1,969	1,335	3,304
Net Margin (Economic) \1	986	3,385	4,371	9,458	5,195	14,653	8,471	1,810	10,281
Area planted (bigha)	6.0	4.0	10.0	9.0	4.0	13.0	3.0	-	3.0
Cropping Intensity (percent)	100%	67%	167%	150%	67%	217%	50%	0%	30%
Unit Area Analysis (Economic):									
Net Margin / bigha	164	846	1,011	1,051	1,299	2,350	886	453	1,339
Net Margin / hectare \2	822	4,231	5,053	5,254	6,494	11,748	4,432	2,263	6,695

Source:

Study of Impact of WIRFP on Net Incomes of Target Households, Jan 2004.

\1 Adjusted for labour costs.

Table AN11.2.3

G. Madhya Pradesh - Village Naganwat Choti: Crop Net Margin per Household and Area - WBR - Better Off.

Item	Well Being Ranking - Better Off								
	Before / Without Project			After / With Project			Increment		
	Khalif	Rabi	Total	Khalif	Rabi	Total	Khalif	Rabi	Total
Household Analysis:									
Crop Revenue									
Crop	5,520	2,000	7,520	12,150	11,900	24,050	6,630	9,900	16,530
Residue	570	220	790	-	2,800	2,800	(570)	2,580	2,010
Total Crop Revenue	6,090	2,220	8,310	12,150	14,700	26,850	6,060	12,480	18,540
Production Costs									
Variable Costs	2,452	763	3,215	4,885	3,540	8,425	2,433	2,777	5,210
Gross Margin (Financial)	3,638	1,457	5,095	7,265	11,160	18,425	3,627	9,703	13,330
Labour Input (person days)	51	26	77	57	32	89	6	6	12
Return per Person Day (Rs/p/day)	71	56	66	127	349	207	605	1,617	1,111
Labour Costs (Economic)	860	520	1,380	2,350	1,600	3,950	1,490	1,080	2,570
Total Production Costs	3,312	1,283	4,595	7,235	5,140	12,375	3,923	3,857	7,780
Net Margin (Economic) 11	2,778	937	3,715	4,915	9,560	14,475	2,137	8,623	10,760
Area planted (bigha)	5.0	3.0	8.0	5.0	5.0	10.0	-	2.0	2.0
Cropping Intensity (percent)	100%	60%	160%	100%	100%	200%			67%
Unit Area Analysis (Economic):									
Net Margin / bigha	556	312	868	983	1,912	2,895	427	1,600	2,027
Net Margin / hectare 12	2,778	1,562	4,340	4,915	9,560	14,475	2,137	7,998	10,135

Source:

Study of Impact of WIRFP on Net Incomes of Target Households, Jan 2004.

Table AN11.2.4 Madhya Pradesh - Village Naganwat Choti: Individual Household Detailed Data: WBR - Very Poor (1).

	Unit	Kharif:								Rabi:											
		Without project				With project				Without Project				With Project							
		Area	Qty	Price	Value	Area	Qty	Price	Value	Area	Qty	Price	Value	Area	Qty	Price	Value				
By Economic Class:	VP1	Crop:	Maize/Tuar				Crop:	Maize/Tuar				Crop:	Chick Pea				Crop:	Chick Pea			
Revenue																					
Crop																					
A. Maize	bigha	3	300	3.5	1,050	3	600	6.0	3,600												
B. Tuar	bigha	-	120	7.0	840	-	80	12.0	960	Crop											
										Chick Pea	2	100	15.0	1,500	3	300	15.0	4,500			
By product										By product											
A. Maize	Sum	-	2.3	120	270	-	6.0	300	1,800	Chick Pea	-	0.50	180	90	-	1.5	400	600			
B. Tuar	Sum	-	1	90	90	-	1.8	200	350		-	-	-	-	-	-	-	-			
Total Revenue					2,250				6,710				1,590						5,100		
Variable Costs																					
Seed																					
A. Maize	kg		10	3.5	35		10	6.0	60												
B. Tuar	kg		2	3.0	6		2	10.0	20												
C. Chick Pea	kg		-	-	-		-	-	-		30	10.0	300		40	18.0	720				
D.	kg		-	-	-		-	-	-		-	-	-		-	-	-				
Fertiliser																					
A. Urea	kg		-	-	-		50	5.0	250												
B. DAP	kg		-	-	-		-	-	-												
C. FYM	Load		1	150.0	150		1	400.0	400												
Pesticide	kg		5	4.0	20		10	13.0	130						3	12.0	36				
Irrigation	Rounds		-	-	-		-	-	-						2	200.0	400				
Subtotal					211				860				300						1,156		
Draught	Days		3	80.0	240		3	200.0	600		4	80.0	320		4	200.0	800				
Repairs	Sum		1	15.0	15		1	35.0	35		1	15.0	15		1	35.0	35				
Thrashing	Rate		-	-	-		-	-	-		-	-	-		1	60.0	60				
Storage	Sum		1	6.0	6		1	12.0	12		-	-	-		-	-	-				
Transport	Sum		-	-	-		-	-	-		-	-	-		1	10.0	10				
Credit	Rs		500	60%	300		-	-	-		-	-	-		-	-	-				
Total Variable Costs					772				1,507				635						2,061		
Labour Costs	P/days																				
Land Prep			4	20	80		4	50	200		7	20	140		7	50	350				
Sowing			4	20	80		4	50	200		4	20	80		4	50	200				
Weeding			13	10	130		13	25	325		-	-	-		-	-	-				
Fert App			-	-	-		1	25	25		-	-	-		-	-	-				
Pest App			1	20	20		1	50	50		-	-	-		1	50	50				
Irrigation			-	-	-		-	-	-		-	-	-		-	-	-				
Harvest			5	20	100		4	50	200		4	20	80		4	35	140				
Storage			5	20	100		2	55	110		6	20	120		2	50	100				
Total Labour Costs			32		510		29		1,110		21		420		19		890				
Total Production Costs					1,282				2,617				1,055						2,951		
Net Margin / Household (Economic)					968				4,093				535						2,149		
Return per Person Day (Financial)					46				179				45						160		

Source: Study of Impact of WIRFP on Net Incomes of Target Households, Jan 2004.
 Economic class VP = Very poor, P = Poor, M = Moderate, BO = Better off.

Table AN11.2.5 Madhya Pradesh - Village Naganwat Choti: Individual Household Detailed Data: WBR - Very Poor (2).

	Unit	Kharif:								Rabi:								
		Without project				With project				Without Project				With Project				
		Area	Qty	Price	Value	Area	Qty	Price	Value	Area	Qty	Price	Value	Area	Qty	Price	Value	
BY ECONOMIC CLASS:	VP2	Crop:	Maize				Crop:	Maize Tuar				Crop:	Chick Pea Wheat					
Revenue																		
Crop																		
A. Maize	bigha	3	175	3.5	613	2	600	6.0	3600	Chick Pea	0	1.5	200	15.0	3,000			
B. Tuar	bigha		0		0	1	120	12.0	1440	Wheat	0	1.5	200	7.0	1,400			
By product										By product								
A. Maize	Sum		1	120	120		3.0	400	1200	Chick Pea	0		0.75	400	300			
B. Tuar	um				0		1.2	200	240	Wheat	0		1.5	250	375			
Total Revenue					733				6480		0				5,075			
Variable Costs																		
Seed																		
A. Maize	kg		10	3.5	35		10	6.0	60	Chick Pea	0		30	18	540			
B. Tuar	kg		0		0		2	10.0	20	Wheat	0		15	10	150			
Fertiliser																		
A. Urea	kg		0		0		50	5.0	250		0		20	5	100			
B. DAP	kg		0		0								5	10	50			
C. FYM	Load		0		0		1	400.0	400		0		0		-			
Pesticide																		
Irrigation	kg		0		0		20	12.0	240		0		2	12	24			
Storage	Rounds		0		0		0	0.0	0		0		4	250	1,000			
Transport	Sum		1	8	8		1	10.0	10		0		1	9	9			
Subtotal	Sum				0				0		0		1	6	6			
					43				980		0				1,879			
Draught																		
Repairs	Days		6	60	360		6	100.0	600		0		6	100	600			
Threshing	Sum		1	15	15		1	35.0	35		0		1	35	35			
Total Variable Costs	Rate				418				1615		0			4	15.0	60		2,574
Labour Costs																		
Land Prep	P/days		5	20	100		6	50.0	300		0		11	50	550			
Sowing			4	20	80		4	50.0	200		0		4	50	200			
Weeding			11	10	110		10	25.0	250		0		0		-			
Fert App			0	0	0		1	50.0	50		0		1	50	50			
Pest App			0	0	0		1	25.0	25		0		0.5	25	13			
Irrigation			0	0	0		0	0.0	0		0		4	50	200			
Harvest			4	20	80		4	50.0	200		0		4	50	200			
Storage			2	20	40		4	50.0	200		0		2	50	100			
Total Labour Costs			26		410		30		1225		0		26.5		1,313			
Total Production Costs					828				2840		0				3,887			
Net Margin / Household (Economic)					-96				3640		0				1,189			
Return per Person Day (Financial)					12				162						94			

Source: Study of Impact of WIRFP on Net Incomes of Target Households, Jan 2004.

Economic class

VP = Very poor, P = Poor, M = Moderate, BO = Better off.

Table A11.2.6 Madhya Pradesh - Village Naganwat Choti: Individual Household Detailed Data: WBR - Poor (1).

		Kharif:								Rabi:									
		Without project				With project				Without Project				With Project					
Unit		Area	Qty	Price	Value	Area	Qty	Price	Value	Area	Qty	Price	Value	Area	Qty	Price	Value		
By Economic Class:	P1	Crop:	Maize			Crop:	Maize / Cotton			Crop:	Gram			Crop:	Gram				
			Tuar				Tuar				Wheat				Wheat				
Revenue																			
Crop										Crop									
A.	Maize	bigha	8	300	3.5	1,050	8	1,000	6.0	6,000									
B.	Cotton	bigha	-	-	-	-	-	300	25.0	7,500									
C.	Tuar	bigha	2	40	7.0	280	2	80	15.0	1,200									
D.	Gram	bigha	-	-	-	-	-	-	-		3	160	10.0	1,600	5	600	7.0	4,200	
E.	Wheat	bigha	-	-	-	-	-	-	-		2	100	5.0	500	5	400	15.0	6,000	
By product										By product									
A.	Maize	Sum	-	1.5	120	180	-	6.0	300	1,800									
B.	Cotton	Sum	-	-	-	-	-	3.0	200	600									
C.	Tuar	Sum	-	0.5	90	45	-	0.5	200	100									
D.	Gram	Sum	-	-	-	-	-	-	-		Gram	-	1.0	150	150	-	1.5	200	300
E.	Wheat	Sum	-	-	-	-	-	-	-		Wheat	-	1.0	130	130	-	1.3	250	313
Total Revenue					1,555				17,200				2,380				10,813		
Variable Costs																			
Seed																			
A.	Maize	kg	40	3.5	140	28	6.0	168											
B.	Cotton	kg	-	-	-	1	500.0	500											
C.	Tuar	kg	3	7.0	21	2	25.0	50											
D.	Gram	kg	-	-	-	-	-	-			Gram	25	8.0	200	40	15.0	600		
E.	Wheat	kg	-	-	-	-	-	-			Wheat	10	5.0	50	40	7.0	280		
Fertiliser																			
A.	Urea	kg	-	-	-	-	-	-											
B.	DAP	kg	-	-	-	-	-	-											
C.	FYM	Load	-	-	-	1	400.0	400											
Pesticide																			
Irrigation	kg		-	-	-	10	12.0	120											
Subtotal	Rounds		-	-	-	-	-	-							4	150.0	600		
Draught																			
Repairs	Days		8	60.0	480	8	150.0	1,200							5	150.0	750		
Threshing	Sum		1	15.0	15	1	35.0	35							1	35.0	35		
Storage	Rate		-	-	-	-	-	-							-	-	-		
Transport	Sum		-	-	-	1	25.0	25							1	10.0	10		
Credit	Sum		-	-	-	1	30.0	30							1	20.0	20		
Total Variable Costs					656			2,528					815			1,100	6%	2,361	
Labour Costs		P/days																	
Land Prep			13	20	260	16	40	640							6	20	120	400	
Sowing			4	20	80	4	40	160							4	20	80	160	
Weeding			8	10	80	8	20	160							-	-	-	-	
Fert App			-	-	-	1	40	40							-	-	-	-	
Pest App			-	-	-	1	40	40							-	-	-	-	
Irrigation			-	-	-	-	-	-							4	40	160		
Harvest			8	20	160	8	40	320							6	40	240		
Storage			6	20	120	4	40	160							8	20	160	400	
Total Labour Costs			39		700	42		1,520			28		560		34		1,360		
Total Production Costs					1,356			4,048					1,375				3,721		
Net Margin / Household (Economic)					199			13,152					1,005				7,092		
Return per Person Day (Financial)					23			349					56				249		

Source: Study of Impact of WIRFP on Net Incomes of Target Households, Jan 2004.

Economic class

VP = Very poor, P = Poor, M = Moderate, BO = Better off.

Table A11.2.7 Madhya Pradesh - Village Naganwat Choti: Individual Household Detailed Data: WBR - Poor (2).

	Unit	Kharif:								Rabi:								
		Without project				With project				Without Project				With Project				
		Area	Qty	Price	Value	Area	Qty	Price	Value	Area	Qty	Price	Value	Area	Qty	Price	Value	
By Economic Class:	P2	Crop: Maize				Crop: Maize\Cotton\Tuar				Crop: Gram				Crop: Gram				
Revenue																		
Crop																		
A. Maize	bigha	5	500	3.5	1,750	5	800	6.0	4,800	Gram	1	75	10.0	750	3	375	15.0	5,625
B. Cotton	bigha	-	-	-	-	-	120	25.0	3,000		-	-	-	-	-	-	-	-
C. Tuar	bigha	-	-	-	-	-	100	8.8	880		-	-	-	-	-	-	-	-
By product										By product								
A. Maize	Sum	-	2.5	120	300	-	4.0	300	1,200	Gram	-	0.5	150	75	-	2.0	200	400
B. Cotton	Sum	-	-	-	-	-	1.0	200	200		-	-	-	-	-	-	-	-
C. Tuar	Sum	-	-	-	-	-	0.5	200	100		-	-	-	-	-	-	-	-
Total Revenue					2,050				10,180					825				6,025
Variable Costs																		
Seed																		
A. Maize	kg		15	3.5	53		15	6.0	90	Gram		10	8.0	80		40	15.0	600
B. Cotton	kg		-	-	-		25	10.0	250			-	-	-		-	-	-
C. Tuar	kg		-	-	-		1	10.0	10			-	-	-		-	-	-
D. Urad	kg		-	-	-		-	-	-			-	-	-		-	-	-
Fertiliser																		
A. Urea	kg		-	-	-		50	5.0	250			-	-	-		-	-	-
B. DAP	kg		-	-	-		-	-	-			-	-	-		-	-	-
C. FYM	Load		3	150.0	450		2	400.0	800			-	-	-		-	-	-
Pesticide																		
Irrigation																		
Subtotal					503				1,560					80		1	125.0	125
Draught	Days		3	80.0	240		3	200.0	600			2	80.0	160		2	200.0	400
Repairs	Sum		1	15.0	15		1	35.0	35			1	15.0	15		1	35.0	35
Threshing	Rate		-	-	-		-	-	-			-	-	-		-	-	-
Storage	Sum		-	-	-		1	25.0	25			-	-	-		-	-	-
Transport	Sum		-	-	-		-	-	-			-	-	-		1	6.0	6
Credit	Rs		-	-	-		-	-	-			-	-	-		-	-	-
Total Variable Costs					758				2,220					255				1,166
Labour Costs	P/days																	
Land Prep			4	20	80		4	30	120			4	20	80		2	30	60
Sowing			2	20	40		4	30	120			1	20	20		4	30	120
Weeding			12	10	120		12	15	180			-	-	-		-	-	-
Fert App			2	20	40		2	30	60			-	-	-		-	-	-
Pest App			-	-	-		-	-	-			-	-	-		-	-	-
Irrigation			-	-	-		-	-	-			-	-	-		1	30	30
Harvest			8	20	160		8	30	240			6	20	120		8	30	240
Storage			4	20	80		4	30	120			2	20	40		4	30	120
Total Labour Costs			32		520		34		840			13		260		19		570
Total Production Costs					1,278				3,060					515				1,736
Gross Margin / Household (Economic)					773				7,120					310				4,289
Return per Person Day (Financial)					40				234					44				256

Source: Study of Impact of WIRFP on Net Incomes of Target Households, Jan 2004.

Economic class

VP = Very poor, P = Poor, M = Moderate, BO = Better off.

Table 1: Summary of Data		Table 2: Detailed Data		Table 3: Summary of Data		Table 4: Detailed Data	
Category	Value	Category	Value	Category	Value	Category	Value
Category A	10	Category A	10	Category A	10	Category A	10
Category B	20	Category B	20	Category B	20	Category B	20
Category C	30	Category C	30	Category C	30	Category C	30
Category D	40	Category D	40	Category D	40	Category D	40
Category E	50	Category E	50	Category E	50	Category E	50
Category F	60	Category F	60	Category F	60	Category F	60
Category G	70	Category G	70	Category G	70	Category G	70
Category H	80	Category H	80	Category H	80	Category H	80
Category I	90	Category I	90	Category I	90	Category I	90
Category J	100	Category J	100	Category J	100	Category J	100

Table A11.2.9 Madhya Pradesh - Village Naganwat Choti: Individual Household Detailed Data: WBR - Better Off.

Kharif:											Rabi:								
Item	Unit	Without project				With project				Item	Without Project				With Project				
		Area	Qty	Price	Value	Area	Qty	Price	Value		Area	Qty	Price	Value	Area	Qty	Price	Value	
By Economic Class:		BO	Crop:	Maize\Cotton		Crop:	Maize\Cotton			Crop:	Chick Pea		Crop:	Chick Pea					
			Tuar\Urad		Tuar					Wheat		Wheat							
Revenue																			
Crop										Crop									
A.	Maize	bigha	4	600	3.5	2,100	4	1,000	6	6,000	Chick Pea	1	150	10	1,500	3	500	12.6	6,300
B.	Cotton	bigha	-	200	10.0	2,000	-	150	25	3,750	Wheat	2	100	5	500	2	800	7.0	5,600
C.	Tuar	bigha	1	100	7.0	700	1	200	12	2,400		-	-	-	-	-	-	-	
D.	Urad	bigha	-	80	9.0	720	-	-	-	-		-	-	-	-	-	-	-	
By product										By product									
A.	Maize	Sum	-	3.0	120.0	360	-	-	-	-	Chick Pea	-	0.5	180	90	-	2	400	800
B.	Cotton	Sum	-	2.0	50.0	100	-	-	-	-	Wheat	-	1.0	130	130	-	8	250	2,000
C.	Tuar	Sum	-	1.0	90.0	90	-	-	-	-		-	-	-	-	-	-	-	
D.	Urad	Sum	-	0.5	40.0	20	-	-	-	-		-	-	-	-	-	-	-	
Total Revenue					6,090				12,150				2,220					14,700	
Variable Costs																			
Seed																			
A.	Maize	kg		20.0	3.5	70		20	6	120	Chick Pea		20	10	200		5	18	90
B.	Cotton	kg		1.0	150.0	150		1	500	500	Wheat		40	5	200		50	6	300
C.	Tuar	kg		2.0	8.0	16		3	25	75			-	-	-		-	-	-
D.	Urad	kg		1.5	10.0	15		-	-	-			-	-	-		-	-	-
Fertiliser																			
A.	Urea	kg		-	-	-		250	5	1,250			-	-	-		50	5	250
B.	DAP	kg		-	-	-		-	-	-			-	-	-		50	10	500
C.	FYM	Load		4.0	150.0	600		2	400	800			-	-	-		-	-	-
Pesticide																			
Irrigation																			
Subtotal					851				2,875				400					2,140	
Draught																			
Repairs																			
Threshing																			
Storage																			
Transport																			
Credit																			
Total Variable Costs					2,452				4,885				763					3,540	
Labour Costs																			
Land Prep		P/days		12	20.0	240		12	50	600			6	20	120		10	50	500
Sowing				6	20.0	120		6	50	300			4	20	80		6	50	300
Weeding				16	10.0	160		20	25	500			-	-	-		-	-	-
Fert App				1	20.0	20		2	50	100			-	-	-		2	50	100
Pest App				-	-	-		1	50	50			-	-	-		-	-	-
Irrigation				-	-	-		-	-	-			-	-	-		3	50	150
Harvest				10	20.0	200		10	50	500			8	20	160		7	50	350
Storage				6	20.0	120		6	50	300			8	20	160		4	50	200
Total Labour Costs				51		860		57		2,350			26		520		32		1,600
Total Production Costs					3,312				7,235				1,283					5,140	
Net Margin / Household (Economic)					2,778				4,915				937					9,560	
Return per Person Day (Financial)					71				127				56					349	

Source: Study of Impact of WIRFP on Net Incomes of Target Households, Jan 2004.

Economic class

VP = Very poor, P = Poor, M = Moderate, BO = Better off.

Table A11.2.10 Madhya Pradesh - Village Naganwat Choti: Individual Household Livestock Detailed Data: WBR - Very Poor (1).

Item	Units	Period	Before / Without Project Situation			After / With Project Situation		
			Quantity (No)	Unit Price (Rs)	Value (Rs/Period)	Quantity (No)	Unit Price (Rs)	Value (Rs/Period)
Livestock Asset Value								
Cow								
Male	head		2	400.0	800	2	1,500.0	3,000
Female	head		-	-	-	1	1,200.0	1,200
Losses	head		-	-	-	-	-	-
Buffalo								
Male	head		-	-	-	-	-	-
Female	head		-	-	-	-	-	-
Losses	head		-	-	-	-	-	-
Goat								
Male	head		-	-	-	-	-	-
Female	head		1	200.0	200	-	-	-
Losses	head		-	-	-	2	800.0	1,600
Poultry								
Not Specified	head		2	80.0	160	1	100.0	100
Losses	head		-	-	-	-	-	-
Total Livestock Assets					1,160			5,900
Annual Increase in Livestock Assets	year	5			-			948
Sales Income								
Cow and Buffalo								
Milk	litres	year	-	-	-	90	14.0	1,260
Dung	cart	year	1.0	100.0	100	1	400.0	400
Draught	days	year	7	80.0	560	7	200.0	1,400
Transport	days	year	-	-	-	-	-	-
Sales	no	year	-	-	-	-	-	-
Goat								
Milk	litres	year	-	-	-	15	8.0	120
Dung	sum	year	-	-	-	-	-	-
Other	-	-	-	-	-	-	-	-
Sales	no	year	-	-	-	-	-	-
Poultry								
Sales	no	year	-	-	-	10	3.0	30
Other	-	-	-	-	-	12	50.0	600
Total Sales Income					660			3,810
Expenditure								
Direct Costs								
Cow and Buffalo								
Feeding (grazing)	sum	year	-	-	-	-	-	-
Feeding (roughage)	sum	year	1.0	360.0	360	1.0	2,400.0	2,400
Feeding (concentrate)	sum	year	1.0	120.0	120	1.0	420.0	420
Vet and Med	sum	year	1.0	120.0	120	1.0	100.0	100
Other	sum	year	1.0	20.0	20	1.0	60.0	60
Goat								
Feeding	sum	year	-	-	-	-	-	-
Vet and Med	sum	year	-	-	-	-	-	-
Other	sum	year	-	-	-	-	-	-
Poultry								
Other	sum	year	1.0	110.0	110	1.0	60.0	60
Total Direct Costs					730			3,040
Overhead Costs								
Equipment repairs	sum	year	-	-	-	-	-	-
Total Overhead Costs					-			-
Total Expenditure					730			3,040
Net Margin					(70)			770
Family Labour Input	Days	Month	-	-	-	-	-	-
Return to Family Labour								
Combined Net Margin and Asset Increase					(70)			1,718

Source: Study of Impact of WIRFP on Net Incomes of Target Households, Jan 2004.

Table A11.2.11 Madhya Pradesh - Village Naganwat Choti: Individual Household Livestock Detailed Data: WBR - Very Poor (2).

Item	Units	Period	Before / Without Project Situation			After / With Project Situation		
			Quantity (No)	Unit Price (Rs)	Value (Rs/Period)	Quantity (No)	Unit Price (Rs)	Value (Rs/Period)
Livestock Asset Value								
Cow								
Male	head		-	-	-	1	2,500.0	2,500
Female	head		-	-	-	-	-	-
Losses	head		-	-	-	-	-	-
Buffalo								
Male	head		-	-	-	-	-	-
Female	head		-	-	-	-	-	-
Losses	head		-	-	-	-	-	-
Goat								
Male	head		-	-	-	-	-	-
Female	head		-	-	-	3	900.0	2,700
Losses	head		-	-	-	-	-	-
Poultry								
Not Specified	head		-	-	-	4	50.0	200
Losses	head		-	-	-	-	-	-
Total Livestock Assets								5,400
Annual Increase in Livestock Assets	year	5						1,080
Sales Income								
Cow and Buffalo								
Milk	litres	year	-	-	-	-	-	-
Dung	cart	year	-	-	-	0.25	400.0	100
Draught	days	year	-	-	-	8	150.0	1,200
Transport	days	year	-	-	-	-	-	-
Sales	no	year	-	-	-	-	-	-
Goat								
Milk	litres	year	-	-	-	15	8.0	120
Dung	sum	year	-	-	-	-	-	-
Other	-	-	-	-	-	-	-	-
Sales	no	year	-	-	-	-	-	-
Poultry								
Sales	no	year	-	-	-	25	100.0	2,500
Other	-	-	-	-	-	5	3.0	15
Total Sales Income								3,935
Expenditure								
Direct Costs								
Cow and Buffalo								
Feeding (grazing)	sum	year	-	-	-	-	-	-
Feeding (roughage)	sum	year	-	-	-	1.0	1,875.0	1,875
Feeding (concentrate)	sum	year	-	-	-	-	-	-
Vet and Med	sum	year	-	-	-	1.0	50.0	50
Other	sum	year	-	-	-	1.0	20.0	20
Goat								
Feeding	sum	year	-	-	-	-	-	-
Vet and Med	sum	year	-	-	-	-	-	-
Other	sum	year	-	-	-	-	-	-
Poultry								
Other	sum	year	-	-	-	1.0	135.0	135
Total Direct Costs								2,080
Overhead Costs								
Equipment repairs	sum	year	-	-	-	-	-	-
Total Overhead Costs								-
Total Expenditure								2,080
Net Margin								1,855
Family Labour Input	Days	Month	-	-	-	-	-	-
Return to Family Labour								
Combined Net Margin and Asset Increase								2,935

Source: Study of Impact of WIRFP on Net Incomes of Target Households, Jan 2004.

Table A11.1.12 Madhya Pradesh - Village Naganwat Choti: Individual Household Livestock Detailed Data: WBR - Very Poor (1)

Item	Units	Period	Before / Without Project Situation			After / With Project Situation		
			Quantity (No)	Unit Price (Rs)	Value (Rs/Period)	Quantity (No)	Unit Price (Rs)	Value (Rs/Period)
Livestock Asset Value								
Cow								
Male	head		-	-	-	-	-	-
Female	head		-	-	-	2	2,500.0	5,000
Losses	head		-	-	-	-	-	-
Buffalo								
Male	head		-	-	-	-	-	-
Female	head		-	-	-	-	-	-
Losses	head		-	-	-	-	-	-
Goat								
Male	head		-	-	-	-	-	-
Female	head		-	-	-	-	-	-
Losses	head		-	-	-	-	-	-
Poultry								
Not Specified	head		-	-	-	6	150.0	900
Losses	head		-	-	-	-	-	-
Total Livestock Assets								5,900
Annual Increase in Livestock Assets	year	5						1,180
Sales Income								
Cow and Buffalo								
Milk	litres	year	-	-	-	240	14.0	3,360
Dung	cart	year	-	-	-	1	400.0	400
Draught	days	year	-	-	-	-	-	-
Transport	days	year	-	-	-	-	-	-
Sales	no	year	-	-	-	-	-	-
Goat								
Milk	litres	year	-	-	-	-	-	-
Dung	sum	year	-	-	-	-	-	-
Other	-	-	-	-	-	-	-	-
Sales	no	year	-	-	-	-	-	-
Poultry								
Sales	no	year	-	-	-	90	3.0	270
Other	-	-	-	-	-	20	50.0	1,000
Total Sales Income								5,030
Expenditure								
Direct Costs								
Cow and Buffalo								
Feeding (grazing)	sum	year	-	-	-	-	-	-
Feeding (roughage)	sum	year	-	-	-	1.0	2,113.0	2,113
Feeding (concentrate)	sum	year	-	-	-	-	-	-
Vet and Med	sum	year	-	-	-	1.0	100.0	100
Other	sum	year	-	-	-	1.0	20.0	20
Goat								
Feeding	sum	year	-	-	-	-	-	-
Vet and Med	sum	year	-	-	-	-	-	-
Other	sum	year	-	-	-	-	-	-
Poultry								
Other	sum	year	-	-	-	6.0	45.0	270
Total Direct Costs								2,503
Overhead Costs								
Equipment repairs	sum	year	-	-	-	-	-	-
Total Overhead Costs								
Total Expenditure								2,503
Net Margin								2,527
Family Labour Input	Days	Month	-	-	-	-	-	-
Return to Family Labour								
Combined Net Margin and Asset Increase								3,707

Source: Study of Impact of WIRFP on Net Incomes of Target Households, Jan 2004.

Table A11.2.13 Madhya Pradesh - Village Naganwat Choti: Individual Household Livestock Detailed Data: WBR - Poor (2).

Item	Units	Period	Before / Without Project Situation			After / With Project Situation		
			Quantity (No)	Unit Price (Rs)	Value (Rs/Period)	Quantity (No)	Unit Price (Rs)	Value (Rs/Period)
Livestock Asset Value								
Cow								
Male	head		2	700.0	1,400	2	2,500.0	5,000
Female	head		5	500.0	2,500	3	1,800.0	5,400
Losses	head		-	-	-	-	-	-
Buffalo								
Male	head		-	-	-	-	-	-
Female	head		-	-	-	-	-	-
Losses	head		-	-	-	-	-	-
Goat								
Male	head		-	-	-	-	-	-
Female	head		3	200.0	600	-	-	-
Losses	head		-	-	-	-	-	-
Poultry								
Not Specified	head		5	40.0	200	2	100.0	200
Losses	head		-	-	-	-	-	-
Total Livestock Assets					4,700			10,600
Annual Increase in Livestock Assets	year	5			-			1,180
Sales Income								
Cow and Buffalo								
Milk	litres	year	200	6.0	1,200	180	14.0	2,520
Dung	cart	year	3.0	150.0	450	2	400.0	800
Draught	days	year	5	80.0	400	10	100.0	1,000
Transport	days	year	-	-	-	-	-	-
Sales	no	year	-	-	-	-	-	-
Goat								
Milk	litres	year	-	-	-	-	-	-
Dung	sum	year	-	-	-	-	-	-
Other	-	-	-	-	-	-	-	-
Sales	no	year	-	-	-	-	-	-
Poultry								
Sales	no	year	40	20.0	800	30	50.0	1,500
Other	-	-	-	-	-	-	-	-
Total Sales Income					2,850			5,820
Expenditure								
Direct Costs								
Cow and Buffalo								
Feeding (grazing)	sum	year	-	-	-	-	-	-
Feeding (roughage)	sum	year	1.0	375.0	375	1.0	1,300.0	1,300
Feeding (concentrate)	sum	year	30.0	4.0	120	1.0	210.0	210
Vet and Med	sum	year	-	-	-	1.0	100.0	100
Other	sum	year	-	-	-	-	-	-
Goat								
Feeding	sum	year	-	-	-	-	-	-
Vet and Med	sum	year	-	-	-	-	-	-
Other	sum	year	-	-	-	-	-	-
Poultry								
Other	sum	year	1.0	90.0	90	1.0	55.0	55
Total Direct Costs					585			1,665
Overhead Costs								
Equipment repairs	sum	year	-	-	-	-	-	-
Total Overhead Costs					-			-
Total Expenditure					585			1,665
Net Margin					2,265			4,155
Family Labour Input	Days	Month	-	-	-	-	-	-
Return to Family Labour								
Combined Net Margin and Asset Increase					2,265			5,335

Source: Study of Impact of WIRFP on Net Incomes of Target Households, Jan 2004.

Table A11.2.14 Madhya Pradesh - Village Naganwat Choti: Individual Household Livestock Detailed Data: WBR - Moderate.

Item	Units	Period	Before / Without Project Situation			After / With Project Situation		
			Quantity (No)	Unit Price (Rs)	Value (Rs/Period)	Quantity (No)	Unit Price (Rs)	Value (Rs/Period)
Livestock Asset Value								
Cow								
Male	head		2	2,500.0	5,000	-	-	-
Female	head		1	2,000.0	2,000	-	-	-
Losses	head		-	-	-	-	-	-
Buffalo								
Male	head		-	-	-	-	-	-
Female	head		1	5,000.0	5,000	-	-	-
Losses	head		-	-	-	-	-	-
Goat								
Male	head		2	300.0	600	2	400.0	800
Female	head		7	200.0	1,400	3	300.0	900
Losses	head		-	-	-	-	-	-
Poultry								
Not Specified	head		7	100.0	700	2	100.0	200
Losses	head		-	-	-	-	-	-
Total Livestock Assets					14,700			1,900
Annual Increase in Livestock Assets	year	5			-			(2,560)
Sales Income								
Cow and Buffalo								
Milk	litres	year	180	8.0	1,440	-	-	-
Dung	cart	year	2	150.0	300	-	-	-
Draught	days	year	20	100.0	2,000	-	-	-
Transport	days	year	-	-	-	-	-	-
Sales	no	year	-	-	-	-	-	-
Goat								
Milk	litres	year	-	-	-	-	-	-
Dung	sum	year	-	-	-	-	-	-
Other	-	-	-	-	-	-	-	-
Sales	no	year	5	200.0	1,000	3	400.0	1,200
Poultry								
Sales	no	year	2	60.0	120	2	150.0	300
Other	-	-	75	40.0	3,000	25	100.0	2,500
Total Sales Income					7,860			4,000
Expenditure								
Direct Costs								
Cow and Buffalo								
Feeding (grazing)	sum	year	-	-	-	-	-	-
Feeding (roughage)	sum	year	1.0	640.0	640	-	-	-
Feeding (concentrate)	sum	year	-	-	-	-	-	-
Vet and Med	sum	year	1.0	60.0	60	-	-	-
Other	sum	year	1.0	30.0	30	-	-	-
Goat								
Feeding	sum	year	-	-	-	-	-	-
Vet and Med	sum	year	-	-	-	1.0	200.0	200
Other	sum	year	-	-	-	-	-	-
Poultry								
Other	sum	year	1.0	100.0	100	1.0	80.0	80
Total Direct Costs					830			280
Overhead Costs								
Equipment repairs	sum	year	-	-	-	-	-	-
Total Overhead Costs					-			-
Total Expenditure					830			280
Net Margin					7,030			3,720
Family Labour Input	Days	Month	-	-	-	-	-	-
Return to Family Labour								
Combined Net Margin and Asset Increase					7,030			1,160

Source: Study of Impact of WIRFP on Net Incomes of Target Households, Jan 2004.

Table A11.2.15 Madhya Pradesh - Village Naganwat Choti: Individual Household Livestock Detailed Data: WBR - Better Off.

Item	Units	Period	Before / Without Project Situation			After / With Project Situation		
			Quantity (No)	Unit Price (Rs)	Value (Rs/Period)	Quantity (No)	Unit Price (Rs)	Value (Rs/Period)
Livestock Asset Value								
Cow								
Male	head		2	1,000.0	2,000	2	3,000.0	6,000
Female	head		7	800.0	5,600	2	2,000.0	4,000
Losses	head		-	-	-	-	-	-
Buffalo								
Male	head		-	-	-	-	-	-
Female	head		-	-	-	-	-	-
Losses	head		-	-	-	-	-	-
Goat								
Male	head		-	-	-	1	700.0	700
Female	head		15	500.0	7,500	5	600.0	3,000
Losses	head		-	-	-	-	-	-
Poultry								
Not Specified	head		4	120.0	480	6	150.0	900
Losses	head		-	-	-	-	-	-
Total Livestock Assets					15,580			14,600
Annual Increase in Livestock Assets	year	5			-			(196)
Sales Income								
Cow and Buffalo								
Milk	litres	year	180	6.0	1,080	180	12.0	2,160
Dung	cart	year	4.0	150.0	600	2	400.0	800
Draught	days	year	9	80.0	720	13	200.0	2,600
Transport	days	year	-	-	-	-	-	-
Sales	no	year	-	-	-	-	-	-
Goat								
Milk	litres	year	80	4.0	320	90	4.0	360
Dung	sum	year	-	-	-	-	-	-
Other	-	-	-	-	-	-	-	-
Sales	no	year	2	200.0	400	-	-	-
Poultry								
Sales	no	year	90	30.0	2,700	135	100.0	13,500
Other	-	-	-	-	-	-	-	-
Total Sales Income					5,820			19,420
Expenditure								
Direct Costs								
Cow and Buffalo								
Feeding (grazing)	sum	year	-	-	-	-	-	-
Feeding (roughage)	sum	year	1.0	600.0	600	1.0	4,700.0	4,700
Feeding (concentrate)	sum	year	1.0	540.0	540	1.0	1,260.0	1,260
Vet and Med	sum	year	1.0	900.0	900	1.0	500.0	500
Other	sum	year	1.0	90.0	90	1.0	80.0	80
Goat								
Feeding	sum	year	-	-	-	-	-	-
Vet and Med	sum	year	1.0	-	-	-	-	-
Other	sum	year	-	-	-	-	-	-
Poultry								
Other	sum	year	1.0	90.0	90	1.0	290.0	290
Total Direct Costs					2,220			6,830
Overhead Costs								
Equipment repairs	sum	year	-	-	-	-	-	-
Total Overhead Costs								
Total Expenditure					2,220			6,830
Net Margin					3,600			12,590
Family Labour Input	Days	Month	-	-	-	-	-	-
Return to Family Labour								
Combined Net Margin and Asset Increase					3,600			12,394

Source: Study of Impact of WIRFP on Net Incomes of Target Households, Jan 2004.

WIRFP - Phase II - Cost Benefit Analysis

Tables AN11.0 Incremental Benefits

Tables AN11.3 Net Income Study Crop and Livestock Net Margin Data: Phase II State Gujarat - Village Lakhana

Table AN11.3.1	Gujarat - Village Lakhana: Weighted Household Crop Net Margin Summary.
Table AN11.3.2	Gujarat - Village Lakhana: Weighted Household Livestock Net Margin Summary.
Table AN11.3.3	A. Gujarat - Village Lakhana: Summary of Crop Net Margin per Household and Area (WBR - All Types). B. Gujarat - Village Lakhana: Crop Net Margin per Household and Area - WBR - Very Poor (1). C. Gujarat - Village Lakhana: Crop Net Margin per Household and Area - WBR - Very Poor (2). D. Gujarat - Village Lakhana: Crop Net Margin per Household and Area - WBR - Poor (1). E. Gujarat - Village Lakhana: Crop Net Margin per Household and Area - WBR - Poor (2). F. Gujarat - Village Lakhana: Crop Net Margin per Household and Area - WBR - Moderate. G. Gujarat - Village Lakhana: Crop Net Margin per Household and Area - WBR - Better Off.
Table AN11.3.4	Gujarat - Village Lakhana: Individual Household Crop Detailed Data: WBR - Very Poor (1).
Table AN11.3.5	Gujarat - Village Lakhana: Individual Household Crop Detailed Data: WBR - Very Poor (2).
Table AN11.3.6	Gujarat - Village Lakhana: Individual Household Crop Detailed Data: WBR - Poor (1).
Table AN11.3.7	Gujarat - Village Lakhana: Individual Household Crop Detailed Data: WBR - Poor (2).
Table AN11.3.8	Gujarat - Village Lakhana: Individual Household Crop Detailed Data: WBR - Moderate.
Table AN11.3.9	Gujarat - Village Lakhana: Individual Household Crop Detailed Data: WBR - Better Off.
Table AN11.3.10	Gujarat - Village Lakhana: Individual Household Livestock Detailed Data: WBR - Very Poor (1).
Table AN11.3.11	Gujarat - Village Lakhana: Individual Household Livestock Detailed Data: WBR - Very Poor (2).
Table AN11.3.12	Gujarat - Village Lakhana: Individual Household Livestock Detailed Data: WBR - Poor (1).
Table AN11.3.13	Gujarat - Village Lakhana: Individual Household Livestock Detailed Data: WBR - Poor (2).
Table AN11.3.14	Gujarat - Village Lakhana: Individual Household Livestock Detailed Data: WBR - Moderate.
Table AN11.3.15	Gujarat - Village Lakhana: Individual Household Livestock Detailed Data: WBR - Better Off.

Table AN11.3.1 Gujarat - Village Lakhana: Weighted Household Crop Net Margin Summary.

Item	WBR (%)	Before / Without Project			After / With Project			Increment		
		Khalif	Rabi	Total	Khalif	Rabi	Total	Khalif	Rabi	Total
Household and Unit Area Analysis (Economic):										
Well Being Ranking - Very Poor (1)	12.5%									
Household Crop Net Margin (Rs)		936	-	936	3,160	1,157	4,316	2,224	1,157	3,380
Area Planted (bigha)		4.5	-	4.5	5.0	1.0	6.0	0.5	1.0	1.5
Crop Net Margin (Rs) / bigha		208	-	208	702	231	863	494	231	725
Crop Net Margin / hectare \2		1,040	-	1,040	3,511	1,157	4,316	2,471	1,157	3,276
Well Being Ranking - Very Poor (2)	12.5%									
Household Crop Net Margin (Rs)		3,306	-	3,306	2,757	-	2,757	(549)	-	(549)
Area Planted (bigha)		2.5	-	2.5	2.5	-	2.5	-	-	-
Crop Net Margin / bigha		1,322	-	1,322	1,103	-	1,103	(219)	-	(219)
Crop Net Margin / hectare \2		6,611	-	6,611	5,514	-	5,514	(1,097)	-	(1,097)
Well Being Ranking - Poor (1)	0.0%									
Household Crop Net Margin (Rs)		14,565	5,990	20,555	6,400	8,251	14,651	(8,165)	2,261	(5,904)
Area Planted (bigha)		5.0	2.0	7.0	7.0	5.0	12.0	2.0	3.0	5.0
Crop Net Margin / bigha		2,913	2,995	5,908	914	1,650	2,564	(1,999)	(1,345)	(3,344)
Crop Net Margin / hectare \2		14,565	14,975	29,540	4,571	8,251	12,822	(9,994)	(6,724)	(16,718)
Well Being Ranking - Poor (2)	25.0%									
Household Crop Net Margin (Rs)		2,810	-	2,810	9,167	610	9,777	6,357	610	6,967
Area Planted (bigha)		4.0	-	4.0	7.0	0.5	7.5	3.0	0.5	3.5
Crop Net Margin / bigha		703	-	703	2,292	153	2,444	1,589	153	1,742
Crop Net Margin / hectare \2		3,513	-	3,513	11,459	763	12,221	7,946	763	8,709
Well Being Ranking - Moderate	25.0%									
Household Crop Net Margin (Rs)		1,953	179	2,132	3,778	3,309	7,087	1,825	3,130	4,955
Area Planted (bigha)		5.0	1.0	6.0	5.0	1.5	6.5	-	0.5	0.5
Crop Net Margin / bigha		488	45	533	945	827	1,772	456	783	1,239
Crop Net Margin / hectare \2		2,441	223	2,664	4,723	4,136	8,858	2,282	3,913	6,194
Well Being Ranking - Better Off	25.0%									
Household Crop Net Margin (Rs)		7,892	5,270	13,162	19,403	6,118	25,521	11,511	848	12,359
Area Planted (bigha)		4.0	3.5	7.5	10.0	4.0	14.0	6.0	0.5	6.5
Crop Net Margin / bigha		1,973	1,318	3,291	4,851	1,530	6,380	2,878	212	3,090
Crop Net Margin / hectare \2		9,865	6,588	16,453	24,253	7,648	31,901	14,388	1,060	15,448
WBR - Weighted	100%									
Household Crop Net Margin (Rs)		3,694	1,362	5,056	8,826	2,654	11,480	5,133	1,292	6,424
Crop Net Margin / bigha		982	341	1,323	2,247	656	2,895	1,265	316	1,581
Crop Net Margin / hectare \2		4,911	1,703	6,614	11,237	3,281	14,474	6,326	1,578	7,860

Source: Study of Impact of WIRFP on Net Incomes of Target Households, Jan 2004.

WBR = GVT Well Being Ranking

\1 One hectare equivalent to bigha = 5.0

Table AN11.3.2 Gujarat - Village Lakhana: Weighted Household Livestock Net Margin Summary.

Item	WBR (%)	Before / Without Project		After / With Project		Increment ¹	
		Herd Value	Net Margin	Herd Value	Net Margin	Herd Value	Net Margin
Household Livestock Analysis							
Well Being Ranking - Very Poor (1)	12.5%						
Household Livestock Net Margin (Rs) - financial		3,400	(844.0)	24,300	2,372.0	4,180	3,216.0
Labour (person days)			12.0		48.0		36.0
Labour Value (Rs) - economic ¹			300.0		1,200.0		900.0
Household Livestock Net Margin (Rs) - economic			(1,144.0)		1,172.0		2,316.0
Well Being Ranking - Very Poor (2)	12.5%						
Household Livestock Net Margin (Rs) - financial		880	165.0	2,400	1,260.0	304	1,095.0
Labour (person days)			12.0		24.0		12.0
Labour Value (Rs) - economic ¹			300.0		600.0		300.0
Household Livestock Net Margin (Rs) - economic			(135.0)		660.0		795.0
Well Being Ranking - Poor (1)	12.5%						
Household Livestock Net Margin (Rs) - financial		20,000	2,870.0	35,000	5,720.0	3,000	2,850.0
Labour (person days)			36.0		72.0		36.0
Labour Value (Rs) - economic ¹			900.0		1,800.0		900.0
Household Livestock Net Margin (Rs) - economic			1,970.0		3,920.0		1,950.0
Well Being Ranking - Poor (2)	12.5%						
Household Livestock Net Margin (Rs) - financial		14,560	370.0	21,990	5,310.0	1,486	4,940.0
Labour (person days)			12.0		72.0		60.0
Labour Value (Rs) - economic ¹			300.0		1,800.0		1,500.0
Household Livestock Net Margin (Rs) - economic			70.0		3,510.0		3,440.0
Well Being Ranking - Moderate	25.0%						
Household Livestock Net Margin (Rs) - financial		19,200	860.0	38,800	2,600.0	3,920	1,740.0
Labour (person days)			24.0		48.0		24.0
Labour Value (Rs) - economic ¹			600.0		1,200.0		600.0
Household Livestock Net Margin (Rs) - economic			260.0		1,400.0		1,140.0
Well Being Ranking - Better Off	25.0%						
Household Livestock Net Margin (Rs) - financial		21,000	(6,205.0)	56,400	(950.0)	7,080	5,255.0
Labour (person days)			12.0		24.0		12.0
Labour Value (Rs) - economic ¹			300.0		600.0		300.0
Household Livestock Net Margin (Rs) - economic			(6,505.0)		(1,550.0)		4,955.0
Well Being Ranking - Weighted	100%						
Household Livestock Net Margin (Rs) - financial		14,905	(1,016.1)	34,261	2,245.3		3,261.4
Labour (person days)			18.0		45.0		27.0
Labour Value (Rs) - economic ¹			450.0		1,125.0		675.0
Household Livestock Net Margin (Rs) - economic			(1,466.1)		1,120.3		2,586.4

Source: Study of Impact of WIRFP on Net Incomes of Target Households, Jan 2004.

¹ Study of Impact of WIRFP on Net Incomes of Target Households, Jan 2004.

Average annual daily value of family labour assumed = Rs/day 25.0

Table AN11.3.3

A. Gujarat - Village Lakhana: Summary of Crop Net Margin per Household and Area (WBR - All Types).

Item	Well Being Ranking					
	Very Poor (1) Increment	Very Poor (2) Increment	Poor (1) Increment	Poor (2) Increment	Moderate Increment	Better Off Increment
Household Analysis:						
Crop Revenue (Rs/bigha)						
Crop	3,230	(570)	(5,590)	6,250	4,810	11,840
Residue	1,750	200	443	2,800	2,910	6,500
Total Crop Revenue	4,980	(370)	(5,148)	9,050	7,720	18,340
Production Costs (Rs/bigha)						
Variable Costs	309	(945)	383	488	1,669	4,572
Net Margin - Financial	4,671	575	(5,530)	8,562	6,052	13,769
Labour Input (person days)	31	3	(36)	66	38	85
Return per Person Day (Rs/p/day)	151	192	153	130	159	162
Labour Costs - Economic \1	1,291	60	374	1,595	1,096	1,410
Total Production Costs (Rs/bigha)	1,600	(885)	757	2,083	2,765	5,982
Net Margin (Rs/bigha) - Economic	3,380	(549)	(5,904)	6,967	4,955	12,359
Area planted (bigha)	1.5	-	5.0	3.5	0.5	6.5
Cropping Intensity (percent)						
Unit Area Analysis (Rs/unit) - Economic:						
Net Margin / bigha	725	(219)	(3,344)	1,742	1,239	3,090
Net Margin / hectare \2	3,276	(1,097)	(16,718)	8,709	6,194	15,448

Source:

Study of Impact of WIRFP on Net Incomes of Target Households, Jan 2004.

\1 Adjusted for labour costs.

\2 One hectare equivalent to bigha =

Table AN11.3.3

B. Gujarat - Village Lakhana: Crop Net Margin per Household and Area - WBR - Very Poor (1).

Item	Well Being Ranking - Very Poor (1)								
	Before / Without Project			After / With Project			Increment		
	Khalif	Rabi	Total	Khalif	Rabi	Total	Khalif	Rabi	Total
Household Analysis:									
Crop Revenue (Rs/bigha)									
Crop	2,770	-	2,770	5,000	1,000	6,000	2,230	1,000	3,230
Residue	1,250	-	1,250	2,400	600	3,000	1,150	600	1,750
Total Crop Revenue	4,020	-	4,020	7,400	1,600	9,000	3,380	1,600	4,980
Production Costs (Rs/bigha)									
Variable Costs	1,224	-	1,224	1,465	68	1,533	241	68	309
Net Margin - Financial	2,796	-	2,796	5,935	1,532	7,467	3,139	1,532	4,671
Labour Input (person days)	78	-	78	98	11	109	20	11	31
Return per Person Day (Rs/p/day)	36	-	36	61	139	69	157	139	151
Labour Costs - Economic \1	1,860	-	1,860	2,776	375	3,151	916	375	1,291
Total Production Costs (Rs/bigha)	3,084	-	3,084	4,241	443	4,684	1,157	443	1,600
Net Margin (Rs/bigha) - Economic	936	-	936	3,160	1,157	4,316	2,224	1,157	3,380
Area planted (bigha)	4.5	-	4.5	5.0	1.0	6.0	0.5	1.0	1.5
Cropping Intensity (percent)	100%	0%	100%	111%	22%	133%			60%
Unit Area Analysis (Rs/unit) - Economic:									
Net Margin / bigha	208	-	208	702	231	863	494	231	725
Net Margin / hectare \2	1,040	-	1,040	3,511	1,157	4,316	2,471	1,157	3,276

Source:

Study of Impact of WIRFP on Net Incomes of Target Households, Jan 2004.

\1 Adjusted for labour costs.

\2 One hectare equivalent to bigha =

5.0

Table AN11.3.3

C. Gujarat - Village Lakhana: Crop Net Margin per Household and Area - WBR - Very Poor (2).

Item	Well Being Ranking - Very Poor (2)								
	Before / Without Project			After / With Project			Increment		
	Khalif	Rabi	Total	Khalif	Rabi	Total	Khalif	Rabi	Total
Household Analysis:									
Crop Revenue (Rs/bigha)									
Crop	3,670	-	3,670	3,100	-	3,100	(570)	-	(570)
Residue	1,300	-	1,300	1,500	-	1,500	200	-	200
Total Crop Revenue	4,970	-	4,970	4,600	-	4,600	(370)	-	(370)
Production Costs (Rs/bigha)									
Variable Costs	945	-	945	-	-	-	(945)	-	(945)
Net Margin - Financial	4,026	-	4,026	4,600	-	4,600	575	-	575
Labour Input (person days)	36	-	36	39	-	39	3	-	3
Return per Person Day (Rs/p/day)	112	-	112	118	-	118	192	-	192
Labour Costs - Economic \1	720	-	720	780	-	780	60	-	60
Total Production Costs (Rs/bigha)	1,665	-	1,665	1,843	-	1,843	(885)	-	(885)
Net Margin (Rs/bigha) - Economic	3,306	-	3,306	2,757	-	2,757	(549)	-	(549)
Area planted (bigha)	2.5	-	2.5	2.5	-	2.5	-	-	-
Cropping Intensity (percent)	100%	0%	100%	100%	0%	100%			0%
Unit Area Analysis (Rs/unit) - Economic:									
Net Margin / bigha	1,322	-	1,322	1,103	-	1,103	(219)	-	(219)
Net Margin / hectare \2	6,611	-	6,611	5,514	-	5,514	(1,097)	-	(1,097)

Source:

Study of Impact of WIRFP on Net Incomes of Target Households, Jan 2004.

\1 Adjusted for labour costs.

\2 One hectare equivalent to bigha =

Table AN11.3.3

D. Gujarat - Village Lakhana: Crop Net Margin per Household and Area - WBR - Poor (1).

Item	Well Being Ranking - Poor (1)								
	Before / Without Project			After / With Project			Increment		
	Khalif	Rabi	Total	Khalif	Rabi	Total	Khalif	Rabi	Total
Household Analysis:									
Crop Revenue (Rs/bigha)									
Crop	16,780	6,400	23,180	8,990	8,600	17,590	(7,790)	2,200	(5,590)
Residue	1,650	980	2,630	1,998	1,075	3,073	348	95	443
Total Crop Revenue	18,430	7,380	25,810	10,988	9,675	20,663	(7,443)	2,295	(5,148)
Production Costs (Rs/bigha)									
Variable Costs	2,285	190	2,475	2,528	330	2,858	243	140	383
Net Margin - Financial	16,145	7,190	23,335	8,460	9,345	17,805	(7,685)	2,155	(5,530)
Labour Input (person days)	79	48	127	62	29	91	(17)	(19)	(36)
Return per Person Day (Rs/p/day)	204	150	184	136	324	196	452	(112)	153
Labour Costs - Economic \1	1,580	1,200	2,780	2,060	1,094	3,154	480	(106)	374
Total Production Costs (Rs/bigha)	3,865	1,390	5,255	4,588	1,424	6,012	723	34	757
Net Margin (Rs/bigha) - Economic	14,565	5,990	20,555	6,400	8,251	14,651	(8,165)	2,261	(5,904)
Area planted (bigha)	5.0	2.0	7.0	7.0	5.0	12.0	2.0	3.0	5.0
Cropping Intensity (percent)	100%	40%	140%	140%	100%	171%			200%
Unit Area Analysis (Rs/unit) - Economic:									
Net Margin / bigha	2,913	2,995	5,908	914	1,650	2,564	(1,999)	(1,345)	(3,344)
Net Margin / hectare \2	14,565	14,975	29,540	4,571	8,251	12,822	(9,994)	(6,724)	(16,718)

Source:

Study of Impact of WIRFP on Net Incomes of Target Households, Jan 2004.

\1 Adjusted for labour costs.

\2 One hectare equivalent to bigha =

Table AN11.3.3

E. Gujarat - Village Lakhana: Crop Net Margin per Household and Area - WBR - Poor (2).

Item	Well Being Ranking - Poor (2)								
	Before / Without Project			After / With Project			Increment		
	Khalif	Rabi	Total	Khalif	Rabi	Total	Khalif	Rabi	Total
Household Analysis:									
Crop Revenue (Rs/bigha)									
Crop	4,050	-	4,050	10,000	300	10,300	5,950	300	6,250
Residue	1,500	-	1,500	3,700	600	4,300	2,200	600	2,800
Total Crop Revenue	5,550	-	5,550	13,700	900	14,600	8,150	900	9,050
Production Costs (Rs/bigha)									
Variable Costs	1,915	-	1,915	2,353	50	2,403	438	50	488
Net Margin - Financial	3,635	-	3,635	11,347	850	12,197	7,712	850	8,562
Labour Input (person days)	55	-	55	109	12	121	54	12	66
Return per Person Day (Rs/p/day)	66	-	66	104	71	101	143	71	130
Labour Costs - Economic \1	825	-	825	2,180	240	2,420	1,355	240	1,595
Total Production Costs (Rs/bigha)	2,740	-	2,740	4,533	290	4,823	1,793	290	2,083
Net Margin (Rs/bigha) - Economic	2,810	-	2,810	9,167	610	9,777	6,357	610	6,967
Area planted (bigha)	4.0	-	4.0	7.0	0.5	7.5	3.0	0.5	3.5
Cropping Intensity (percent)	100%	0%	100%	175%	13%	188%			140%
Unit Area Analysis (Rs/unit) - Economic:									
Net Margin / bigha	703	-	703	2,292	153	2,444	1,589	153	1,742
Net Margin / hectare \2	3,513	-	3,513	11,459	763	12,221	7,946	763	8,709

Source:

Study of Impact of WIRFP on Net Incomes of Target Households, Jan 2004.

\1 Adjusted for labour costs.

\2 One hectare equivalent to bigha =

Table AN11.3.3

F. Gujarat - Village Lakhana: Crop Net Margin per Household and Area - WBR - Moderate.

Item	Well Being Ranking - Moderate								
	Before / Without Project			After / With Project			Increment		
	Khalif	Rabi	Total	Khalif	Rabi	Total	Khalif	Rabi	Total
Household Analysis:									
Crop Revenue (Rs/bigha)									
Crop	2,160	800	2,960	4,290	3,480	7,770	2,130	2,680	4,810
Residue	1,670	40	1,710	3,370	1,250	4,620	1,700	1,210	2,910
Total Crop Revenue	3,830	840	4,670	7,660	4,730	12,390	3,830	3,890	7,720
Production Costs (Rs/bigha)									
Variable Costs	845	210	1,055	2,162	562	2,723	1,317	352	1,669
Net Margin - Financial	2,985	631	3,616	5,499	4,169	9,667	2,514	3,538	6,052
Labour Input (person days)	52	18	70	71	37	108	19	19	38
Return per Person Day (Rs/p/day)	57	35	52	77	113	90	132	186	159
Labour Costs - Economic \1	1,032	452	1,484	1,720	860	2,580	688	408	1,096
Total Production Costs (Rs/bigha)	1,877	662	2,539	3,882	1,422	5,303	2,005	760	2,765
Net Margin (Rs/bigha) - Economic	1,953	179	2,132	3,778	3,309	7,087	1,825	3,130	4,955
Area planted (bigha)	5.0	1.0	6.0	5.0	1.5	6.5	-	0.5	0.5
Cropping Intensity (percent)	100%	20%	120%	100%	38%	163%			20%
Unit Area Analysis (Rs/unit) - Economic:									
Net Margin / bigha	488	45	533	945	827	1,772	456	783	1,239
Net Margin / hectare \2	2,441	223	2,664	4,723	4,136	8,858	2,282	3,913	6,194

Source:

Study of Impact of WIRFP on Net Incomes of Target Households, Jan 2004.

\1 Adjusted for labour costs.

\2 One hectare equivalent to bigha =

Table AN11.3.3

G. Gujarat - Village Lakhana: Crop Net Margin per Household and Area - WBR - Better Off.

Item	Well Being Ranking - Better Off								
	Before / Without Project			After / With Project			Increment		
	Khalif	Rabi	Total	Khalif	Rabi	Total	Khalif	Rabi	Total
Household Analysis:									
Crop Revenue (Rs/bigha)									
Crop	7,400	4,250	11,650	16,440	7,050	23,490	9,040	2,800	11,840
Residue	3,400	3,300	6,700	10,800	2,400	13,200	7,400	(900)	6,500
Total Crop Revenue	10,800	7,550	18,350	27,240	9,450	36,690	16,440	1,900	18,340
Production Costs (Rs/bigha)									
Variable Costs	2,108	1,740	3,848	6,068	2,352	8,420	3,960	612	4,572
Net Margin - Financial	8,692	5,810	14,502	21,173	7,098	28,271	12,481	1,288	13,769
Labour Input (person days)	35	27	62	98	49	147	63	22	85
Return per Person Day (Rs/p/day)	248	215	234	216	145	192	198	59	162
Labour Costs - Economic \1	800	540	1,340	1,770	980	2,750	970	440	1,410
Total Production Costs (Rs/bigha)	2,908	2,280	5,188	7,838	3,332	11,170	4,930	1,052	5,982
Net Margin (Rs/bigha) - Economic	7,892	5,270	13,162	19,403	6,118	25,521	11,511	848	12,359
Area planted (bigha)	4.0	3.5	7.5	10.0	4.0	14.0	6.0	0.5	6.5
Cropping Intensity (percent)	100%	88%	188%	250%	100%	350%			163%
Unit Area Analysis (Rs/unit) - Economic:									
Net Margin / bigha	1,973	1,318	3,291	4,851	1,530	6,380	2,878	212	3,090
Net Margin / hectare \2	9,865	6,588	16,453	24,253	7,648	31,901	14,388	1,060	15,448

Source:

Study of Impact of WIRFP on Net Incomes of Target Households, Jan 2004.

\1 Adjusted for labour costs.

\2 One hectare equivalent to bigha =

Table AN11.3.4

Gujarat - Village Lakhana: Individual Household Crop Detailed Data: WBR - Very Poor (1).

	Unit	Kharif:								Rabi:							
		Without project				With project				Without Project				With Project			
		Area	Qty	Price	Value	Area	Qty	Price	Value	Area	Qty	Price	Value	Area	Qty	Price	Value
By Economic Class: V1	VP	Crop:	Maize			Crop:	Maize			Crop:	Chick Pea			Crop:	Maize		
			Paddy				Paddy				Wheat						
			Urd				Urd										
			Tuar				Tuar										
Revenue																	
Crop										Crop							
A. Maize	bigha	2	200	4.5	900	2	400	5.0	2,000		-	-	-	1	200	5.0	1,000
B. Paddy	bigha	1	80	4.0	320	1	100	4.0	400		-	-	-	-	-	-	-
C. Urd	bigha	2	100	12.5	1,250	1	160	12.5	2,000		-	-	-	-	-	-	-
D. Tuar	bigha	1	20	15.0	300	1	40	15.0	600		-	-	-	-	-	-	-
By product										By product							
A. Maize	Sum	-	1.5	500	750	-	0.5	1,200	600		-	-	-	-	0.5	1,200	600
B. Paddy	Sum	-	1.0	500	500	-	0.5	1,600	800		-	-	-	-	-	-	-
C. Urd	Sum	-	-	-	-	-	5.0	100	500		-	-	-	-	-	-	-
D. Tuar	Sum	-	-	-	-	-	5.0	100	500		-	-	-	-	-	-	-
Total Revenue					4,020				7,400								1,600
Variable Costs																	
Seed																	
A. Maize	kg		7.5	4.0	30		10.0	10	100		-	-	-		6	4.0	24
B. Cotton	kg		7.0	5.0	35		7.5	6	45		-	-	-		-	-	-
C. Tuar	kg		2.0	12.0	24		10.0	20	200		-	-	-		-	-	-
D. Urad	kg		8.0	15.0	120		3.0	20	60		-	-	-		-	-	-
Fertiliser																	
A. Urea	kg		50	5.5	275		50	6	300		-	-	-		-	-	-
B. DAP	kg		20	7.5	150		20	8	160		-	-	-		-	-	-
C. FYM	Load		1	300.0	300		1	500	500		-	-	-		-	-	-
Pesticide																	
Irrigation	Rounds		-	-	-		-	-	-		-	-	-		2	22.0	44
Subtotal					934				1,365								68
Draught																	
Days			1	200.0	200		-	-	-		-	-	-		-	-	-
Repairs																	
Sum			-	-	-		-	-	-		-	-	-		-	-	-
Thrashing																	
Rate			-	-	-		-	-	-		-	-	-		-	-	-
Storage																	
Sum			-	-	-		-	-	-		-	-	-		-	-	-
Transport																	
Sum			-	-	-		-	-	-		-	-	-		-	-	-
Credit																	
Rs			300	30%	90		500	20%	100		-	-	-		-	-	-
Total Variable Costs					1,224				1,465								68
Labour Costs																	
P/days																	
Land Prep			3	40	120		4	44	175		-	-	-		3	42	125
Sowing			12	40	480		15	42	626		-	-	-		2	38	75
Weeding			15	20	300		30	25	750		-	-	-		-	-	-
Fert App			4	20	80		4	25	100		-	-	-		1	50	50
Pest App			-	-	-		-	-	-		-	-	-		-	-	-
Irrigation			-	-	-		-	-	-		-	-	-		1	25	25
Harvest			30	20	600		25	25	625		-	-	-		2	25	50
Storage			14	20	280		20	25	500		-	-	-		2	25	50
Total Labour Costs			78		1,860		98		2,776						11		375
Total Production Costs					3,084				4,241								443
Net Margin / Household (Economic)					936				3,160								1,157
Return per Person Day (Financial)					35.8				60.6				#DIV/0!				139.3

Source: Study of Impact of WIRFP on Net Incomes of Target Households, Jan 2004.

V1 Economic class

VP = Very poor, P = Poor, M = Moderate, BO = Better off.

Table AN11.3.5 Gujarat - Village Lakhana: Individual Household Crop Detailed Data: WBR - Very Poor (2).

	Unit	Kharif:								Rabi:							
		Without project				With project				Without Project				With Project			
		Area	Qty	Price	Value	Area	Qty	Price	Value	Area	Qty	Price	Value	Area	Qty	Price	Value
By Economic Class:	VP	Crop: Maize Paddy Urad Tuar				Crop: Maize Paddy				Crop: Chick Pea Wheat				Crop:			
Revenue																	
Crop																	
A. Maize	bigha	1.50	300	4.5	1,350	1.25	500	5.0	2,500								
B. Paddy	bigha	0.50	100	4.0	400	1.25	150	4.0	600								
C. Urad	bigha	0.50	60	12.0	720	-	-	-	-								
D. Tuar	bigha	-	80	15.0	1,200	-	-	-	-								
By product																	
A. Maize	Sum	-	0.5	1,000	500	-	1.0	1,200	1,200								
B. Paddy	Sum	-	1.0	200	200	-	0.5	600	300								
C. Urad	Sum	-	0.5	1,200	600	-	-	-	-								
D. Tuar	Sum	-	-	-	-	-	-	-	-								
Total Revenue					4,970				4,600								
Variable Costs																	
Seed																	
A. Maize	kg		8.0	4.0	32		9.0	7.0	63								
B. Paddy	kg		10.0	4.0	40		12.5	4.0	50								
C. Urad	kg		2.0	20.0	40		-	-	-								
D. Tuar	kg		2.5	13.0	33		-	-	-								
Fertiliser																	
A. Urea	kg		10	4.0	40		100	5.6	560								
B. DAP	kg		2.5	8.0	20		10	9.0	90								
C. FYM	Load		0.5	400.0	200		-	-	-								
Pesticide																	
Irrigation	kg		-	-	-		-	-	-								
Subtotal	Rounds		-	-	-		-	-	-								
Total					405				763								
Draught	Days		-	-	-		-	-	-								
Repairs	Sum		-	-	-		-	-	-								
Thrashing	Rate		15	10.0	150		-	-	-								
Storage	Sum		-	-	-		-	-	-								
Transport	Sum		1	150.0	150		1	200.0	200								
Credit	Rs		800	30%	240		500	20%	100								
Total Variable Costs					945				1,063								
Labour Costs	P/days																
Land Prep			2	20	40		-	-	-								
Sowing			5	20	100		2	20	40								
Weeding			13	20	260		11	20	220								
Fert App			4	20	80		4	20	80								
Pest App			-	-	-		-	-	-								
Irrigation			-	-	-		-	-	-								
Harvest			12	20	240		20	20	400								
Storage			-	-	-		2	20	40								
Total Labour Costs			36		720		39		780								
Total Production Costs					1,665				1,843								
Net Margin / Household (Economic)					3,306				2,757								
Return per Person Day (Financial)					111.8				90.7			#DIV/0!				#DIV/0!	

Source: Study of Impact of WIRFP on Net Incomes of Target Households, Jan 2004.
 Economic class VP = Very poor, P = Poor, M = Moderate, BO = Better off.

Table AN11.3.6 Gujarat - Village Lakhana: Individual Household Crop Detailed Data: WBR - Poor (1).

	Unit	Kharif:								Rabi:								
		Without project				With project				Without Project				With Project				
		Area	Qty	Price	Value	Area	Qty	Price	Value	Area	Qty	Price	Value	Area	Qty	Price	Value	
By Economic Class:	P	Crop:	Maize			Crop:				Crop:	Maize			Crop:				
			Paddy								Wheat							
			Black Gram								Gram							
			Pigeon Pea															
Revenue																		
Crop										Crop								
A. Maize	bigha	1	1,000	4.0	4,000	2	300	4.5	1,350	Maize	1.0	500	5.0	2,500	3	1,460	5.0	7,300
B. Paddy	bigha	1	800	3.0	2,400	1	160	8.0	1,280	Wheat	0.5	300	7.0	2,100	1	100	7.0	700
C. Black Gram	bigha	2	300	15.0	4,500	2	240	13.0	3,120	Gram	0.5	120	15.0	1,800	1	40	15.0	600
D. Pigeon Pea	bigha	1	420	14.0	5,880	2	360	9.0	3,240		-	-	-	-	-	-	-	
By product										By product								
A. Maize	Sum	-	2.5	400	1,000	-	8.5	235	1,998	Maize	-	-	-	-	-	1	700	700
B. Paddy	Sum	-	-	-	-	-	-	-	-	Wheat	-	1	480	480	-	1	300	300
C. Black Gram	Sum	-	10.0	15	150	-	-	-	-	Gram	-	1	500	500	-	5	15	75
D. Pigeon Pea	Sum	-	1.0	500	500	-	-	-	-		-	-	-	-	-	-	-	
Total Revenue					18,430				10,988				7,380				9,675	
Variable Costs																		
Seed																		
A. Maize	kg		25.0	4.0	100		25.0	5.0	125	Maize		10	4.0	40		15	6.0	90
B. Paddy	kg		30.0	3.5	105		20.0	7.5	150	Wheat		10	5.0	50		15	8.0	120
C. Black Gram	kg		12.5	32.0	400		12.5	15.0	188	Gram		10	10.0	100		15	8.0	120
D. Pigeon Pea	kg		2.5	12.0	30		17.5	10.0	175			-	-	-		-	-	-
Fertiliser																		
A. Urea	kg		100	4.5	450		100	5.0	500			-	-	-		-	-	-
B. DAP	kg		25	8.0	200		50	9.0	450			-	-	-		-	-	-
C. FYM	Load		2	400.0	800		1.5	500.0	750			-	-	-		-	-	-
Pesticide																		
Irrigation	Rounds		-	-	-		-	-	-			-	-	-		-	-	-
Subtotal					2,085				2,338				190					330
Draught	Days		-	-	-		-	-	-			-	-	-		-	-	-
Repairs	Sum		-	-	-		-	-	-			-	-	-		-	-	-
Thrashing	Rate		1	80.0	80		-	-	-			-	-	-		-	-	-
Storage	Sum		-	-	-		-	-	-			-	-	-		-	-	-
Transport	Sum		-	-	-		1	40.0	40			-	-	-		-	-	-
Credit	Rs		600	20%	120		500	30%	150			-	-	-		-	-	-
Total Variable Costs					2,285				2,528				190					330
Labour Costs	P/days																	
Land Prep			10	20	200		10	50	500			-	-	-		8	38	319
Sowing			9	20	180		-	-	-			-	-	-		2	38	91
Weeding			-	-	-		-	-	-			-	-	-		-	-	-
Fert App			5	20	100		-	-	-			-	-	-		5	38	182
Pest App			-	-	-		-	-	-			-	-	-		-	-	-
Irrigation			-	-	-		-	-	-			-	-	-		4	38	137
Harvest			25	20	500		26	30	780			-	-	-		10	38	365
Storage			30	20	600		26	30	780			48	25	1,200		-	-	-
Total Labour Costs			79		1,580		62		2,060			48		1,200		29		1,094
Total Production Costs					3,865				4,588					1,390				1,424
Net Margin / Household (Economic)					14,565				6,400					5,990				8,251
Return per Person Day (Financial)					204.4				136.5					149.8				324.5

Source: Study of Impact of WIRFP on Net Incomes of Target Households, Jan 2004.
 Economic class VP = Very poor, P = Poor, M = Moderate, BO = Better off.

Table AN11.3.7

Gujarat - Village Lakhana: Individual Household Crop Detailed Data: WBR - Poor (2).

	Unit	Kharif:								Rabi:										
		Without project				With project				Without Project				With Project						
		Area	Qty	Price	Value	Area	Qty	Price	Value	Area	Qty	Price	Value	Area	Qty	Price	Value			
Economic Class: \1	P	Crop:	Maize					Crop:					Crop:				Crop:	Gram		
Revenue			Paddy																	
Crop			Black Gram																	
A. Maize	bigha	1.0	150	4.5	675	2.0	500	5.0	2,500	Crop										
B. Paddy	bigha	1.0	-	-	-	2.0	500	4.0	2,000	Gram	-	-	-	-	-	-	0.5	30	10.0	300
C. Black Gram	bigha	1.0	150	12.5	1,875	1.5	200	12.5	2,500		-	-	-	-	-	-	-	-	-	
D. Pigeon Pea	bigha	1.0	100	15.0	1,500	1.5	200	15.0	3,000		-	-	-	-	-	-	-	-	-	
By product										By product										
A. Maize	Sum	-	1.0	1,200	1,200	-	1	1,200	1,200	Gram	-	-	-	-	-	-	-	0.5	1,200	600
B. Paddy	Sum	-	0.5	600	300	-	1	1,500	1,500		-	-	-	-	-	-	-	-	-	-
C. Black Gram	Sum	-	-	-	-	-	100	5	500		-	-	-	-	-	-	-	-	-	-
D. Pigeon Pea	Sum	-	-	-	-	-	100	5	500		-	-	-	-	-	-	-	-	-	-
Total Revenue					5,550				13,700											900
Variable Costs																				
Seed																				
A. Maize	kg		7.0	5.0	35		12	4.0	48	Gram	-	-	-	-	-	-	-	5.0	10.0	50
B. Paddy	kg		20.0	4.0	80		30	4.0	120		-	-	-	-	-	-	-	-	-	-
C. Black Gram	kg		8.0	15.0	120		10	20.0	200		-	-	-	-	-	-	-	-	-	-
D. Pigeon Pea	kg		2.0	20.0	40		2	20.0	40		-	-	-	-	-	-	-	-	-	-
Fertiliser																				
A. Urea	kg		50	5.2	260		100	5.4	540		-	-	-	-	-	-	-	-	-	-
B. DAP	kg		50	8.0	400		30	6.0	180		-	-	-	-	-	-	-	-	-	-
C. FYM	Load		1	400.0	400		1	500.0	500		-	-	-	-	-	-	-	-	-	-
Pesticide	kg		-	-	-		-	-	-		-	-	-	-	-	-	-	-	-	-
Irrigation	Rounds		-	-	-		-	-	-		-	-	-	-	-	-	-	-	-	-
Subtotal					1,335				1,628											50
Draught	Days		3	123.3	370		3	116.7	350		-	-	-	-	-	-	-	-	-	-
Repairs	Sum		-	-	-		-	-	-		-	-	-	-	-	-	-	-	-	-
Thrashing	Rate		-	-	-		-	-	-		-	-	-	-	-	-	-	-	-	-
Storage	Sum		-	-	-		-	-	-		-	-	-	-	-	-	-	-	-	-
Transport	Sum		-	-	-		-	-	-		-	-	-	-	-	-	-	-	-	-
Credit	Rs		3,500	6%	210		5,000	8%	375			0%	-							-
Total Variable Costs					1,915				2,353											50
Labour Costs	P/days																			
Land Prep			7	15	105		14	20	280		-	-	-					7	20	140
Sowing			6	15	90		11	20	220		-	-	-					3	20	60
Weeding			6	15	90		18	20	360		-	-	-					-	-	-
Fert App			1	15	15		2	20	40		-	-	-					-	-	-
Pest App			-	-	-		-	-	-		-	-	-					-	-	-
Irrigation			-	-	-		-	-	-		-	-	-					-	-	-
Harvest			18	15	270		36	20	720		-	-	-					2	20	40
Storage			17	15	255		28	20	560		-	-	-					-	-	-
Total Labour Costs			55		825		109		2,180									12		240
Total Production Costs					2,740				4,533											290
Net Margin / Household (Economic)					2,810				9,167											610
Return per Person Day (Financial)					66.1				104.1											70.8
																				#DIV/0!

Source: Study of Impact of WIRFP on Net Incomes of Target Households, Jan 2004.

\1 Economic class

VP = Very poor, P = Poor, M = Moderate, BO = Better off.

Table AN11.3.8

Gujarat - Village Lakhana: Individual Household Crop Detailed Data: WBR - Moderate.

Economic Class: /1	Unit	Kharif:								Rabi:								
		Without project				With project				Without Project				With Project				
		Area	Qty	Price	Value	Area	Qty	Price	Value	Area	Qty	Price	Value	Area	Qty	Price	Value	
	M	Crop:	Maize Paddy Urad Tuar			Crop:				Crop:	Chick Pea			Crop:	Chick Pea Maize			
Revenue																		
Crop										Crop								
A. Maize	bigha	1.0	240	4.5	1,080	1	500	4.5	2,250	Chick Pea	1	80	10.0	800	0.5	200	12.0	2,400
B. Paddy	bigha	1.5	100	5.0	500	1	200	6.0	1,200	Maize	-	-	-	-	1.0	240	4.5	1,080
C. Urad	bigha	2.5	60	7.5	450	3	60	9.0	540	-	-	-	-	-	-	-	-	
D. Tuar	bigha	-	10	13.0	130	-	20	15.0	300	-	-	-	-	-	-	-	-	
By product										By product								
A. Maize	Sum		1.0	950	950	-	1.5	1,200	1,800	Chick Pea		4.0	10	40		5.0	10	50
B. Paddy	Sum		0.5	1,300	650	-	1.0	1,500	1,500	Maize		-	-	-		1.0	1,200	1,200
C. Urad	Sum		2.0	10	20	-	3.0	10	30	-		-	-	-		-	-	
D. Tuar	Sum		5.0	10	50	-	4.0	10	40	-		-	-	-		-	-	
Total Revenue					3,830				7,660				840				4,730	
Variable Costs																		
Seed																		
A. Maize	kg		10.0	5.0	50		6	5.0	30	Chick Pea		15.0	12.50	188		15.0	12.0	180
B. Paddy	kg		30.0	4.0	120		20	6.0	120	Maize		-	-	-		10.0	5.0	50
C. Urad	kg		7.5	10.0	75		10	12.0	120	-		-	-	-		-	-	
D. Tuar	kg		2.0	25.0	50		2	12.0	24	-		-	-	-		-	-	
Fertiliser																		
A. Urea	kg		50	5.0	250		105	5.6	588			-	-	-		20.0	5.4	108
B. DAP	kg		-	-	-		25	9.5	238			-	-	-		2.5	9.4	24
C. FYM	Load		1	100.0	100		1	500.0	500			-	-	-		-	-	
Pesticide																		
Irrigation	Rounds		-	-	-		4	23.0	92			1	22.00	22		5	30.0	150
Subtotal					645				1,712				210				512	
Draught	Days		-	-	-		-	-	-			-	-	-		-	-	-
Repairs	Sum		-	-	-		-	-	-			-	-	-		-	-	-
Thrashing	Rate		-	-	-		-	-	-			-	-	-		-	-	-
Storage	Sum		-	-	-		1	150.0	150			-	-	-		1	50.0	50
Transport	Sum		-	-	-		-	-	-			-	-	-		-	-	-
Credit	Rs		1,000	20%	200		1,500	20%	300			-	0%	-		-	0%	-
Total Variable Costs					845				2,162				210				562	
Labour Costs	P/days																	
Land Prep			6	18	108		10	20	200			5	31	154		10	20	200
Sowing			16	24	384		13	43	560			4	34	136		6	40	240
Weeding			15	18	270		20	20	400			2	18	36		5	20	100
Fert App			-	-	-		4	20	80			-	-	-		1	20	20
Pest App			-	-	-		-	-	-			-	-	-		-	-	-
Irrigation			-	-	-		3	20	60			1	18	18		5	20	100
Harvest			15	18	270		21	20	420			6	18	108		10	20	200
Storage			-	-	-		-	-	-			-	-	-		-	-	-
Total Labour Costs			52		1,032		71		1,720			18		452		37		860
Total Production Costs					1,877				3,882					662				1,422
Net Margin / Household (Economic)					1,953				3,778					179				3,309
Return per Person Day (Financial)					57.4				77.4					35.0				112.7

Source: Study of Impact of WIRFP on Net Incomes of Target Households, Jan 2004.

11 Economic class VP = Very poor, P = Poor, M = Moderate, BO = Better off.

Table AN11.3.9

Gujarat - Village Lakhana: Individual Household Crop Detailed Data: WBR - Better Off.

	Unit	Kharif:								Rabi:								
		Without project				With project				Without Project				With Project				
		Area	Qty	Price	Value	Area	Qty	Price	Value	Area	Qty	Price	Value	Area	Qty	Price	Value	
Economic Class: \1	BO	Crop:	Maize			Crop:				Crop:	Maize			Crop:	Maize			
			Paddy								Black Gram				Black Gram			
			Tuar												Wheat			
			Urad															
Revenue										Crop								
Crop										Maize					Black Gram			
A. Maize	bigha	2.0	400	3.0	1,200	3.0	800	4.5	3,600	Maize	2.0	500	4.5	2,250	1.5	200	4.5	900
B. Paddy	bigha	1.0	500	5.0	2,500	3.0	1,000	4.0	4,000	Black Gram	1.5	200	10.0	2,000	1.0	300	12.5	3,750
C. Tuar	bigha	1.0	100	13.0	1,300	4.0	200	12.4	2,480	Wheat	-	-	-	-	1.5	400	6.0	2,400
D. Urad	bigha	-	200	12.0	2,400	-	530	12.0	6,360	-	-	-	-	-	-	-	-	
By product										By product								
A. Maize	Sum		2.0	950	1,900		3.0	1,200	3,600	Maize		2.0	1,500	3,000		1.0	1,500	1,500
B. Paddy	Sum		1.0	1,200	1,200		4.0	1,500	6,000	Black Gram		0.5	600	300		0.5	600	300
C. Tuar	Sum		0.5	600	300		1.0	600	600	Wheat		-	-	-		1.0	600	600
D. Urad	Sum		-	-	-		1.0	600	600	-		-	-	-		-	-	-
Total Revenue					10,800				27,240				7,550				9,450	
Variable Costs																		
Seed																		
A. Maize	kg		10.0	6.0	60		10.0	30.0	300	Maize		10.0	5.0	50		7.0	6.0	42
B. Paddy	kg		20.0	10.0	200		50.0	7.0	350	Black Gram		60.0	15.0	900		40.0	20.0	800
C. Tuar	kg		5.0	15.0	75		30.0	20.0	600	Wheat		-	-	-		30.0	10.0	300
D. Urad	kg		15.0	15.0	225		72.5	15.0	1,088	-		-	-	-		-	-	-
Fertiliser																		
A. Urea	kg		100	5.4	540		250	5.2	1,300			50	5.0	250		50	5.4	270
B. DAP	kg		30	9.6	288		50	10.0	500			30	8.0	240		30	9.0	270
C. FYM	Load		1	400.0	400		2	500.0	1,000			-	-	-		-	-	-
Pesticide	kg		-	-	-		-	-	-			-	-	-		-	-	-
Irrigation	Rounds		-	-	-		2	150.0	300			-	-	-		4	30.0	120
Subtotal					1,788				5,438				1,440					1,802
Draught	Days		3	106.7	320		4.5	100.0	450			3	100.0	300		5	110.0	550
Repairs	Sum		-	-	-		-	-	-			-	-	-		-	-	-
Thrashing	Rate		-	-	-		-	-	-			-	-	-		-	-	-
Storage	Sum		-	-	-		-	-	-			-	-	-		-	-	-
Transport	Sum		-	-	-		4	20.0	80			-	-	-		-	-	-
Credit	Rs		-	0%	-		500	20%	100			-	0%	-		-	0%	-
Total Variable Costs					2,108				6,068				1,740					2,352
Labour Costs	P/days																	
Land Prep			10	30	300		60	20	1,200			4	20	80		20	20	400
Sowing			10	20	200		4	15	60			15	20	300		3	20	60
Weeding			-	-	-		10	15	150			-	-	-		2	20	40
Fert App			-	-	-		6	15	90			2	20	40		2	20	40
Pest App			-	-	-		-	-	-			-	-	-		-	-	-
Irrigation			-	-	-		3	15	45			-	-	-		18	20	360
Harvest			15	20	300		15	15	225			6	20	120		2	20	40
Storage			-	-	-		-	-	-			-	-	-		2	20	40
Total Labour Costs			35		800		98		1,770			27		540		49		980
Total Production Costs					2,908				7,838				2,280					3,332
Net Margin / Household (Economic)					7,892				19,403				5,270					6,118
Return per Person Day (Financial)					248.3				216.0				215.2					144.9

Source: Study of Impact of WIRFP on Net Incomes of Target Households, Jan 2004.

\1 Economic class

VP = Very poor, P = Poor, M = Moderate, BO = Better off.

Table AN11.3.10 Gujarat - Village Lakhana: Individual Household Livestock Detailed Data: WBR - Very Poor (1).

Item	Units	Period	Before / Without Project Situation			After / With Project Situation		
			Quantity (No)	Unit Price (Rs)	Value (Rs/Period)	Quantity (No)	Unit Price (Rs)	Value (Rs/Period)
Livestock Asset Value								
Cow								
Male	head		1	2,000.0	2,000	1	3,500.0	3,500
Female	head		-	-	-	1	2,000.0	2,000
Losses	head		-	-	-	-	-	-
Buffalo								
Male	head		-	-	-	-	-	-
Female	head		-	-	-	2	7,000.0	14,000
Losses	head		-	-	-	-	-	-
Goat								
Male	head		-	-	-	2	1,000.0	2,000
Female	head		2	600.0	1,200	4	700.0	2,800
Losses	head		-	-	-	-	-	-
Poultry								
Not Specified	head		5	40.0	200	-	-	-
Losses	head		-	-	-	-	-	-
Total Livestock Assets					3,400			24,300
Annual Increase in Livestock Assets	year	5			-			4,180
Sales Income								
Cow and Buffalo								
Milk	litres	year	-	-	-	480	10.0	4,800
Dung	cart	year	0.8	400.0	300	1	500.0	500
Draught	days	year	-	-	-	-	-	-
Transport	days	year	-	-	-	-	-	-
Sales	no	year	-	-	-	-	-	-
Goat								
Milk	litres	year	-	-	-	-	-	-
Dung	sum	year	-	-	-	-	-	-
Other	-	-	-	-	-	-	-	-
Sales	no	year	-	-	-	-	-	-
Poultry								
Sales	no	year	-	-	-	-	-	-
Total Sales Income					300			5,300
Expenditure								
Direct Costs								
Cow and Buffalo								
Feeding (grazing)	sum	year	1.0	144.0	144	1.0	168.0	168
Feeding (roughage)	sum	year	1.0	800.0	800	1.0	2,500.0	2,500
Feeding (concentrate)	sum	year	1.0	200.0	200	1.0	260.0	260
Vet and Med	sum	year	-	-	-	-	-	-
Other	sum	year	-	-	-	-	-	-
Goat								
Feeding	sum	year	-	-	-	-	-	-
Vet and Med	sum	year	-	-	-	-	-	-
Other	sum	year	-	-	-	-	-	-
Poultry								
Sales	sum	year	-	-	-	-	-	-
Other	sum	year	-	-	-	-	-	-
Total Direct Costs					1,144			2,928
Overhead Costs								
Equipment repairs	sum	year	-	-	-	-	-	-
Total Overhead Costs					-			-
Total Expenditure					1,144			2,928
Net Margin					(844)			2,372
Family Labour Input	Days	Month	-	-	-	-	-	-
Return to Family Labour								
Combined Net MarginCash Flow and Asset					(844)			6,552

Source: Study of Impact of WIRFP on Net Incomes of Target Households, Jan 2004.

Table AN11.3.11 Gujarat - Village Lakhana: Individual Household Livestock Detailed Data: WBR - Very Poor (2).

Item	Units	Period	Before / Without Project Situation			After / With Project Situation		
			Quantity (No)	Unit Price (Rs)	Value (Rs/Period)	Quantity (No)	Unit Price (Rs)	Value (Rs/Period)
Livestock Asset Value								
Cow								
Male	head		-	-	-	-	-	-
Female	head		-	-	-	-	-	-
Losses	head		-	-	-	-	-	-
Buffalo								
Male	head		-	-	-	-	-	-
Female	head		-	-	-	-	-	-
Losses	head		-	-	-	-	-	-
Goat								
Male	head		-	-	-	-	-	-
Female	head		1	800.0	800	3	800.0	2,400
Losses	head		-	-	-	-	-	-
Poultry								
Not Specified	head		2	40.0	80	2	40.0	-
Losses	head		-	-	-	-	-	-
Total Livestock Assets					880			2,400
Annual Increase in Livestock Assets	year	5						304
Sales Income								
Cow and Buffalo								
Milk	litres	year	-	-	-	-	-	-
Dung	cart	year	-	-	-	-	-	-
Draught	days	year	-	-	-	-	-	-
Transport	days	year	-	-	-	-	-	-
Sales	no	year	-	-	-	-	-	-
Goat								
Milk	litres	year	-	-	-	-	-	-
Dung	sum	year	-	-	-	-	-	-
Other	-	-	-	-	-	-	-	-
Sales	no	year	-	-	-	1	750.0	750
Poultry								
Sales	no	year	30	0.5	15	-	-	-
Other	-	-	1	750.0	750	1	1,450.0	1,450
Total Sales Income					765			2,200
Expenditure								
Direct Costs								
Cow and Buffalo								
Feeding (grazing)	sum	year	-	-	-	-	-	-
Feeding (concentrate)	sum	year	-	-	-	-	-	-
Vet and Med	sum	year	-	-	-	-	-	-
Other	sum	year	-	-	-	-	-	-
Goat								
Feeding	sum	year	-	-	-	-	-	-
Vet and Med	sum	year	-	-	-	1.0	40.0	40
Other	sum	year	-	-	-	-	-	-
Poultry								
Sales	sum	year	1.0	300.0	300	1.0	450.0	450
Other	sum	year	1.0	300.0	300	1.0	450.0	450
Total Direct Costs					600			940
Overhead Costs								
Equipment repairs	sum	year	-	-	-	-	-	-
Total Overhead Costs								
Total Expenditure					600			940
Net Margin					165			1,260
Family Labour Input	Days	Month	-	-	-	-	-	-
Return to Family Labour								
Combined Asset and Cash Value					165			1,564

Source: Study of Impact of WIRFP on Net Incomes of Target Households, Jan 2004.

Table AN11.3.12 Gujarat - Village Lakhana: Individual Household Livestock Detailed Data: WBR - Poor (1).

Item	Units	Period	Before / Without Project Situation			After / With Project Situation		
			Quantity (No)	Unit Price (Rs)	Value (Rs/Period)	Quantity (No)	Unit Price (Rs)	Value (Rs/Period)
Livestock Asset Value								
Cow								
Male	head		2	4,000.0	8,000	2	5,000.0	10,000
Female	head		1	500.0	500	2	1,000.0	2,000
Losses	head		-	-	-	-	-	-
Buffalo								
Male	head		-	-	-	1	500.0	500
Female	head		2	4,000.0	8,000	3	4,000.0	12,000
Losses	head		-	-	-	-	-	-
Goat								
Male	head		-	-	-	2	1,000.0	2,000
Female	head		5	500.0	2,500	13	500.0	6,500
Losses	head		-	-	-	-	-	-
Poultry								
Not Specified	head		10	100.0	1,000	20	100.0	2,000
Losses	head		-	-	-	-	-	-
Total Livestock Assets					20,000			35,000
Annual Increase in Livestock Assets	year	5.0			-			3,000
Sales Income								
Cow and Buffalo								
Milk	litres	year	-	-	-	540.0	15.0	8,100
Dung	cart	year	2.0	400.0	800	1.5	130.0	195
Draught	days	year	20	150.0	3,000	30	100.0	3,000
Transport	days	year	-	-	-	-	-	-
Sales	no	year	-	-	-	-	-	-
Goat								
Milk	litres	year	-	-	-	-	-	-
Dung	sum	year	-	-	-	-	-	-
Other	-	-	-	-	-	-	-	-
Sales	no	year	2	450.0	900	5	800.0	4,000
Poultry								
Sales	no	year	10	50.0	500	50	40.0	2,000
Other	-	-	-	-	-	9	50.0	450
Total Sales Income					5,200			17,745
Expenditure								
Direct Costs								
Cow and Buffalo								
Feeding (grazing)	sum	year	-	-	-	-	-	-
Feeding (roughage)	sum	year	1.0	2,330.0	2,330	1.0	3,075.0	3,075
Feeding (concentrate)	sum	year	-	-	-	40.0	5.0	200
Vet and Med	sum	year	-	-	-	1.0	100.0	100
Other	sum	year	-	-	-	1.0	1,000.0	1,000
Goat								
Feeding	sum	year	-	-	-	720.0	10.0	7,200
Vet and Med	sum	year	-	-	-	-	-	-
Other	sum	year	-	-	-	-	-	-
Poultry								
Other	sum	year	-	-	-	90.0	5.0	450
Total Direct Costs					2,330			12,025
Overhead Costs								
Equipment repairs	sum	year	-	-	-	-	-	-
Total Overhead Costs					-			-
Total Expenditure					2,330			12,025
Net Margin					2,870			5,720
Family Labour Input	Days	Month	-	-	-	-	-	-
Return to Family Labour								
Combined Asset and Cash Value					22,870			40,720

Source: Study of Impact of WIRFP on Net Incomes of Target Households, Jan 2004.

Table AN11.3.13 Gujarat - Village Lakhana: Individual Household Livestock Detailed Data: WBR - Poor (2).

Item	Units	Period	Before / Without Project Situation			After / With Project Situation		
			Quantity (No)	Unit Price (Rs)	Value (Rs/Period)	Quantity (No)	Unit Price (Rs)	Value (Rs/Period)
Livestock Asset Value								
Cow								
Male	head		2	3,080.0	6,160	3	4,000.0	12,000
Female	head		-	-	-	1	2,000.0	2,000
Losses	head		-	-	-	-	-	-
Buffalo								
Male	head		-	-	-	-	-	-
Female	head		1	5,000.0	5,000	4	7,500.0	-
Losses	head		-	-	-	-	-	-
Goat								
Male	head		2	600.0	1,200	4	900.0	3,600
Female	head		4	500.0	2,000	5	750.0	3,750
Losses	head		-	-	-	-	-	-
Poultry								
Not Specified	head		5	40.0	200	8	80.0	640
Losses	head		-	-	-	-	-	-
Total Livestock Assets					14,560			21,990
Annual Increase in Assets	year	5			-			1,486
Sales Income								
Cow and Buffalo								
Milk	litres	year	-	-	-	550	10.0	5,500
Dung	cart	year	1.0	400.0	400	1	500.0	500
Draught	days	year	-	-	-	-	-	-
Transport	days	year	-	-	-	-	-	-
Sales	no	year	-	-	-	-	-	-
Goat								
Milk	litres	year	90	6.0	540	180	8.0	1,440
Dung	sum	year	-	-	-	1	400.0	400
Other	-	-	-	-	-	-	-	-
Sales	no	year	2	500.0	1,000	2	1,000.0	2,000
Poultry								
Sales	no	year	-	-	-	-	-	-
Other	-	-	-	-	-	-	-	-
Total Sales Income					1,940			9,840
Expenditure								
Direct Costs								
Cow and Buffalo								
Feeding (grazing)	sum	year	-	-	-	-	-	-
Feeding (roughage)	sum	year	1.0	1,500.0	1,500	1.0	4,300.0	4,300
Feeding (concentrate)	sum	year	-	-	-	-	-	-
Vet and Med	sum	year	1.0	70.0	70	1.0	230.0	230
Other	sum	year	-	-	-	-	-	-
Goat								
Feeding	sum	year	-	-	-	-	-	-
Vet and Med	sum	year	-	-	-	-	-	-
Other	sum	year	-	-	-	-	-	-
Poultry								
Other	sum	year	-	-	-	-	-	-
Total Direct Costs					1,570			4,530
Overhead Costs								
Equipment repairs	sum	year	-	-	-	-	-	-
Total Overhead Costs					-			-
Total Expenditure					1,570			4,530
Net Margin					370			5,310
Family Labour Input	Days	Month	-	-	-	-	-	-
Return to Family Labour								
Combined Net Margin and Asset					14,930			27,300

Source: Study of Impact of WIRFP on Net Incomes of Target Households, Jan 2004.

Table AN11.3.14 Gujarat - Village Lakhana: Individual Household Livestock Detailed Data: WBR - Moderate.

Item	Units	Period	Before / Without Project Situation			After / With Project Situation		
			Quantity (No)	Unit Price (Rs)	Value (Rs/Period)	Quantity (No)	Unit Price (Rs)	Value (Rs/Period)
Livestock Asset Value								
Cow								
Male	head		2	5,000.0	10,000	2	7,500.0	15,000
Female	head		-	-	-	1	5,500.0	5,500
Losses	head		-	-	-	-	-	-
Buffalo								
Male	head		1	8,000.0	8,000	-	-	-
Female	head		-	-	-	2	9,000.0	18,000
Losses	head		-	-	-	-	-	-
Goat								
Male	head		-	-	-	1	1,200.0	
Female	head		2	600.0	1,200	1	800.0	
Losses	head		-	-	-	-	-	-
Poultry								
Not Specified	head		-	-	-	-	-	-
Losses	head		-	-	-	4	75.0	300
Total Livestock Assets					19,200			38,800
Annual Increase in Assets	year	5			-			3920
Sales Income								
Cow and Buffalo								
Milk	litres	year	250	10.0	2,500	560	12.0	6,720
Dung	cart	year	1.0	100.0	100	1	500.0	500
Draught	days	year	-	-	-	-	-	-
Transport	days	year	-	-	-	-	-	-
Sales	no	year	-	-	-	-	-	-
Goat								
Milk	litres	year	-	-	-	-	-	-
Dung	sum	year	1	50.0	50	1	100.0	100
Other	-	-	-	-	-	-	-	-
Sales	no	year	-	-	-	-	-	-
Poultry								
Sales	no	year	-	-	-	-	-	-
Other	-	-	-	-	-	-	-	-
Total Sales Income					2,650			7,320
Expenditure								
Direct Costs								
Cow and Buffalo								
Feeding (grazing)	sum	year	-	-	-	-	-	-
Feeding (roughage)	sum	year	1.0	1,710.0	1,710	1.0	4,620.0	4,620
Feeding (concentrate)	sum	year	-	-	-	-	-	-
Vet and Med	sum	year	-	-	-	-	-	-
Other	sum	year	-	-	-	-	-	-
Goat								
Feeding	sum	year	1.0	80.0	80	1.0	100.0	100
Vet and Med	sum	year	-	-	-	-	-	-
Other	sum	year	-	-	-	-	-	-
Poultry								
Other	sum	year	-	-	-	-	-	-
Total Direct Costs					1,790			4,720
Overhead Costs								
Equipment repairs	sum	year	-	-	-	-	-	-
Total Overhead Costs					-			-
Total Expenditure					1,790			4,720
Net Margin					860			2,600
Family Labour Input	Days	Month	-	-	-	-	-	-
Return to Family Labour								
Combined Net Margin and Asset					20,060			41,400

Source: Study of Impact of WIRFP on Net Incomes of Target Households, Jan 2004.

Table AN11.3.15 Gujarat - Village Lakhana: Individual Household Livestock Detailed Data: WBR - Better Off.

Item	Units	Period	Before / Without Project Situation			After / With Project Situation		
			Quantity (No)	Unit Price (Rs)	Value (Rs/Period)	Quantity (No)	Unit Price (Rs)	Value (Rs/Period)
Livestock Asset Value								
Cow								
Male	head		2	7,500.0	15,000	2	10,000.0	20,000
Female	head		-	-	-	-	-	-
Losses	head		-	-	-	-	-	-
Buffalo								
Male	head		1	1,000.0	1,000	1	1,500.0	1,500
Female	head		1	5,000.0	5,000	2	15,000.0	30,000
Losses	head		-	-	-	-	-	-
Goat								
Male	head		-	-	-	-	-	-
Female	head		-	-	-	7	700.0	4,900
Losses	head		-	-	-	-	-	-
Poultry								
Not Specified	head		-	-	-	-	-	-
Losses	head		-	-	-	-	-	-
Total Livestock Assets					21,000			56,400
Annual Increase in Assets	year	5			-			7,080
Sales Income								
Cow and Buffalo								
Milk	litres	year	-	-	-	1,150	10.0	11,500
Dung	cart	year	1.0	400.0	400	2	500.0	1,000
Draught	days	year	-	-	-	-	-	-
Transport	days	year	-	-	-	-	-	-
Sales	no	year	-	-	-	-	-	-
Goat								
Milk	litres	year	35	7.0	245	50	8.0	400
Dung	sum	year	-	-	-	-	-	-
Other	-	-	-	-	-	-	-	-
Sales	no	year	-	-	-	-	-	-
Poultry								
Sales	no	year	-	-	-	-	-	-
Other	-	-	-	-	-	-	-	-
Total Sales Income					645			12,900
Expenditure								
Direct Costs								
Cow and Buffalo								
Feeding (grazing)	sum	year	-	-	-	-	-	-
Feeding (roughage)	sum	year	1.0	6,700.0	6,700	1.0	13,600.0	13,600
Feeding (concentrate)	sum	year	-	-	-	-	-	-
Vet and Med	sum	year	3.0	50.0	150	-	-	-
Other	sum	year	-	-	-	-	-	-
Goat								
Feeding	sum	year	-	-	-	1.0	150.0	150
Vet and Med	sum	year	-	-	-	1.0	100.0	100
Other	sum	year	-	-	-	-	-	-
Poultry								
Other	sum	year	-	-	-	-	-	-
Total Direct Costs					6,850			13,850
Overhead Costs								
Equipment repairs	sum	year	-	-	-	-	-	-
Total Overhead Costs					-			-
Total Expenditure					6,850			13,850
Net Margin					(6,205)			(950)
Family Labour Input	Days	Month	-	-	-	-	-	-
Return to Family Labour								
Combined Net Margin and Asset					14,795			55,450

Source: Study of Impact of WIRFP on Net Incomes of Target Households, Jan 2004.

WIRFP - Phase II - Cost Benefit Analysis

Tables AN11.0 Incremental Benefits

Tables AN11.4 Net Income Study Net Margin Data: Phase II - Madhya Pradesh (MP) - Village Bagoli

- Table AN11.4.1 Madhya Pradesh (MP) - Village Bagoli: Weighted Household Crop Net Margin Summary.
- Table AN11.4.2 Madhya Pradesh (MP) - Village Bagoli: Weighted Household Livestock Net Margin Summary.
- Table AN11.4.3 A. Madhya Pradesh (MP) - Village Bagoli: Summary of Net Margin per Household and Area (WBR - All Types).
B. Madhya Pradesh (MP) - Village Bagoli: Net Margin per Household and Area - WBR - Very Poor.
C. Madhya Pradesh (MP) - Village Bagoli: Net Margin per Household and Area - WBR - Poor.
D. Madhya Pradesh (MP) - Village Bagoli: Net Margin per Household and Area - WBR - Moderate.
E. Madhya Pradesh (MP) - Village Bagoli: Net Margin per Household and Area - WBR - Better Off.

- Table AN11.4.4 Madhya Pradesh (MP) - Village Bagoli: Individual Household Crop Detailed Data: WBR - Very Poor.
- Table AN11.4.5 Madhya Pradesh (MP) - Village Bagoli: Individual Household Crop Detailed Data: WBR - Poor.
- Table AN11.4.6 Madhya Pradesh (MP) - Village Bagoli: Individual Household Crop Detailed Data: WBR - Moderate.
- Table AN11.4.7 Madhya Pradesh (MP) - Village Bagoli: Individual Household Crop Detailed Data: WBR - Better Off.

- Table AN11.4.8 Madhya Pradesh (MP) - Village Bagoli: Individual Household Livestock Detailed Data: WBR - Very Poor.
- Table AN11.4.9 Madhya Pradesh (MP) - Village Bagoli: Individual Household Livestock Detailed Data: WBR - Poor.
- Table AN11.4.10 Madhya Pradesh (MP) - Village Bagoli: Individual Household Livestock Detailed Data: WBR - Moderate.
- Table AN11.4.11 Madhya Pradesh (MP) - Village Bagoli: Individual Household Livestock Detailed Data: WBR - Better Off.

Table AN11.4.1 Madhya Pradesh (MP) - Village Bagoli: Weighted Household Crop Net Margin Summary.

Item	WBR (%)	Before / Without Project			After / With Project			Increment		
		Khalif	Rabi	Total	Khalif	Rabi	Total	Khalif	Rabi	Total
Unit Area Analysis (Economic):										
WBR - Very Poor										
Household Crop Net Margin (Rs)	25%	240	-	240	2,673	-	2,673	2,434	-	2,434
Area Planted (bigha)		3.0	-	3.0	3.0	-	3.0	-	-	-
Crop Net Margin / bigha (Rs)		80	-	80	891	-	891	811	-	811
Crop Net Margin / hectare (RS) \1		399	-	399	4,455	-	4,455	4,056	-	4,056
WBR - Poor										
Household Crop Net Margin (Rs)	25%	128	-	128	2,952	-	2,952	2,824	-	2,824
Area Planted (bigha)		5.5	-	5.5	5.5	-	5.5	-	-	-
Crop Net Margin / bigha (Rs)		23	-	23	537	-	537	513	-	513
Crop Net Margin / hectare (RS) \1		116	-	116	2,684	-	2,684	2,567	-	2,567
WBR - Moderate										
Household Crop Net Margin (Rs)	25%	35	-	35	3,645	1,708	5,353	3,610	1,708	5,318
Area Planted (bigha)		5.0	-	5.0	5.0	5.0	10.0	-	5.0	5.0
Crop Net Margin / bigha (Rs)		7	-	7	729	342	1,071	722	342	1,064
Crop Net Margin / hectare (RS) \1		35	-	35	3,645	1,708	5,353	3,610	1,708	5,318
WBR - Better Off										
Household Crop Net Margin (Rs)	25%	4,485	-	4,485	21,093	-	21,093	16,608	-	16,608
Area Planted (bigha)		8	-	8	8	-	8	-	-	-
Crop Net Margin / bigha (Rs)		561	-	561	2,637	-	2,637	2,076	-	2,076
Crop Net Margin / hectare (RS) \1		2,803	-	2,803	13,183	-	13,183	10,380	-	10,380
WBR - Weighted										
Household Crop Net Margin (Rs)	100%	1,222	-	1,222	7,591	427	8,018	6,369	427	6,796
Crop Net Margin / bigha (Rs)		168	-	168	1,198	85	1,284	1,031	85	1,116
Crop Net Margin / hectare (RS) \1		838	-	838	5,992	427	6,419	5,153	427	5,580

Source: Study of Impact of WIRFP on Net Incomes of Target Households, Jan 2004.

WBR = GVT Well Being Ranking.

\1 One hectare equivalent to bigha =

5.0

Table AN11.4.2 Madhya Pradesh (MP) - Village Bagoli: Weighted Household Livestock Net Margin Summary.

Item	WBR (%)	Before / Without Project		After / With Project		Increment \1	
		Herd Value	Net Margin	Herd Value	Net Margin	Herd Value	Net Margin
Household Livestock Analysis							
Well Being Ranking - Very Poor							
Household Net Margin (Rs) - financial	25%	5,200	125.0	5,650	3,910.0	90	3,785.0
Labour (person days)			12		36		24
Labour Value (Rs) - economic \1			300		900		600
Household Net Margin (Rs) - economic			(175.0)		3,010.0		3,185.0
Well Being Ranking - Poor							
Household Net Margin (Rs) - financial	25%	7,000	320.0	25,825	3,615.0	3,765	3,295.0
Labour (person days)			12		36		24
Labour Value (Rs) - economic \1			300		900		600
Household Net Margin (Rs) - economic			20.0		2,715.0		2,695.0
Well Being Ranking - Moderate							
Household Net Margin (Rs) - financial	25%	7,850	8,710.3	15,240	10,299.0	1,478	1,588.8
Labour (person days)			36		48		12
Labour Value (Rs) - economic \1			900		1,200		300
Household Net Margin (Rs) - economic			7,810.3		9,099.0		1,288.8
Well Being Ranking - Better Off							
Household Net Margin (Rs) - financial	25%	5,800	5,640.0	38,900	6,380.0	6,620	740.0
Labour (person days)			24		36		12
Labour Value (Rs) - economic \1			600		900		300
Household Net Margin (Rs) - economic			5,040.0		5,480.0		440.0
Well Being Ranking - Weighted							
Household Net Margin (Rs) - financial	100%	6,463	3,698.8	21,404	6,051.0	2,988	2,352.2
Household Net Margin (Rs) - economic			3,173.8		5,076.0		1,902.2

Source: Study of Impact of WIRFP on Net Incomes of Target Households, Jan 2004.

\1 Herd value increment averaged over five years.

\2 Average annual daily value of family labour assumed = Rs/day 25.0

WBR = GVT Well Being Ranking.

Table AN11.4.3

A. Madhya Pradesh (MP) - Village Bagoli: Summary of Net Margin per Household and Area (WBR - All Types).

Item	Well Being Ranking			
	Very Poor Increment	Poor Increment	Moderate Increment	Better Off Increment
Household (HH) Analysis:				
Crop Revenue (Rs/HH)				
Crop	2,800	4,025	9,110	18,860
Residue	551	875	2,173	2,655
Total Crop Revenue	3,351	4,900	11,283	21,515
Production Costs (Rs/HH)				
Variable Costs	947	(4)	4,585	1,822
Gross Margin - Financial	2,404	4,904	6,698	19,693
Labour Input (person days)	(2)	(114)	48	58
Return per Person Day (Rs/p/day)	(1,202)	(43)	140	340
Labour Costs - Economic \1	(30)	2,080	1,380	3,085
Total Production Costs (Rs/HH)	917	2,076	5,965	4,907
Net Margin (Rs/HH) - Economic	2,434	2,824	5,318	16,608
Area planted (bigha)	-	-	5.0	-
Cropping Intensity (percent)				
Unit Area Analysis - Economic:				
Net Margin (Rs/bigha)	811	513	1,064	2,076
Net Margin (Rs/hectare) \2	4,056	2,567	5,318	10,380

Source:

Study of Impact of WIRFP on Net Incomes of Target Households, Jan 2004.

\1 Adjusted for labour costs.

\2 One hectare equivalent to bigha =

Table AN11.4.3

B. Madhya Pradesh (MP) - Village Bagoli: Net Margin per Household and Area - WBR - Very Poor.

Item	Well Being Ranking - Very Poor								
	Before / Without Project			After / With Project			Increment		
	Khalif	Rabi	Total	Khalif	Rabi	Total	Khalif	Rabi	Total
Household (HH) Analysis:									
Crop Revenue (Rs/HH)									
Crop	4,000	-	4,000	6,800	-	6,800	2,800	-	2,800
Residue	550	-	550	1,100	-	1,100	551	-	551
Total Crop Revenue	4,550	-	4,550	7,900	-	7,900	3,351	-	3,351
Production Costs (Rs/HH)									
Variable Costs	2,555	-	2,555	3,502	-	3,502	947	-	947
Gross Margin - Financial	1,995	-	1,995	4,398	-	4,398	2,404	-	2,404
Labour Input (person days)	72	-	72	70	-	70	(2)	-	(2)
Return per Person Day (Rs/p/day)	28	-	28	63	-	63	(1,202)	-	(1,202)
Labour Costs - Economic \1	1,755	-	1,755	1,725	-	1,725	(30)	-	(30)
Total Production Costs (Rs/HH)	4,310	-	4,310	5,227	-	5,227	917	-	917
Net Margin (Rs/HH) - Economic	240	-	240	2,673	-	2,673	2,434	-	2,434
Area planted (bigha)	3.0	-	3.0	3.0	-	3.0	-	-	-
Cropping Intensity (percent)	100%	0%	100%	100%	0%	100%	0%	#DIV/0!	0%
Unit Area Analysis - Economic:									
Net Margin (Rs/bigha)	80	-	80	891	-	891	811	-	811
Net Margin (Rs/hectare) \2	399	-	399	4,455	-	4,455	4,056	-	4,056

Source:

Study of Impact of WIRFP on Net Incomes of Target Households, Jan 2004.

\1 Adjusted for labour costs.

\2 One hectare equivalent to bigha =

5.0

Table AN11.4.3

C. Madhya Pradesh (MP) - Village Bagoli: Net Margin per Household and Area - WBR - Poor.

Item	Well Being Ranking - Poor								
	Before / Without Project			After / With Project			Increment		
	Khalif	Rabi	Total	Khalif	Rabi	Total	Khalif	Rabi	Total
Household (HH) Analysis:									
Crop Revenue (Rs/HH)									
Crop	4,800	-	4,800	8,825	-	8,825	4,025	-	4,025
Residue	1,075	-	1,075	1,950	-	1,950	875	-	875
Total Crop Revenue	5,875	-	5,875	10,775	-	10,775	4,900	-	4,900
Production Costs (Rs/HH)									
Variable Costs	3,077	-	3,077	3,073	-	3,073	(4)	-	(4)
Gross Margin - Financial	2,798	-	2,798	7,702	-	7,702	4,904	-	4,904
Labour Input (person days)	114	-	114	-	-	-	(114)	-	(114)
Return per Person Day (Rs/p/day)	25	-	25	-	-	-	(43)	-	(43)
Labour Costs - Economic \1	2,670	-	2,670	4,750	-	4,750	2,080	-	2,080
Total Production Costs (Rs/HH)	5,747	-	5,747	7,823	-	7,823	2,076	-	2,076
Net Margin (Rs/HH) - Economic	128	-	128	2,952	-	2,952	2,824	-	2,824
Area planted (bigha)	5.5	-	5.5	5.5	-	5.5	-	-	-
Cropping Intensity (percent)	100%	0%	100%	100%	0%	100%	0%	#DIV/0!	0%
Unit Area Analysis - Economic:									
Net Margin (Rs/bigha)	23	-	23	537	-	537	513	-	513
Net Margin (Rs/hectare) \2	116	-	116	2,684	-	2,684	2,567	-	2,567

Source:

Study of Impact of WIRFP on Net Incomes of Target Households, Jan 2004.

\1 Adjusted for labour costs.

\2 One hectare equivalent to bigha =

Gini Curve

Table AN11.4.3

D. Madhya Pradesh (MP) - Village Bagoli: Net Margin per Household and Area - WBR - Moderate.

Item	Well Being Ranking - Moderate								
	Before / Without Project			After / With Project			Increment		
	Khalif	Rabi	Total	Khalif	Rabi	Total	Khalif	Rabi	Total
Household (HH) Analysis:									
Crop Revenue (Rs/HH)									
Crop	3,590	-	3,590	8,500	4,200	12,700	4,910	4,200	9,110
Residue	790	-	790	1,463	1,500	2,963	673	1,500	2,173
Total Crop Revenue	4,380	-	4,380	9,963	5,700	15,663	5,583	5,700	11,283
Production Costs (Rs/HH)									
Variable Costs	2,650	-	2,650	4,143	3,092	7,235	1,493	3,092	4,585
Gross Margin - Financial	1,730	-	1,730	5,820	2,608	8,428	4,090	2,608	6,698
Labour Input (person days)	62	-	62	80	30	110	18	30	48
Return per Person Day (Rs/p/day)	28	-	28	73	87	77	227	87	140
Labour Costs - Economic \1	1,695	-	1,695	2,175	900	3,075	480	900	1,380
Total Production Costs (Rs/HH)	4,345	-	4,345	6,318	3,992	10,310	1,973	3,992	5,965
Net Margin (Rs/HH) - Economic	35	-	35	3,645	1,708	5,353	3,610	1,708	5,318
Area planted (bigha)	5.0	-	5.0	5.0	5.0	10.0	-	5.0	5.0
Cropping Intensity (percent)	100%	0%	100%	100%	100%	200%			91%
Unit Area Analysis - Economic:									
Net Margin (Rs/bigha)	7	-	7	729	342	1,071	722	342	1,064
Net Margin (Rs/hectare) \2	35	-	35	3,645	1,708	5,353	3,610	1,708	5,318

Source:

Study of Impact of WIRFP on Net Incomes of Target Households, Jan 2004.

\1 Adjusted for labour costs.

\2 One hectare equivalent to bigha =

Table AN11.4.3

E. Madhya Pradesh (MP) - Village Bagoli: Net Margin per Household and Area - WBR - Better Off.

Item	Well Being Ranking - Better Off								
	Before / Without Project			After / With Project			Increment		
	Khalif	Rabi	Total	Khalif	Rabi	Total	Khalif	Rabi	Total
Household (HH) Analysis:									
Crop Revenue (Rs/HH)									
Crop	8,800	-	8,800	27,660	-	27,660	18,860	-	18,860
Residue	1,620	-	1,620	4,275	-	4,275	2,655	-	2,655
Total Crop Revenue	10,420	-	10,420	31,935	-	31,935	21,515	-	21,515
Production Costs (Rs/HH)									
Variable Costs	3,100	-	3,100	4,922	-	4,922	1,822	-	1,822
Gross Margin - Financial	7,320	-	7,320	27,013	-	27,013	19,693	-	19,693
Labour Input (person days)	110	-	110	168	-	168	58	-	58
Return per Person Day (Rs/p/day)	67	-	67	161	-	161	340	-	340
Labour Costs - Economic \1	2,835	-	2,835	5,920	-	5,920	3,085	-	3,085
Total Production Costs (Rs/HH)	5,935	-	5,935	10,842	-	10,842	4,907	-	4,907
Net Margin (Rs/HH) - Economic	4,485	-	4,485	21,093	-	21,093	16,608	-	16,608
Area planted (bigha)	8.0	-	8.0	8.0	-	8.0	-	-	-
Cropping Intensity (percent)	100%	0%	100%	100%	0%	100%			0%
Unit Area Analysis - Economic:									
Net Margin (Rs/bigha)	561	-	561	2,637	-	2,637	2,076	-	2,076
Net Margin (Rs/hectare) \2	2,803	-	2,803	13,183	-	13,183	10,380	-	10,380

Source:

Study of Impact of WIRFP on Net Incomes of Target Households, Jan 2004.

\1 Adjusted for labour costs.

\2 One hectare equivalent to bigha =

Table AN11.4.4

Madhya Pradesh (MP) - Village Bagoli: Individual Household Crop Detailed Data: WBR - Very Poor.

	Unit	Kharif:								Rabi:							
		Without project				With project				Without Project				With Project			
		Area	Qty	Price	Value	Area	Qty	Price	Value	Area	Qty	Price	Value	Area	Qty	Price	Value
By Economic Class: V1	VP	Crop:	Maize\Cotton			Crop:				Crop:				Crop:			
			Jower														
Revenue																	
Crop										Crop							
A. Maize	bigha	2	250	6.0	1,500	1.5	400	7.0	2,800	-	-	-	-	-	-	-	-
B. Cotton	bigha	-	100	22.0	2,200	-	100	20.0	2,000	-	-	-	-	-	-	-	-
C. Jower	bigha	1	60	5.0	300	1.5	80	25.0	2,000	-	-	-	-	-	-	-	-
D.	bigha	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
By product										By product							
A. Maize	Sum	-	1.3	250	313	-	2.0	300	600	-	-	-	-	-	-	-	-
B. Cotton	Sum	-	1.0	180	180	-	1.0	250	250	-	-	-	-	-	-	-	-
C. Jower	Sum	-	0.3	190	57	-	1.0	250	250	-	-	-	-	-	-	-	-
D.	Sum	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Total Revenue					4,550				7,900								
Variable Costs																	
Seed																	
A. Maize	kg		10	6.0	60	7.5	18.0	135									
B. Cotton	kg		-	-	-												
C. Jower	kg		5	5.0	25	10	15.0	150									
D.	kg		-	-	-												
Fertiliser																	
A. Urea	kg		100	5.0	500	100	5.0	500									
B. DAP	kg		-	-	-												
C. FYM	Load		2	100.0	200	1	300.0	300									
Pesticide																	
Irrigation																	
Subtotal					785			1,085									
Draught	Days		12	100.0	1,200	12	100.0	1,200									
Repairs	Sum		1	30.0	30	1	55.0	55									
Thrashing	Rate		-	-	-	4	20.0	80									
Storage	Sum		1	40.0	40	1	50.0	50									
Transport	Sum		1	20.0	20	1	24.0	24									
Credit	Rs			600	80%	480			2,400	42%	1,008						
Total Variable Costs					2,555			3,502									
Labour Costs	P/days																
Land Prep			15	30	450	13	30	390									
Sowing			10	30	300	8	30	240									
Weeding			27	15	405	25	15	375									
Fert App			2	30	60	2	30	60									
Pest App			-	-	-	8	30	240									
Irrigation			-	-	-	-	-	-									
Harvest			12	30	360	10	30	300									
Storage			6	30	180	4	30	120									
Total Labour Costs			72		1,755	70		1,725									
Total Production Costs					4,310			5,227									
Net Margin / Household (Economic)					240			2,673									
Return per Person Day (Financial)					27.7			62.8					#DIV/0!				#DIV/0!

Source: Study of Impact of WIRFP on Net Incomes of Target Households, Jan 2004.

V1 Economic class

VP = Very poor, P = Poor, M = Moderate, BO = Better off.

Table A11.3.5 Madhya Pradesh (MP) - Village Bagoli: Individual Household Crop Detailed Data: WBR - Poor.

	Unit	Kharif:								Rabi:							
		Without project				With project				Without Project				With Project			
		Area	Qty	Price	Value	Area	Qty	Price	Value	Area	Qty	Price	Value	Area	Qty	Price	Value
By Economic Class: V1	P	Crop:	Maize	Cotton		Crop:	Maize	Cotton		Crop:	Chick Pea	Wheat		Crop:			
			Tuar	Mixed Crops			Tuar	Mixed									
Revenue																	
Crop										Crop							
A. Maize	bigha	3.0	500	6.0	3,000	3.0	600	7.0	4,200		-	-	-	-	-	-	-
B. Cotton	bigha	-	150	12.0	1,800	-	150	20.0	3,000		-	-	-	-	-	-	-
C. Tuar	bigha	2.0	100	-	-	2.0	150	5.0	750		-	-	-	-	-	-	-
D. Mixed	bigha	0.5	-	-	-	0.5	35	25.0	875		-	-	-	-	-	-	-
By product										By product							
A. Maize	Sum	-	2.0	300	600	-	4.0	300	1,200		-	-	-	-	-	-	-
B. Cotton	Sum	-	1.5	250	375	-	1.5	250	375		-	-	-	-	-	-	-
C. Tuar	Sum	-	0.5	200	100	-	1.5	250	375		-	-	-	-	-	-	-
D. Mixed	Sum	-	-	-	-	-	-	-	-		-	-	-	-	-	-	-
Total Revenue					5,875				10,775								
Variable Costs																	
Seed																	
A. Maize	kg		10	3.0	30		10	6.0	60		-	-	-	-	-	-	-
B. Cotton	kg		5	8.0	40		5	10.0	50		-	-	-	-	-	-	-
C. Tuar	kg		2	2.0	4		2	5.0	10		-	-	-	-	-	-	-
D. Mixed	kg		2	19.0	38		2	25.0	50		-	-	-	-	-	-	-
Fertiliser																	
A. Urea	kg		100	3.0	300		100	5.0	500		-	-	-	-	-	-	-
B. DAP	kg		-	-	-		-	-	-		-	-	-	-	-	-	-
C. FYM	Load		2	100.0	200		-	-	-		-	-	-	-	-	-	-
Pesticide	kg		-	-	-		1	300.0	300		-	-	-	-	-	-	-
Irrigation	Rounds		-	-	-		-	-	-		-	-	-	-	-	-	-
Subtotal					612				970								
Draught	Days		20	100.0	2,000		15	100.0	1,500		-	-	-	-	-	-	-
Repairs	Sum		1	25.0	25		1	55.0	55		-	-	-	-	-	-	-
Thrashing	Rate		-	-	-		6	20.0	120		-	-	-	-	-	-	-
Storage	Sum		1	40.0	40		1	200.0	200		-	-	-	-	-	-	-
Transport	Sum		-	-	-		1	100.0	100		-	-	-	-	-	-	-
Credit	Rs		500	80%	400		800	16%	128		-	-	-	-	-	-	-
Total Variable Costs					3,077				3,073								
Labour Costs	P/days																
Land Prep			28	30	840		20	50	1,000		-	-	-	-	-	-	-
Sowing			12	30	360		8	50	400		-	-	-	-	-	-	-
Weeding			50	15	750		20	25	500		-	-	-	-	-	-	-
Fert App			2	30	60		6	50	300		-	-	-	-	-	-	-
Pest App			-	-	-		1	50	50		-	-	-	-	-	-	-
Irrigation			-	-	-		-	-	-		-	-	-	-	-	-	-
Harvest			16	30	480		40	50	2,000		-	-	-	-	-	-	-
Storage			6	30	180		10	50	500		-	-	-	-	-	-	-
Total Labour Costs			114		2,670		105		4,750								
Total Production Costs					5,747				7,823								
Net Margin / Household (Economic)					128				2,952								
Return per Person Day (Financial)					24.5				73.4					#DIV/0!			#DIV/0!

Source: Study of Impact of WIRFP on Net Incomes of Target Households, Jan 2004.
V1 Economic class VP = Very poor, P = Poor, M = Moderate, BO = Better off.

Table AN11.4.6

Madhya Pradesh (MP) - Village Bagoli: Individual Household Crop Detailed Data: WBR - Moderate.

Unit	Kharif:								Rabi:							
	Without project				With project				Without Project				With Project			
	Area	Qty	Price	Value	Area	Qty	Price	Value	Area	Qty	Price	Value	Area	Qty	Price	Value
By Economic Class: V1	Crop:	Maize/Cotton	Maize	Tuar	Crop:	Maize/Cotton	Maize	Tuar	Crop:	Chick Pea	Wheat	Crop:				
Revenue																
Crop									Crop							
A. Maize	bigha	1	450	5.0	2,250	1	600	7.0	4,200	Wheat	-	5	600	7.0	4,200	
B. Cotton	bigha	-	100	12.0	1,200	-	200	20.0	4,000		-	-	-	-	-	-
C. Maize	bigha	2	-	-	-	2	-	-	-		-	-	-	-	-	-
D. Tuar	bigha	2	35	4.0	140	2	60	5.0	300		-	-	-	-	-	-
By product										By product						
A. Maize	Sum	-	2.25	250	563	-	3.00	300	900	Wheat	-	-	6.0	250	-	1,500
B. Cotton	Sum	-	1.00	180	180	-	2.00	250	500		-	-	-	-	-	-
C. Maize	Sum	-	-	-	-	-	-	-	-		-	-	-	-	-	-
D. Tuar	Sum	-	0.25	190	48	-	0.25	250	63		-	-	-	-	-	-
Total Revenue				4,380				9,963								5,700
Variable Costs																
Seed																
A. Maize	kg	-	10	3.0	30	-	3	6.0	18	Wheat	-	-	-	100	9.0	900
B. Cotton	kg	-	3	4.0	12	-	10	8.0	80		-	-	-	-	-	-
C. Maize	kg	-	10	3.0	30	-	10	6.0	60		-	-	-	-	-	-
D. Tuar	kg	-	5	2.0	10	-	5	5.0	25		-	-	-	-	-	-
Fertiliser																
A. Urea	kg	-	200	5.2	1,040	-	200	5.2	1,040		-	-	-	50	4.0	200
B. DAP	kg	-	-	-	-	-	-	-	-		-	-	-	50	3.2	160
C. FYM	Load	-	-	-	-	-	-	-	-		-	-	-	-	-	-
Pesticide	kg	-	-	-	-	-	2	300.0	600		-	-	-	-	-	-
Irrigation	Rounds	-	-	-	-	-	-	-	-		-	-	-	1	1,000.0	1,000
Subtotal				1,122				1,823								2,260
Draught	Days	-	15	100.0	1,500	-	20	100.0	2,000		-	-	-	6	100.0	600
Repairs	Sum	-	1	25.0	25	-	1	60.0	60		-	-	-	1	60.0	60
Thrashing	Rate	-	-	-	-	-	-	-	-		-	-	-	6	12.0	72
Storage	Sum	-	1	3.0	3	-	1	20.0	20		-	-	-	1	100.0	100
Transport	Sum	-	-	-	-	-	1	120.0	120		-	-	-	-	-	-
Credit V1	Rs	-	-	0.0%	-	-	750	16%	120		-	-	-	-	-	-
Total Variable Costs				2,650				4,143								3,092
Labour Costs	P/days															
Land Prep		-	23	30	690	-	23	30	690		-	-	-	10	30	300
Sowing		-	10	30	300	-	10	30	300		-	-	-	2	30	60
Weeding		-	11	15	165	-	15	15	225		-	-	-	-	-	-
Fert App		-	1	30	30	-	2	30	60		-	-	-	1	30	30
Pest App		-	-	-	-	-	12	30	360		-	-	-	-	-	-
Irrigation		-	-	-	-	-	-	-	-		-	-	-	5	30	150
Harvest		-	11	30	330	-	12	30	360		-	-	-	8	30	240
Storage		-	6	30	180	-	6	30	180		-	-	-	4	30	120
Total Labour Costs			62		1,695		80		2,175					30		900
Total Production Costs				4,345				6,318								3,992
Net Margin / Household (Economic)				35				3,645								1,708
Return per Person Day (Financial)				27.9				72.7			#DIV/0!					86.9

Source: Study of Impact of WIRFP on Net Incomes of Target Households, Jan 2004.

V1 Economic class VP = Very poor, P = Poor, M = Moderate, BO = Better off.

V1 Credit costs adjusted.

Table AN11.4.7

Madhya Pradesh (MP) - Village Bagoli: Individual Household Crop Detailed Data: WBR - Better Off.

	Unit	Kharif:								Rabi:							
		Without project				With project				Without Project				With Project			
		Area	Qty	Price	Value	Area	Qty	Price	Value	Area	Qty	Price	Value	Area	Qty	Price	Value
By Economic Class: V1	BO	Crop:	Maize/Cotton Tuar		Crop:				Crop:	Chick Pea Wheat			Crop:				
Revenue																	
Crop									Crop								
A. Maize	bigha	5	1,000	6.0	6,000	5	1,000	6.0	6,000	-	-	-	-	-	-	-	-
B. Cotton	bigha	-	200	12.0	2,400	-	700	25.0	17,500	-	-	-	-	-	-	-	-
C. Tuar	bigha	3	100	4.0	400	2	-	-	-	-	-	-	-	-	-	-	-
D. Other	bigha	-	-	-	-	1	320	13.0	4,160	-	-	-	-	-	-	-	-
By product									By product								
A. Maize	Sum	-	5.0	250	1,250	-	12.5	250	3,125	-	-	-	-	-	-	-	-
B. Cotton	Sum	-	1.0	180	180	-	-	-	-	-	-	-	-	-	-	-	-
C. Tuar	Sum	-	1.0	190	190	-	2.0	250	500	-	-	-	-	-	-	-	-
D. Other	Sum	-	-	-	-	-	3.3	200	650	-	-	-	-	-	-	-	-
Total Revenue					10,420				31,935								
Variable Costs																	
Seed																	
A. Maize	kg	16	5.5	88	-	9	13.5	119	-	-	-	-	-	-	-	-	-
B. Cotton	kg	-	-	-	-	2	17.5	39	-	-	-	-	-	-	-	-	-
C. Tuar	kg	5	2.0	10	-	6	40.0	240	-	-	-	-	-	-	-	-	-
D. Other	kg	-	-	-	-	6	25.0	155	-	-	-	-	-	-	-	-	-
Fertiliser																	
A. Urea	kg	100	3.0	300	-	200	3.7	740	-	-	-	-	-	-	-	-	-
B. DAP	kg	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
C. FYM	Load	2	300.0	600	-	-	-	-	-	-	-	-	-	-	-	-	-
Pesticide																	
Irrigation	kg	-	-	-	-	3	300.0	900	-	-	-	-	-	-	-	-	-
Subtotal					998			2,192									
Draught																	
Draught	Days	20	100.0	2,000	-	16	100.0	1,600	-	-	-	-	-	-	-	-	-
Repairs																	
Repairs	Sum	1	27.0	27	-	1	60.0	60	-	-	-	-	-	-	-	-	-
Thrashing																	
Thrashing	Rate	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Storage																	
Storage	Sum	1	75.0	75	-	1	250.0	250	-	-	-	-	-	-	-	-	-
Transport																	
Transport	Sum	-	-	-	-	1	20.0	20	-	-	-	-	-	-	-	-	-
Credit																	
Credit	Rs	-	-	-	-	-	5,000	0.2	800	-	-	-	-	-	-	-	-
Total Variable Costs					3,100			4,922									
Labour Costs																	
Labour Costs	P/days																
Land Prep		32	28.1	900	-	15	50	750	-	-	-	-	-	-	-	-	-
Sowing		8	27.5	220	-	12	45	540	-	-	-	-	-	-	-	-	-
Weeding		20	15.0	300	-	72	23	1,620	-	-	-	-	-	-	-	-	-
Fert App		4	30.0	120	-	10	44	440	-	-	-	-	-	-	-	-	-
Pest App		-	-	-	-	9	41	370	-	-	-	-	-	-	-	-	-
Irrigation		-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Harvest		36	28.3	1,020	-	40	44	1,760	-	-	-	-	-	-	-	-	-
Storage		10	27.5	275	-	10	44	440	-	-	-	-	-	-	-	-	-
Total Labour Costs		110		2,835		168		5,920									
Total Production Costs				5,935				10,842									
Net Margin / Household (Economic)				4,485				21,093									
Return per Person Day (Financial)				66.5				160.8			#DIV/0!					#DIV/0!	

Source: Study of Impact of WIRFP on Net Incomes of Target Households, Jan 2004.

\1 Economic class

VP = Very poor, P = Poor, M = Moderate, BO = Better off.

Table AN11.4.8 Madhya Pradesh (MP) - Village Bagoli: Individual Household Livestock Detailed Data: WBR - Very Poor

Item	Units	Period	Before / Without Project Situation			After / With Project Situation		
			Quantity (No)	Unit Price (Rs)	Value (Rs/Period)	Quantity (No)	Unit Price (Rs)	Value (Rs/Period)
Livestock Asset Value								
Cow								
Male	head		2	2,500.0	5,000	1	2,500.0	2,500
Female	head		-	-	-	-	-	-
Losses	head		-	-	-	-	-	-
Buffalo								
Male	head		-	-	-	-	-	-
Female	head		-	-	-	-	-	-
Losses	head		-	-	-	-	-	-
Goat								
Male	head		-	-	-	3	650.0	1,950
Female	head		-	-	-	-	-	-
Losses	head		-	-	-	-	-	-
Poultry								
Not Specified	head		2	100.0	200	10	120.0	1,200
Losses	head		-	-	-	-	-	-
Total Livestock Assets					5,200			5,650
Annual Increase in Livestock Assets	years	5						90
Sales Income								
Cow and Buffalo								
Milk	litres	year	-	-	-	-	-	-
Dung	cart	year	-	-	-	1	300.0	300
Draught	days	year	12	100.0	1,200	12	100.0	1,200
Transport	days	year	-	-	-	-	-	-
Sales	no	year	-	-	-	-	-	-
Goat								
Milk	litres	year	-	-	-	-	-	-
Dung	sum	year	-	-	-	-	-	-
Other	-	-	-	-	-	1	50.0	50
Sales	no	year	-	-	-	-	-	-
Poultry								
Sales	no	year	-	-	-	75	50.0	3,750
Other	no	year	-	-	-	1	200.0	200
Total Sales Income					1,200			5,500
Expenditure								
Direct Costs								
Cow and Buffalo								
Feeding (grazing)	sum	month	-	-	-	-	-	-
Feeding (roughage)	sum	month	1	550.0	550	1.0	1,100.0	1,100
Feeding (concentrate)	sum	month	-	-	-	-	-	-
Vet and Med	sum	year	1	400.0	400	1.0	50.0	50
Other	sum	year	-	-	-	-	-	-
Goat								
Feeding	sum	year	-	-	-	-	-	-
Vet and Med	sum	year	-	-	-	-	-	-
Other	sum	year	-	-	-	-	-	-
Poultry								
Other	sum	year	1.0	125.0	125	1.0	440.0	440
Total Direct Costs					1,075			1,590
Overhead Costs								
Equipment repairs	sum	year	-	-	-	-	-	-
Total Overhead Costs								
Total Expenditure					1,075			1,590
Net Margin					125			3,910
Family Labour Input	Days	Month	-	-	-	-	-	-
Return to Family Labour								
Combined Net Margin and Assets					125			4,000

Source: Study of Impact of WIRFP on Net Incomes of Target Households, Jan 2004.

Table AN11.4.9 Madhya Pradesh (MP) - Village Bagoli: Individual Household Livestock Detailed Data: WBR - Poor.

Item	Units	Period	Before / Without Project Situation			After / With Project Situation		
			Quantity (No)	Unit Price (Rs)	Value (Rs/Period)	Quantity (No)	Unit Price (Rs)	Value (Rs/Period)
Livestock Asset Value								
Cow								
Male	head		-	-	-	-	-	-
Female	head		2	1,500.0	3,000	-	-	-
Losses	head		-	-	-	-	-	-
Buffalo								
Male	head		-	-	-	-	-	-
Female	head		-	-	-	2	8,000.0	16,000
Losses	head		-	-	-	-	-	-
Goat								
Male	head		2	1,000.0	2,000	1	2,500.0	2,500
Female	head		-	-	-	5	1,225.0	6,125
Losses	head		-	-	-	-	-	-
Poultry								
Not Specified	head		20	100.0	2,000	8	150.0	1,200
Losses	head		-	-	-	-	-	-
Total Livestock Assets					7,000			25,825
Annual Increase in Livestock Assets	year	5						3,765
Sales Income								
Cow and Buffalo								
Milk	litres	year	-	-	-	125	14.0	1,750
Dung	cart	year	1	350.0	350	1	350.0	350
Draught	days	year	-	-	-	-	-	-
Transport	days	year	-	-	-	-	-	-
Sales	no	year	-	-	-	5	150.0	750
Goat								
Milk	litres	year	-	-	-	45	8.0	360
Dung	sum	year	-	-	-	-	-	-
Sales	no	year	1	950.0	950	1	1,000.0	1,000
Other	sum	year	-	-	-	-	-	-
Poultry								
Sales	no	year	5	80.0	400	9	100.0	900
Other	sum	year	200	2.0	400	600	3.0	1,800
Total Sales Income					2,100			6,910
Expenditure								
Direct Costs								
Cow and Buffalo								
Feeding (grazing)	sum	month	5.0	75.0	375	5.0	75.0	375
Feeding (roughage)	sum	year	1.0	1,075.0	1,075	1.0	1,950.0	1,950
Feeding (concentrate)	sum	year	-	-	-	-	-	-
Vet and Med	sum	year	-	-	-	-	-	-
Other	sum	year	-	-	-	-	-	-
Goat								
Feeding	sum	year	-	-	-	100.0	5.0	500
Vet and Med	sum	year	-	-	-	1.0	200.0	200
Other	sum	year	-	-	-	-	-	-
Poultry								
Other	sum	year	1.0	330.0	330	1.0	270.0	270
Total Direct Costs					1,780			3,295
Overhead Costs								
Equipment repairs	sum	year	-	-	-	-	-	-
Total Overhead Costs					-			-
Total Expenditure					1,780			3,295
Net Return					320			3,615
Family Labour Input	Days	Month	12.0	24	288	12.0	30	360
Return to Family Labour								
Combined Net Return and Asset					320			7,380

Source: Study of Impact of WIRFP on Net Incomes of Target Households, Jan 2004.

Table AN11.4.10 Madhya Pradesh (MP) - Village Bagoli: Individual Household Livestock Detailed Data: WBR - Moderate.

Item	Units	Period	Before / Without Project Situation			After / With Project Situation		
			Quantity (No)	Unit Price (Rs)	Value (Rs/Period)	Quantity (No)	Unit Price (Rs)	Value (Rs/Period)
Livestock Asset Value								
Cow	-							
Male	head		2	2,000.0	4,000	4	1,500.0	6,000
Female	head		3	300.0	900	1	1,000.0	1,000
Losses	head		-	-	-	-	-	-
Buffalo								
Male	head		-	-	-	-	-	-
Female	head		-	-	-	1	2,000.0	2,000
Losses	head		-	-	-	-	-	-
Goat								
Male	head		1	400.0	400	1	600.0	600
Female	head		9	250.0	2,250	6	700.0	4,200
Losses	head		-	-	-	-	-	-
Poultry								
Not Specified	head		3	100.0	300	12	120.0	1,440
Losses	head		-	-	-	-	-	-
Total Livestock Assets					7,850			15,240
Annual Increase in Livestock Assets	year	5						1,478
Sales Income								
Cow and Buffalo								
Milk	litres	year	420	10.0	4,200	180	14.5	2,610
Dung	cart	year	0.75	275.0	206	1	450.0	450
Draught	days	year	24	100.0	2,400	30	100.0	3,000
Transport	days	year	-	-	-	25	100.0	2,500
Sales	no	year	-	-	-	-	-	-
Goat								
Milk	litres	year	-	-	-	11	10.0	110
Dung	sum	year	1	150.0	150	1	150.0	150
Sales	no	year	2	750.0	1,500	-	-	-
Other	sum	year	-	-	-	-	-	-
Poultry								
Sales	no	year	30	50.0	1,500	85	50.0	4,250
Other	sum	year	1	135.0	135	1	1,700.0	1,700
Total Sales Income					10,091			14,770
Expenditure								
Direct Costs								
Cow and Buffalo								
Feeding (grazing)	sum	year	-	-	-	-	-	-
Feeding (roughage)	sum	year	1.0	750.0	750	1.0	3,000.0	3,000
Feeding (concentrate)	sum	year	-	-	-	-	-	-
Vet and Med	sum	year	1.0	500.0	500	1.0	100.0	100
Other	sum	year	1.0	50.0	50	1.0	125.0	125
Goat								
Feeding	sum	year	1.0	-	-	-	-	-
Vet and Med	sum	year	1.0	6.0	6	1.0	6.0	6
Other	sum	year	-	-	-	-	-	-
Poultry								
Other	sum	year	1.0	75.0	75	1.0	1,000.0	1,000
Total Direct Costs					1,381			4,231
Overhead Costs								
Equipment repairs	sum	year	-	-	-	1.0	240.0	240
Total Overhead Costs								240
Total Expenditure					1,381			4,471
Net Margin					8,710			10,299
Family Labour Input	Days	Month	12.0	25	300	12.0	29	350
Return to Family Labour								
Combined Net Margin and Asset					8,710			11,777

Source: Study of Impact of WIRFP on Net Incomes of Target Households, Jan 2004.

Table AN11.4.11 Madhya Pradesh (MP) - Village Bagoli: Individual Household Livestock Detailed Data: WBR - Better Off.

Item	Units	Period	Before / Without Project Situation			After / With Project Situation		
			Quantity (No)	Unit Price (Rs)	Value (Rs/Period)	Quantity (No)	Unit Price (Rs)	Value (Rs/Period)
Livestock Asset Value								
Cow								
Male	head		-	-	-	1	5,000.0	5,000
Female	head		2	1,500.0	3,000	6	2,000.0	12,000
Losses	head		-	-	-	-	-	-
Buffalo								
Male	head		-	-	-	-	-	-
Female	head		-	-	-	-	-	-
Losses	head		-	-	-	-	-	-
Goat								
Male	head		-	-	-	4	1,200.0	4,800
Female	head		1	1,000.0	1,000	11	1,500.0	16,500
Losses	head		-	-	-	-	-	-
Poultry								
Not Specified	head		15	120.0	1,800	5	120.0	600
Losses	head		-	-	-	-	-	-
Total Livestock Assets					5,800			38,900
Annual Increase in Livestock Assets	years	5						6,620
Sales Income								
Cow and Buffalo								
Milk	litres	year	240	10.0	2,400	480	14.0	6,720
Dung	cart	year	1.5	300.0	450	3.0	300.0	900
Draught	days	year	20	100.0	2,000	30	100.0	3,000
Transport	days	year	-	-	-	-	-	-
Sales	no	year	-	-	-	-	-	-
Goat								
Milk	litres	year	-	-	-	-	-	-
Dung	sum	year	-	-	-	-	-	-
Sales	no	year	2	750.0	1,500	-	-	-
Other	-	-	-	-	-	-	-	-
Poultry								
Sales	-	-	13	70.0	910	15	50.0	750
Other	-	-	-	-	-	-	-	-
Total Sales Income					7,260			11,370
Expenditure								
Direct Costs								
Cow and Buffalo								
Feeding (grazing)	sum	year	-	-	-	-	-	-
Feeding (roughage)	sum	month	1.0	1,620.0	1,620	2.0	2,140.0	4,280
Feeding (concentrate)	sum	year	-	-	-	-	-	-
Vet and Med	sum	year	-	-	-	1.0	100.0	100
Other	sum	year	-	-	-	-	-	-
Goat								
Feeding	sum	year	-	-	-	-	-	-
Vet and Med	sum	year	-	-	-	1.0	150.0	150
Other	sum	year	-	-	-	-	-	-
Poultry								
Other	sum	year	-	-	-	1.0	460.0	460
Total Direct Costs					1,620			4,990
Overhead Costs								
Equipment repairs	sum	year	-	-	-	-	-	-
Total Overhead Costs					-			-
Total Expenditure					1,620			4,990
Net Margin					5,640			6,380
Family Labour Input	Days	Month	12.0	40	480	12.0	40	480
Return to Family Labour								
Combined Net Margin and Asset					5,640			13,000

Source: Study of Impact of WIRFP on Net Incomes of Target Households, Jan 2004.

WIRFP - Phase II - Cost Benefit Analysis

Tables AN11.0 Incremental Benefits

Tables AN11.5 Net Income Study Crop and Livestock Gross Margin Data: Phase II - State Rajasthan - Village Merana

Table AN11.5.1 Phase II Rajasthan - Village Merana: Weighted Crop Net Margin Summary.

Table AN11.5.2 Phase II Rajasthan - Village Merana: Weighted Livestock Net Margin Summary.

Table AN11.5.3 A. Phase II Rajasthan - Village Merana: Summary of Crop Net Margin per Household and Area (WBR - All Types).
B. Phase II Rajasthan - Village Merana: Crop Net Margin per Household and Area - WBR - Very Poor (1).
C. Phase II Rajasthan - Village Merana: Crop Net Margin per Household and Area - WBR - Very Poor (2).
D. Phase II Rajasthan - Village Merana: Crop Net Margin per Household and Area - WBR - Poor.
E. Phase II Rajasthan - Village Merana: Crop Net Margin per Household and Area - WBR - Better Off.

Table AN11.5.4 Phase II Rajasthan - Village Merana: Individual Household Detailed Data: WBR - Very Poor (1).

Table AN11.5.5 Phase II Rajasthan - Village Merana: Individual Household Detailed Data: WBR - Very Poor (2).

Table AN11.5.6 Phase II Rajasthan - Village Merana: Individual Household Detailed Data: WBR - Poor.

Table AN11.5.7 Phase II Rajasthan - Village Merana: Individual Household Detailed Data: WBR - Better Off.

Table AN11.5.8 Phase II Rajasthan - Village Merana: Individual Household Livestock Detailed Data: WBR - Very Poor (1).

Table AN11.5.9 Phase II Rajasthan - Village Merana: Individual Household Livestock Detailed Data: WBR - Very Poor (2).

Table AN11.5.10 Phase II Rajasthan - Village Merana: Individual Household Livestock Detailed Data: WBR - Poor.

Table AN11.5.11 Phase II Rajasthan - Village Merana: Individual Household Livestock Detailed Data: WBR - Better Off.

Table AN11.5.1 Phase II Rajasthan - Village Merana: Weighted Crop Net Margin Summary.

Item	WBR (%)	Before / Without Project			After / With Project			Increment		
		Khalif	Rabi	Total	Khalif	Rabi	Total	Khalif	Rabi	Total
Household and Unit Area Analysis (Economic):										
WBR - Very Poor	12.5%									
Household Net Margin (Rs)		(15)	-	(15)	206	3,065	3,271	221	3,065	3,286
Area Planted (bigha)		2.0	-	2.0	2.0	2.0	4.0	-	2.0	2.0
Net Margin (Rs) / bigha		(8)	-	(8)	103	1,533	1,636	111	1,533	1,643
Net Margin / hectare \2		(38)	-	(38)	515	7,663	8,178	553	7,663	8,215
WBR - Very Poor	12.5%									
Household Net Margin (Rs)		(293)	513	220	453	1,117	1,570	746	605	1,351
Area Planted (bigha)		2.0	1.5	3.5	2.0	1.5	3.5	-	-	-
Net Margin / bigha		(147)	342	63	227	745	971	373	403	776
Net Margin / hectare \2		(733)	1,708	314	1,134	3,723	4,857	1,866	2,015	4,543
WBR - Poor	37.5%									
Household Net Margin (Rs)		(1,025)	-	(1,025)	2,290	52	2,342	3,315	52	3,367
Area Planted (bigha)		4.0	-	4.0	5.0	1.0	6.0	1.0	1.0	2.0
Net Margin / bigha		(256)	-	(256)	458	52	510	714	52	766
Net Margin / hectare \2		(1,281)	-	(1,281)	2,290	260	2,550	3,571	260	3,831
WBR - Better Off	37.5%									
Household Net Margin (Rs)		6,166	-	6,166	8,092	-	8,092	1,927	-	1,927
Area Planted (bigha)		14.0	-	14.0	20.0	-	20.0	6.0	-	6.0
Net Margin / bigha		440	-	440	578	-	578	138	-	138
Net Margin / hectare \2		2,202	-	2,202	2,890	-	2,890	688	-	688
WBR - Weighted	100%									
Household Net Margin (Rs)		1,889	64	1,953	3,976	542	4,518	2,086	478	2,565
Net Margin / bigha		50	43	93	430	304	734	380	261	641
Net Margin / hectare \2		249	214	463	2,149	1,521	3,669	1,900	1,307	3,207

Source: Study of Impact of WIRFP on Net Incomes of Target Households, Jan 2004.

WBR = GVT Well Being Ranking

\1 One hectare equivalent to bigha = 5.0

Table AN11.5.2 Phase II Rajasthan - Village Merana: Weighted Livestock Net Margin Summary.

Item	WBR (%)	Before / Without Project		After / With Project		Increment \1	
		Herd Value	Net Margin	Herd Value	Net Margin	Herd Value	Net Margin
Household Livestock Analysis							
Well Being Ranking - Very Poor (1)	12.5%						
Household Livestock Net Margin (Rs) - financial		15,000	2,865.0	11,000	1,840.0	(800)	(1,025.0)
Labour (person days)			12		24		12
Labour Value (Rs) - economic \1			300		600		300
Household Livestock Net Margin (Rs) - economic			2,565.0		1,240.0		(1,325.0)
Well Being Ranking - Very Poor (2)	12.5%						
Household Livestock Net Margin (Rs) - financial		4,300	(65.0)	11,500	1,750.0	1,440	1,815.0
Labour (person days)			12		24		12
Labour Value (Rs) - economic \1			300		600		300
Household Livestock Net Margin (Rs) - economic			(365.0)		1,150.0		1,515.0
Well Being Ranking - Poor	37.5%						
Household Livestock Net Margin (Rs) - financial		10,950	1,648.0	21,100	2,490.0	2,030	842.0
Labour (person days)			12		24		12
Labour Value (Rs) - economic \1			300		600		300
Household Livestock Net Margin (Rs) - economic			1,348.0		1,890.0		542.0
Well Being Ranking - Better Off	37.5%						
Household Livestock Net Margin (Rs) - financial		11,300	(580.0)	30,320	4,390.0	3,804	4,970.0
Labour (person days)			12		24		12
Labour Value (Rs) - economic \1			300		600		300
Household Livestock Net Margin (Rs) - economic			(880.0)		3,790.0		4,670.0
Well Being Ranking - Weighted	100%						
Household Livestock Net Margin (Rs) - financial		10,756	750.5	22,095	3,028.8	2,268	2,278.3
Household Livestock Net Margin (Rs) - economic			450.5		2,428.8		1,978.3

Source: Study of Impact of WIRFP on Net Incomes of Target Households, Jan 2004.

\1 Herd value increment averaged over five years.

\2 Average annual daily value of family labour assumed = Rs/day 25.0

Table AN11.5.3

A. Phase II Rajasthan - Village Merana: Summary of Crop Net Margin per Household and Area (WBR - All Types).

Item	Well Being Ranking			
	Very Poor (1) Increment	Very Poor (2) Increment	Poor Increment	Better Off Increment
Household Analysis:				
Crop Revenue (Rs/bigha)				
Crop	4,950	3,040	4,200	6,540
Residue	1,450	288	1,680	-
Total Crop Revenue	6,400	3,328	5,880	6,540
Production Costs (Rs/bigha)				
Variable Costs	1,245	1,170	270	2,838
Gross Margin - Financial	5,155	2,158	5,610	3,703
Labour Input (person days)	26	(1)	29	37
Return per Person Day (Rs/p/day)	198	(2,158)	193	100
Labour Costs - Economic \1	1,869	807	2,243	1,776
Total Production Costs (Rs/bigha)	3,114	1,977	2,513	4,614
Gross Margin (Rs/bigha) - Economic	3,286	1,351	3,367	1,927
Area planted (bigha)	2	-	2.0	6
Cropping Intensity (percent)				
Unit Area Analysis (Rs/unit) - Economic:				
Gross Margin / bigha	1,643	776	766	138
Gross Margin / hectare \2	8,215	4,543	3,831	688

Source:

Study of Impact of WIRFP on Net Incomes of Target Households, Jan 2004.

\1 Adjusted for labour costs.

\2 One hectare equivalent to bigha =

Table AN11.5.3

B. Phase II Rajasthan - Village Merana: Crop Net Margin per Household and Area - WBR - Very Poor (1).

Item	Well Being Ranking - Very Poor (1)								
	Before / Without Project			After / With Project			Increment		
	Khalif	Rabi	Total	Khalif	Rabi	Total	Khalif	Rabi	Total
Household Analysis:									
Crop Revenue (Rs/bigha)									
Crop	650	-	650	1,600	4,000	5,600	950	4,000	4,950
Residue	550	-	550	1,200	800	2,000	650	800	1,450
Total Crop Revenue	1,200	-	1,200	2,800	4,800	7,600	1,600	4,800	6,400
Production Costs (Rs/bigha)									
Variable Costs	540	-	540	1,010	775	1,785	470	775	1,245
Gross Margin - Financial	660	-	660	1,790	4,025	5,815	1,130	4,025	5,155
Labour Input (person days)	27	-	27	33	20	53	6	20	26
Return per Person Day (Rs/p/day)	24	-	24	54	201	110	188	201	198
Labour Costs - Economic \1	675	-	675	1,584	960	2,544	909	960	1,869
Total Production Costs (Rs/bigha)	1,215	-	1,215	2,594	1,735	4,329	1,379	1,735	3,114
Gross Margin (Rs/bigha) - Economic	(15)	-	(15)	206	3,065	3,271	221	3,065	3,286
Area planted (bigha)	2.0	-	2.0	2.0	2.0	4.0	-	2.0	2.0
Cropping Intensity (percent)	100%	0%	100%	100%	100%	200%	0%	#DIV/0!	100%
Unit Area Analysis (Rs/unit) - Economic:									
Gross Margin / bigha	(8)	-	(8)	103	1,533	1,636	111	1,533	1,643
Gross Margin / hectare \2	(38)	-	(38)	515	7,663	8,178	553	7,663	8,215

Source:

Study of Impact of WIRFP on Net Incomes of Target Households, Jan 2004.

\1 Adjusted for labour costs.

\2 One hectare equivalent to bigha =

5.0

Table AN11.5.3

C. Phase II Rajasthan - Village Merana: Crop Net Margin per Household and Area - WBR - Very Poor (2).

Item	Well Being Ranking - Very Poor (2)								
	Before / Without Project			After / With Project			Increment		
	Khalif	Rabi	Total	Khalif	Rabi	Total	Khalif	Rabi	Total
Household Analysis:									
Crop Revenue (Rs/bigha)									
Crop	480	1,100	1,580	2,750	1,870	4,620	2,270	770	3,040
Residue	150	113	263	300	250	550	150	138	288
Total Crop Revenue	630	1,213	1,843	3,050	2,120	5,170	2,420	908	3,328
Production Costs (Rs/bigha)									
Variable Costs	498	300	798	1,733	235	1,968	1,235	(65)	1,170
Gross Margin - Financial	132	913	1,045	1,317	1,885	3,202	1,185	973	2,158
Labour Input (person days)	17	16	33	16	16	32	(1)	-	(1)
Return per Person Day (Rs/p/day)	8	57	32	82	118	100	(1,185)	-	(2,158)
Labour Costs - Economic \1	425	400	825	864	768	1,632	439	368	807
Total Production Costs (Rs/bigha)	923	700	1,623	2,597	1,003	3,600	1,674	303	1,977
Gross Margin (Rs/bigha) - Economic	(293)	513	220	453	1,117	1,570	746	605	1,351
Area planted (bigha)	2.0	1.5	3.5	2.0	1.5	3.5	-	-	-
Cropping Intensity (percent)	100%	75%	175%	100%	75%	175%	0%	0%	0%
Unit Area Analysis (Rs/unit) - Economic:									
Gross Margin / bigha	(147)	342	63	227	745	971	373	403	776
Gross Margin / hectare \2	(733)	1,708.3	314	1,134	3,723	4,857	1,866	2,015	4,543

Source:

Study of Impact of WIRFP on Net Incomes of Target Households, Jan 2004.

\1 Adjusted for labour costs.

\2 One hectare equivalent to bigha =

Table AN11.5.3

D. Phase II Rajasthan - Village Merana: Crop Net Margin per Household and Area - WBR - Poor.

Item	Well Being Ranking - Poor								
	Before / Without Project			After / With Project			Increment		
	Khalif	Rabi	Total	Khalif	Rabi	Total	Khalif	Rabi	Total
Household Analysis:									
Crop Revenue (Rs/bigha)									
Crop	600	-	600	3,500	1,300	4,800	2,900	1,300	4,200
Residue	100	-	100	1,600	180	1,780	1,500	180	1,680
Total Crop Revenue	700	-	700	5,100	1,480	6,580	4,400	1,480	5,880
Production Costs (Rs/bigha)									
Variable Costs	800	-	800	650	420	1,070	(150)	420	270
Gross Margin - Financial	(100)	-	(100)	4,450	1,060	5,510	4,550	1,060	5,610
Labour Input (person days)	37	-	37	45	21	66	8	21	29
Return per Person Day (Rs/p/day)	(3)	-	(3)	99	50	83	569	50	193
Labour Costs - Economic \1	925	-	925	2,160	1,008	3,168	1,235	1,008	2,243
Total Production Costs (Rs/bigha)	1,725	-	1,725	2,810	1,428	4,238	1,085	1,428	2,513
Gross Margin (Rs/bigha) - Economic	(1,025)	-	(1,025)	2,290	52	2,342	3,315	52	3,367
Area planted (bigha)	4.0	-	4.0	5.0	1.0	6.0	1.0	1.0	2.0
Cropping Intensity (percent)	100%	0%	100%	100%	20%	120%			100%
Unit Area Analysis (Rs/unit) - Economic:									
Gross Margin / bigha	(256)	-	(256)	458	52	510	714	52	766
Gross Margin / hectare \2	(1,281)	-	(1,281)	2,290	260	2,550	3,571	260	3,831

Source:

Study of Impact of WIRFP on Net Incomes of Target Households, Jan 2004.

\1 Adjusted for labour costs.

\2 One hectare equivalent to bigha =

Table AN11.5.3

E. Phase II Rajasthan - Village Merana: Crop Net Margin per Household and Area - WBR - Better Off.

Item	Well Being Ranking - Better Off								
	Before / Without Project			After / With Project			Increment		
	Khalif	Rabi	Total	Khalif	Rabi	Total	Khalif	Rabi	Total
Household Analysis:									
Crop Revenue (Rs/bigha)									
Crop	7,460	-	7,460	14,000	-	14,000	6,540	-	6,540
Residue	2,700	-	2,700	2,700	-	2,700	-	-	-
Total Crop Revenue	10,160	-	10,160	16,700	-	16,700	6,540	-	6,540
Production Costs (Rs/bigha)									
Variable Costs	923	-	923	3,760	-	3,760	2,838	-	2,838
Gross Margin - Financial	9,238	-	9,238	12,940	-	12,940	3,703	-	3,703
Labour Input (person days)	64	-	64	101	-	101	37	-	37
Return per Person Day (Rs/p/day)	144	-	144	128	-	128	100	-	100
Labour Costs - Economic \1	3,072	-	3,072	4,848	-	4,848	1,776	-	1,776
Total Production Costs (Rs/bigha)	3,995	-	3,995	8,608	-	8,608	4,614	-	4,614
Gross Margin (Rs/bigha) - Economic	6,166	-	6,166	8,092	-	8,092	1,927	-	1,927
Area planted (bigha)	14.0	-	14.0	20.0	-	20.0	6.0	-	6.0
Cropping Intensity (percent)	100%	0%	100%	143%	0%	143%			300%
Unit Area Analysis (Rs/unit) - Economic:									
Gross Margin / bigha	440	-	440	578	-	578	138	-	138
Gross Margin / hectare \2	2,202	-	2,202	2,890	-	2,890	688	-	688

Source:

Study of Impact of WIRFP on Net Incomes of Target Households, Jan 2004.

\1 Adjusted for labour costs.

\2 One hectare equivalent to bigha =

Table AN11.5.4

Phase II Rajasthan - Village Merana: Individual Household Detailed Data: WBR - Very Poor (1).

	Unit	Kharif:								Rabi:								
		Without project				With project				Without Project				With Project				
		Area	Qty	Price	Value	Area	Qty	Price	Value	Area	Qty	Price	Value	Area	Qty	Price	Value	
By Economic Class: /1	VP (1)	Crop:	Maize			Crop:	Maize			Crop:			Crop:	Chick Pea	Wheat			
Revenue																		
Crop										Crop								
A. Maize	bigha	1	100	4.0	400	1	200	5.0	1,000	Chick Pea	-	-	-	-	0.5	80	15.0	1,200
B. Paddy	bigha	1	50	5.0	250	1	100	6.0	600	Wheat	-	-	-	-	1.0	300	7.0	2,100
C. -	bigha	-	-	-	-	-	-	-	-	Other	-	-	-	-	0.5	100	7.0	700
D. -	bigha	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
By product										By product								
A. Maize	Sum	-	1.0	250.0	250	-	1.0	600.0	600	Chick Pea	-	-	-	-	-	0.5	100	50
B. Paddy	Sum	-	1.0	300.0	300	-	1.0	600.0	600	Wheat	-	-	-	-	-	1.0	500	500
C. -	Sum	-	-	-	-	-	-	-	-	Other	-	-	-	-	-	1.0	250	250
D. -	Sum	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Total Revenue					1,200				2,800									4,800
Variable Costs																		
Seed																		
A. Maize	kg		10	4.0	40		12	5.0	60	Chick Pea	-	-	-	-	20	20.0	400	
B. Paddy	kg		20	5.0	100		20	10.0	200	Wheat	-	-	-	-	30	7.0	210	
C. -	kg		-	-	-		-	-	-	Other	-	-	-	-	20	7.0	140	
D. -	kg		-	-	-		-	-	-	-	-	-	-	-	-	-	-	
Fertiliser																		
A. Urea	kg		-	-	-		50	5.0	250	-	-	-	-	-	-	-	-	
B. DAP	kg		-	-	-		-	-	-	-	-	-	-	-	-	-	-	
C. FYM	Load		1	400.0	400		1	500.0	500	-	-	-	-	-	-	-	-	
Pesticide	kg		-	-	-		-	-	-	-	-	-	-	-	-	-	-	
Irrigation	Rounds		-	-	-		-	-	-	-	-	-	-	-	-	-	-	
Subtotal					540				1,010									750
Draught	Days		-	-	-		-	-	-	-	-	-	-	-	-	-	-	-
Repairs	Sum		-	-	-		-	-	-	-	-	-	-	-	-	-	-	-
Thrashing	Rate		-	-	-		-	-	-	-	-	-	-	-	-	-	-	-
Storage	Sum		-	-	-		-	-	-	-	-	-	-	1	25.0	25	25	
Transport	Sum		-	-	-		-	-	-	-	-	-	-	-	-	-	-	
Credit	Rs		-	-	-		-	-	-	-	-	-	-	-	-	-	-	
Total Variable Costs					540				1,010									775
Labour Costs	P/days																	
Land Prep			3	25.0	75		4	48.0	192	-	-	-	-	4	48	192		
Sowing			4	25.0	100		4	48.0	192	-	-	-	-	4	48	192		
Weeding			8	25.0	200		10	48.0	480	-	-	-	-	-	-	-		
Fert App			2	25.0	50		3	48.0	144	-	-	-	-	-	-	-		
Pest App			-	-	-		-	-	-	-	-	-	-	-	-	-		
Irrigation			-	-	-		-	-	-	-	-	-	-	-	-	-		
Harvest			8	25.0	200		10	48.0	480	-	-	-	-	8	48	384		
Storage			2	25.0	50		2	48.0	96	-	-	-	-	4	48	192		
Total Labour Costs			27		675		33		1,584					20		960		
Total Production Costs					1,215				2,594									1,735
Net Margin / Household (Economic)					(15)				206									3,065
Return per Person Day (Financial)					24.4				54.2				#DIV/0!					201.25

Source: Study of Impact of WIRFP on Net Incomes of Target Households, Jan 2004.

11 Economic class

VP = Very poor, P = Poor, M = Moderate, BO = Better off.

Table AN11.5.5

Phase II Rajasthan - Village Merana: Individual Household Detailed Data: WBR - Very Poor (2).

	Unit	Kharif:								Rabi:									
		Without project				With project				Without Project				With Project					
		Area	Qty	Price	Value	Area	Qty	Price	Value	Area	Qty	Price	Value	Area	Qty	Price	Value		
By Economic Class: V1	P	Crop:	Maize			Crop:	Maize			Crop:	Chick Pea			Crop:	Chick Pea				
			Pigeon Pea				Pigeon Pea				Wheat				Wheat				
Revenue										Crop									
A. Maize	bigha	1.5	100	4.0	400	1.5	250	5.0	1,250	Chick Pea	0.5	50	10.0	500	0.5	50	15.0	750	
B. Pigeon Pea	bigha	0.5	10	8.0	80	0.5	150	10.0	1,500	Wheat	1.0	100	6.0	600	1.0	160	7.0	1,120	
C. -	bigha	-	-	-	-	-	-	-	-		-	-	-	-	-	-	-		
D. -	bigha	-	-	-	-	-	-	-	-		-	-	-	-	-	-	-		
By product										By product									
A. Maize	Sum	-	1.0	150	150	-	1.0	150	150	Chick Pea	-	0.75	150.0	113	-	1.0	50	50	
B. Pigeon Pea	Sum	-	-	-	-	-	1.0	150	150	Wheat	-	-	-	-	-	1.0	200	200	
C. -	Sum	-	-	-	-	-	-	-	-		-	-	-	-	-	-	-		
D. -	Sum	-	-	-	-	-	-	-	-		-	-	-	-	-	-	-		
Total Revenue					630				3,050				1,213				2,120		
Variable Costs																			
Seed																			
A. Maize	kg		10	4.0	40		12	5.0	60	Chick Pea		10	10.0	100		10	12.5	125	
B. Pigeon Pea	kg		1	8.0	8		1	13.0	13	Wheat		10	5.0	50		10	5.0	50	
C. -	kg		-	-	-		-	-	-			-	-	-		-	-	-	
D. -	kg		-	-	-		-	-	-			-	-	-		-	-	-	
Fertiliser																			
A. Urea	kg		-	-	-		50	5.0	250			-	-	-		-	-	-	
B. DAP	kg		-	-	-		-	-	-			-	-	-		-	-	-	
C. FYM	Load		0.5	400.0	200		1	500.0	500			-	-	-		-	-	-	
Pesticide	kg		-	-	-		-	-	-			-	-	-		-	-	-	
Irrigation	Rounds		-	-	-		-	-	-			-	-	-		-	-	-	
Subtotal					248				823				150				175		
Draught	Days		-	-	-		-	-	-			-	-	-		-	-	-	
Repairs	Sum		-	-	-		-	-	-			-	-	-		-	-	-	
Thrashing	Rate		-	-	-		-	-	-			-	-	-		-	-	-	
Storage	Sum		-	-	-		1	200.0	200			-	-	-		-	-	-	
Transport	Sum		-	-	-		-	-	-			-	-	-		-	-	-	
Credit	Rs			5,000	5%	250		1,600	44%	710			500	30%	150		200	30%	60
Total Variable Costs					498				1,733				300				235		
Labour Costs	P/days																		
Land Prep			4	25	100		4	48	192		4	25	100		4	48	192		
Sowing			2	25	50		2	48	96		2	25	50		2	48	96		
Weeding			2	25	50		2	48	96		2	25	50		2	48	96		
Fert App			1	25	25		2	48	96		-	-	-		-	-	-		
Pest App			-	-	-		-	-	-		-	-	-		-	-	-		
Irrigation			-	-	-		-	-	-		-	-	-		-	-	-		
Harvest			6	25	150		6	48	288		6	25	150		6	48	288		
Storage			2	25	50		2	48	96		2	25	50		2	48	96		
Total Labour Costs			17		425		18		864		16		400		16		768		
Total Production Costs					923				2,597				700				1,003		
Net Margin / Household (Economic)					(293)				453				513				1,117		
Return per Person Day (Financial)					7.8				73.2				57.0				117.8		

Source: Study of Impact of WIRFP on Net Incomes of Target Households, Jan 2004.

\1 Economic class

VP = Very poor, P = Poor, M = Moderate, BO = Better off.

Table AN11.5.6

Phase II Rajasthan - Village Merana: Individual Household Detailed Data: WBR - Poor.

	Unit	Kharif:								Rabi:								
		Without project				With project				Without Project				With Project				
		Area	Qty	Price	Value	Area	Qty	Price	Value	Area	Qty	Price	Value	Area	Qty	Price	Value	
By Economic Class: \1	P (1)	Crop:	Maize			Crop:	Maize			Crop:	-			Crop:	Chick Pea			
			Paddy				Paddy				-				Wheat			
			-				Other				-				-			
Revenue																		
Crop										Crop								
A. Maize	bigha	3.0	100	4.0	400	3.0	500	5.0	2,500	Chick Pea	-	-	-	-	0.5	40	12.5	500
B. Paddy	bigha	1.0	40	5.0	200	1.0	100	6.0	600	Wheat	-	-	-	-	0.5	100	8.0	800
C. Other	bigha	-	-	-	-	1.0	100	4.0	400		-	-	-	-	-	-	-	-
D.	bigha	-	-	-	-	-	-	-	-		-	-	-	-	-	-	-	-
By product										By product								
A. Maize	Sum	-	0.50	100	50	-	2.00	500	1,000	Chick Pea	-	-	-	-	-	4.00	20	80
B. Paddy	Sum	-	0.50	100	50	-	1.00	300	300	Wheat	-	-	-	-	-	5.00	20	100
C. Other	Sum	-	-	-	-	-	1.00	300	300		-	-	-	-	-	-	-	-
D.	Sum	-	-	-	-	-	-	-	-		-	-	-	-	-	-	-	-
Total Revenue					700				5,100									1,480
Variable Costs																		
Seed																		
A. Maize	kg		25	4.0	100		25	5.0	125	Chick Pea	-	-	-	-	5	20.0		100
B. Paddy	kg		20	5.0	100		20	10.0	200	Wheat	-	-	-	-	10	7.0		70
C. Other	kg		-	-	-		5	5.0	25		-	-	-	-	-	-	-	-
D.	kg		-	-	-		-	-	-		-	-	-	-	-	-	-	-
Fertiliser																		
A. Urea	kg		-	-	-		60	5.0	300		-	-	-	-	-	-	-	-
B. DAP	kg		-	-	-		-	-	-		-	-	-	-	-	-	-	-
C. FYM	Load		1	400.0	400		-	-	-		-	-	-	-	0.5	500.0		250
Pesticide																		
Irrigation																		
Subtotal					600				650									420
Draught	Days		-	-	-		-	-	-		-	-	-	-	-	-	-	-
Repairs	Sum		-	-	-		-	-	-		-	-	-	-	-	-	-	-
Thrashing	Rate		-	-	-		-	-	-		-	-	-	-	-	-	-	-
Storage	Sum		-	-	-		-	-	-		-	-	-	-	-	-	-	-
Transport	Sum		-	-	-		-	-	-		-	-	-	-	-	-	-	-
Credit \2	Rs		500	40.0%	200		-	0.0%	-		-	0.0%	-	-	-	0.0%	-	-
Total Variable Costs					800				650									420
Labour Costs	P/days																	
Land Prep			8	25	200		10	48	480		-	-	-		4	48		192
Sowing			4	25	100		4	48	192		-	-	-		4	48		192
Weeding			12	25	300		15	48	720		-	-	-		-	-		-
Fert App			1	25	25		2	48	96		-	-	-		1	48		48
Pest App			-	-	-		-	-	-		-	-	-		-	-		-
Irrigation			-	-	-		-	-	-		-	-	-		-	-		-
Harvest			8	25	200		10	48	480		-	-	-		8	48		384
Storage			4	25	100		4	48	192		-	-	-		4	48		192
Total Labour Costs			37		925		45		2,160						21			1,008
Total Production Costs					1,725				2,810									1,428
Net Margin / Household (Economic)					(1,025)				2,290									52
Return per Person Day (Financial)					(2.7)				98.9				#DIV/0!					50.5

Source: Study of Impact of WIRFP on Net Incomes of Target Households, Jan 2004.

\1 Economic class

VP = Very poor, P = Poor, M = Moderate, BO = Better off.

\2 Credit costs adjusted.

Table AN11.5.7

Phase II Rajasthan - Village Merana: Individual Household Detailed Data: WBR - Better Off.

	Unit	Kharif:								Rabi:												
		Without project				With project				Without Project				With Project								
		Area	Qty	Price	Value	Area	Qty	Price	Value	Area	Qty	Price	Value	Area	Qty	Price	Value					
By Economic Class: \1	BO	Crop:	Maize					Crop:					Crop:	Chick Pea				Crop:				
			Pigeon Pea											Wheat								
			Black Gram																			
			Other																			
Revenue		Crop						Crop					Crop					Crop				
A. Maize	bigha	8	1,500	4.0	6,000	10.0	1,600	6.0	9,600													
B. Pigeon Pea	bigha	2	100	8.0	800	5.0	140	10.0	1,400													
C. Black Gram	bigha	2	110	6.0	660																	
D. Other	bigha	2	-	-	-	5.0	600	5.0	3,000													
By product										By product												
A. Maize	Sum	-	5.0	200.0	1,000	-	2	500.0	1,000													
B. Pigeon Pea	Sum	-	3.0	300.0	900	-	2	250.0	500													
C. Black Gram	Sum	-	2.0	400.0	800	-	-	-	-													
D. Other	Sum	-	-	-	-	-	2	600.0	1,200													
Total Revenue					10,160				16,700													
Variable Costs																						
Seed																						
A. Maize	kg		40	3.5	140		75	6.0	450													
B. Pigeon Pea	kg		7	7.0	46		10	10.0	100													
C. Black Gram	kg		5	7.0	35		3	20.0	60													
D. Other	kg		1	2.0	2		-	-	-													
Fertiliser																						
A. Urea	kg		-	-	-		150	5.0	750													
B. DAP	kg		-	-	-		-	-	-													
C. FYM	Load		2	150.0	300		4	400.0	1,600													
Pesticide																						
Irrigation	Rounds		-	-	-		-	-	-													
Subtotal					523				2,960													
Draught	Days		-	-	-		-	-	-													
Repairs	Sum		-	-	-		-	-	800													
Thrashing	Rate		-	-	-		-	-	-													
Storage	Sum		-	-	-		-	-	-													
Transport	Sum		-	-	-		-	-	-													
Credit	Rs		2,000	20%	400		-	-	-													
Total Variable Costs					923				3,760													
Labour Costs	P/days																					
Land Prep			11	48.0	528		10	48	480													
Sowing			6	48.0	288		15	48	720													
Weeding			28	48.0	1,344		35	48	1,680													
Fert App			4	48.0	192		6	48	288													
Pest App			-	-	-		-	-	-													
Irrigation			-	-	-		-	-	-													
Harvest			11	48.0	528		23	48	1,104													
Storage			4	48.0	192		12	48	576													
Total Labour Costs			64		3,072		101		4,848													
Total Production Costs					3,995				8,608													
Net Margin / Household (Economic)					6,166				8,092													
Return per Person Day (Financial)					144.3				128.1					#DIV/0!								#DIV/0!

Source: Study of Impact of WIRFP on Net Incomes of Target Households, Jan 2004.

\1 Economic class

VP = Very poor, P = Poor, M = Moderate, BO = Better off.

Table AN11.5.8 Phase II Rajasthan - Village Merana: Individual Household Livestock Detailed Data: WBR - Very Poor (1).

Item	Units	Period	Before / Without Project Situation			After / With Project Situation		
			Quantity (No)	Unit Price (Rs)	Value (Rs)	Quantity (No)	Unit Price (Rs)	Value (Rs)
Livestock Asset Value								
A Cow								
Male	head		2	1,500.0	3,000	2	2,000.0	4,000
Female	head		1	1,500.0	1,500	-	-	-
Losses	head		-	-	-	-	-	-
B Buffalo								
Male	head		-	-	-	1	2,000.0	2,000
Female	head		1	5,000.0	5,000	1	5,000.0	5,000
Losses	head		-	-	-	-	-	-
C Goat								
Male	head		1	1,000.0	1,000	-	-	-
Female	head		5	800.0	4,000	-	-	-
Losses	head		-	-	-	-	-	-
D Poultry								
Not specified	head		10	50.0	500	-	-	-
Losses	head		-	-	-	-	-	-
Total Livestock Assets					15,000			11,000
Annual Increase in Livestock Assets	year	5						(800)
Sales Income								
A Cow and Buffalo								
Milk	litres	year	300	7.0	2,100	360	10.0	3,600
Dung	cart	year	1	400.0	400	1	500.0	500
Draught	days	year	-	-	-	-	-	-
Transport	days	year	-	-	-	-	-	-
Sales	no	year	-	-	-	-	-	-
C Goat								
Milk	litres	year	120	7.0	840	-	-	-
Dung	sum	year	-	-	-	-	-	-
Sales	no	year	-	-	-	-	-	-
Other	-	-	-	-	-	-	-	-
D Poultry								
Sales	no	year	75	1.0	75	-	-	-
Other	no	year	-	-	-	-	-	-
Total Sales Income					3,415			4,100
Expenditure								
Direct Costs								
Cow and Buffalo								
Feeding (grazing)	sum	year	-	-	-	-	-	-
Feeding (roughage)	sum	year	1.0	550.0	550	1.0	2,000.0	2,000
Feeding (concentrate)	kg	year	-	-	-	50.0	5.0	250
Vet and Med	sum	year	-	-	-	1.0	10.0	10
Other	sum	year	-	-	-	-	-	-
Goat								
Feeding	sum	year	-	-	-	-	-	-
Vet and Med	sum	year	-	-	-	-	-	-
Other	sum	year	-	-	-	-	-	-
Poultry								
Other	sum	year	-	-	-	-	-	-
Total Direct Costs					550			2,260
Overhead Costs								
Equipment repairs	sum	year	-	-	-	-	-	-
Total Overhead Costs					-			-
Total Expenditure					550			2,260
Net Margin					2,865			1,840
Family Labour Input	Days	Month	12.0	5	60	12.0	5	60
Return to Family Labour								
Combined Net Margin and Asset					2,865			1,040

Source: Study of Impact of WIRFP on Net Incomes of Target Households, Jan 2004.

Table AN11.5.9 Phase II Rajasthan - Village Merana: Individual Household Livestock Detailed Data: WBR - Very Poor (2).

Item	Units	Period	Before / Without Project Situation			After / With Project Situation		
			Quantity (No)	Unit Price (Rs)	Value (Rs/Period)	Quantity (No)	Unit Price (Rs)	Value (Rs/Period)
Livestock Asset Value								
Cow								
Male	head		1	1,500.0	1,500	2	5,000.0	10,000
Female	head		-	-	-	1	1,500.0	1,500
Losses	head		-	-	-	-	-	-
Buffalo								
Male	head		-	-	-	-	-	-
Female	head		-	-	-	-	-	-
Losses	head		-	-	-	-	-	-
Goat								
Male	head		2	900.0	1,800	-	-	-
Female	head		-	-	-	-	-	-
Losses	head		-	-	-	-	-	-
Poultry								
Not Specified	head		10	100.0	1,000	-	-	-
Losses	head		-	-	-	-	-	-
Total Livestock Assets					4,300			11,500
Annual Increase in Livestock Assets	year	5						1,440
Sales Income								
Cow and Buffalo								
Milk	litres	year	-	-	-	180	10.0	1,800
Dung	cart	year	0.5	400.0	200	1	500.0	500
Draught	days	year	-	-	-	-	-	-
Transport	days	year	-	-	-	-	-	-
Sales	no	year	-	-	-	-	-	-
Goat								
Milk	litres	year	-	-	-	-	-	-
Dung	sum	year	-	-	-	-	-	-
Sales	no	year	-	-	-	-	-	-
Other	-	-	-	-	-	-	-	-
Poultry								
Sales	no	year	-	-	-	-	-	-
Other	no	year	-	-	-	-	-	-
Total Sales Income					200			2,300
Expenditure								
Direct Costs								
Cow and Buffalo								
Feeding (grazing)	sum	year	-	-	-	-	-	-
Feeding (roughage)	sum	year	1.0	265.0	265	12.0	45.0	540
Feeding (concentrate)	sum	year	-	-	-	-	-	-
Vet and Med	sum	year	-	-	-	1.0	10.0	10
Other	sum	year	-	-	-	-	-	-
Goat								
Feeding	sum	year	-	-	-	-	-	-
Vet and Med	sum	year	-	-	-	-	-	-
Other	sum	year	-	-	-	-	-	-
Poultry								
Other	sum	year	-	-	-	-	-	-
Total Direct Costs					265			550
Overhead Costs								
Equipment repairs	sum	year	-	-	-	-	-	-
Total Overhead Costs					-			-
Total Expenditure					265			550
Net Margin					(65)			1,750
Family Labour Input	Days	Month	12.0	5	60	12.0	5	60
Return to Family Labour								
Combined Net Margin and Asset					4,235			13,250

Source: Study of Impact of WIRFP on Net Incomes of Target Households, Jan 2004.

Table AN11.5.10 Phase II Rajasthan - Village Merana: Individual Household Livestock Detailed Data: WBR - Poor.

Item	Units	Period	Before / Without Project Situation			After / With Project Situation		
			Quantity (No)	Unit Price (Rs)	Value (Rs/Period)	Quantity (No)	Unit Price (Rs)	Value (Rs/Period)
Livestock Asset Value								
Cow								
Male	head		2	4,000.0	8,000	3	5,000.0	15,000
Female	head		1	2,000.0	2,000	2	2,000.0	4,000
Losses	head		-	-	-	-	-	-
Buffalo								
Male	head		-	-	-	-	-	-
Female	head		-	-	-	-	-	-
Losses	head		-	-	-	-	-	-
Goat								
Male	head		-	-	-	-	-	-
Female	head		1	800.0	800	2	1,000.0	2,000
Losses	head		-	-	-	-	-	-
Poultry								
Not Specified	head		2	75.0	150	1.0	100.0	100
Losses	head		-	-	-	-	-	-
Total Livestock Assets					10,950			21,100
Annual Increase in Livestock Assets	year	5						2,030
Sales Income								
Cow and Buffalo								
Milk	litres	year	180	7.0	1,260	270	10.0	2,700
Dung	cart	year	1	400.0	400	1.5	500.0	750
Draught	days	year	-	-	-	-	-	-
Transport	days	year	-	-	-	-	-	-
Sales	no	year	-	-	-	-	-	-
Goat								
Milk	litres	year	24	7.0	168	48	10.0	480
Dung	sum	year	-	-	-	-	-	-
Sales	no	year	-	-	-	1	500.0	500
Other	-	-	-	-	-	-	-	-
Poultry								
Sales	no	year	-	-	-	-	-	-
Other	-	-	-	-	-	-	-	-
Total Sales Income					1,828			4,430
Expenditure								
Direct Costs								
Cow and Buffalo								
Feeding (grazing)	sum	year	-	-	-	-	-	-
Feeding (roughage)	sum	year	1.0	100.0	100	1.0	1,780.0	1,780
Feeding (concentrate)	sum	year	-	-	-	-	-	-
Vet and Med	sum	year	-	-	-	1.0	10.0	10
Other	sum	year	-	-	-	-	-	-
Goat								
Feeding	sum	year	10.0	4.0	40	20.0	5.0	100
Vet and Med	sum	year	-	-	-	-	-	-
Other	sum	year	-	-	-	-	-	-
Poultry								
Other	sum	year	1.0	40.0	40	1.0	50.0	50
Total Direct Costs					180			1,940
Overhead Costs								
Equipment repairs	sum	year	-	-	-	-	-	-
Total Overhead Costs					-			-
Total Expenditure					180			1,940
Net Margin					1,648			2,490
Family Labour Input	Days	Month	12.0	20	240	12.0	40	480
Return to Family Labour								
Combined Net Margin and Asset					1,648			4,520

Source: Study of Impact of WIRFP on Net Incomes of Target Households, Jan 2004.

Table AN11.5.11 Phase II Rajasthan - Village Merana: Individual Household Livestock Detailed Data: WBR - Better Off.

Item	Units	Period	Before / Without Project Situation			After / With Project Situation		
			Quantity (No)	Unit Price (Rs)	Value (Rs/Period)	Quantity (No)	Unit Price (Rs)	Value (Rs/Period)
Livestock Asset Value								
Cow								
Male	head		2	1,500.0	3,000	4	2,000.0	8,000
Female	head		1	2,000.0	2,000	5	1,500.0	7,500
Losses	head		-	-	-	-	-	-
Buffalo								
Male	head		-	-	-	1	2,500.0	2,500
Female	head		-	-	-	2	4,000.0	8,000
Losses	head		-	-	-	-	-	-
Goat								
Male	head		-	-	-	-	-	-
Female	head		-	-	-	-	-	-
Losses	head		-	-	-	-	-	-
Poultry								
Not Specified	head		-	-	-	4.0	80.0	320
Losses	head		-	-	-	-	-	-
Total Livestock Assets					11,300			30,320
Annual Increase in Livestock Assets	year	5						3,804
Sales Income								
Cow and Buffalo								
Milk	litres	year	10	8.0	80	240	10.0	2,400
Dung	cart	year	1	250.0	250	4	500.0	2,000
Draught	days	year	-	-	-	-	-	-
Transport	days	year	-	-	-	-	-	-
Sales	no	year	-	-	-	-	-	-
Goat								
Milk	litres	year	20	7.0	140	120	10.0	1,200
Dung	sum	year	-	-	-	-	-	-
Sales	no	year	-	-	-	-	-	-
Other	-	-	-	-	-	-	-	-
Poultry								
Sales	no	year	-	-	-	45	2.0	90
Other	no	year	-	-	-	-	-	-
Total Sales Income					470			5,690
Expenditure								
Direct Costs								
Cow and Buffalo								
Feeding (grazing)	sum	year	-	-	-	-	-	-
Feeding (roughage)	sum	year	-	-	-	-	-	-
Feeding (concentrate)	sum	year	1.0	1,000.0	1,000	1.0	1,200.0	1,200
Vet and Med	sum	year	1.0	50.0	50	4.0	25.0	100
Other	sum	year	-	-	-	-	-	-
Goat								
Feeding	sum	year	-	-	-	-	-	-
Vet and Med	sum	year	-	-	-	-	-	-
Other	sum	year	-	-	-	-	-	-
Poultry								
Other	sum	year	-	-	-	-	-	-
Total Direct Costs					1,050			1,300
Overhead Costs								
Equipment repairs	sum	year	-	-	-	-	-	-
Total Overhead Costs					-			-
Total Expenditure					1,050			1,300
Net Return					(580)			4,390
Family Labour Input	Days	Month	12.0	20	240	12.0	20	240
Return to Family Labour								
Combined Net Return and Asset					(580)			8,194

Source: Study of Impact of WIRFP on Net Incomes of Target Households, Jan 2004.
WBR = Well Being Ranking.



Economic Analysis



AN12 | Village Cost Benefit Analysis

AN12 | Village Cost Benefit Analysis

Introduction

Investment administration and development costs over the seven-year implementation period together with the projected recurrent cost stream over the 20-year analysis period have been identified for each of the 20 sample villages. Estimates of the associated incremental benefit streams have been quantified for each of the development activities by individual village. The resulting net incremental benefit stream for each village, over the analysis period, has been discounted to determine the economic internal rate of return (EIRR) and net present value (NPV) at 12 percent, which has been taken as the opportunity cost of capital for rural development projects in India. A description of the development activities and associated benefit assumptions is given below.

Description of Development Activity Costs and Associated Benefits

Participatory Planning and Group Formation

The participatory planning and group formation (PPGF) activity costs identified under this development activity are related to the participatory planning process adopted by the implementing agencies following village identification and entry. These costs include the preliminary rural appraisal (PRA) of the selected village resources, the community problem analysis (CPA) and the identification and prioritisation of development options all leading to the preparation of the village work plan. All stages of the process include the active participation of the village community. Within the village, paraprofessionals or *jankars* are identified, by the individual groups established within the community, to implement the process at the village level. For this involvement, a payment is made through the project to the *jankars* as an incentive to off set against time that otherwise might have been devoted to agricultural production and to cover any incurred travel and accommodation expenses. The average investment costs for PPGF account for one and two percent respectively of GVT and IFFDC development activity expenditure.

No direct quantified benefits are attributed to this participatory planning and group formation process.

Village Organisation and Development (VOD)

Village organisation and development activity costs include village mobilisation into effective SHGs operating savings and credit schemes, adult and child literacy support programmes, the introduction of drudgery reduction initiatives (ball bearings for cereal grinding, energy efficient stoves (*chulas*), fibre glass sky light tiles, and solar energy systems), group grain bank storage programmes, material support for the less advantaged households and seed capital to SHGs for both individual and

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group IGA initiatives. The average investment costs, in VOD, account for 12 and eight percent respectively of GVT and IFFDC development activity expenditure.

Direct quantifiable benefits from the VOD development activities are calculated on terms of time savings from drudgery reduction initiatives (including reduced time in domestic water carrying) and as potential membership interest income from SHG deposits on-lent to members for production and consumption loans.

Drudgery Reduction

Quantified benefits, resulting from drudgery reduction for household activities (ball bearings, and access to water), are measured as hours / days savings per household / village valued at the economic shadow wage rate. This assumes that such time saved will be gainfully employed in alternative productive activities. Potential productive drudgery reduction benefits per household are assessed an average of one hour per day per household for 200 days per year assuming an average eight hour day (the equivalent of 25 days per year per household) valued at a shadow wage rate of Rs 25 per day to reflect that only 50 percent of the time saved will be devoted to economically productive activities.

Interest Income for Self Help Groups

Individual IGAs appear attractive but very limited in scope for duplication. However group IGAs are generally less financially viable. Loan repayment terms (monthly interest rate, capital grace periods, the period for capital repayment, etc) remain ill defined. Individual IGAs can justify an interest rate of two percent per month (24 percent per year) but repayment of principle is more problematic owing to the seasonality of crop production and migration income.

Potential interest income is assessed on the percentage of individual / group deposits held by the individual SHG / village that it is onlent for IGAs to individual members of an SHG. Interest income charges are highly variable between SHGs and are reported to vary from 12 to 24 percent per year (equivalent to one to two percent per month) with penalties applied for non-payment. In quantifying the benefits, namely the interest income derived from the volume of deposits onlent to members, use has been made of both field verification data and implementing agency SHG records.

Crop Technology, Soil and Water Conservation (SWC), and Water Resource Development (WRD) Programmes

Investment costs associated with the crop technology component include the costs of village demonstration plots for improved crop husbandry, the distribution of superior seed varieties and fertiliser, and the allocation of farming implements to households. The average investment costs, in crop technology, account for seven and five percent respectively of GVT and IFFDC development activity expenditure.

SWC investment costs relate to expenditure on the construction and / or repair of earthen dams and storage ponds, watershed management structures including field bunds, contour bunds and trenches, *nala* plugs and vegetative conservation measures. The average investment costs, in SWC, account for 41 and nine percent respectively of GVT and IFFDC development activity expenditure.

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WRD investment costs include the construction and / or repair of check dams (*anicuts*), the construction and / or deepening of wells, the construction of lift irrigation schemes, the installation of 'drip' irrigation schemes, the installation of hand pumps for both domestic and livestock water supply and the supply of irrigation pumps and pipes. The average investment costs, in WRD, account for 21 and 69 percent respectively of GVT and IFFDC development activity expenditure.

Overall average investment costs in crop technology, WSC and WRD, accounts for 70 and 83 percent respectively of GVT and IFFDC development activity expenditure.

As discussed previously, the incremental benefits to these three development activities are not differentiated and are based on incremental net crop margins, weighted by the village WBR type, and derived from data recorded for the Net Income Study. The underlying assumption is that the Net Income Study sample by well being ranking type, is representative of the integrated benefits of these three activities and that all participating households village have benefited from the interventions.

Livestock Programme

The livestock investment programme includes the development of a village livestock centre incorporating a twice yearly vaccination and disease control programme, a breed improvement / adoption schemes for cattle, goats and poultry supported by seed capital financing for livestock IGAs administered through SHGs. The average investment costs, in the livestock programme, account for five and three percent respectively of GVT and IFFDC development activity expenditure.

The incremental benefits to the livestock development activity are based on incremental net crop margins, weighted by the village WBR type, and derived from data recorded for the Net Income Study. Again the underlying assumption is that the Net Income Study sample, adjusted by well being ranking type, is representative of the integrated benefits of the activity and that all participating households village have benefited from the intervention.

Forestry Programme

The forestry investment programmes includes the promotion of existing and the establishment of new, joint forestry management (JFM) schemes on common property resource land, in association with the forestry department. Other initiatives comprise the purchase and distribution of young fruit tree seedlings in association with the establishment of a village nursery programme using both grafting and budding skills. The average investment costs, in the forestry programme, account for four percent respectively of both GVT and IFFDC development activity expenditure.

The quantified benefits of the forestry programme are measured in terms of the potential incremental household net margin derived from primarily fruit production to obtain a positive NPV. For the sample villages, this net margin ranged from Rs 200 to 600 per household and falls within the levels identified in the Net Income Study. No significant expenditure was identified for JFM development in the sample villages.

Migration Labour Support Programme

The migration labour support programme (MLSP) is a relatively new development activity being limited to budget allocations for GVT operations in Gujarat and Madhya Pradesh. The programme is the subject of ongoing studies in these states. As such, the average investment costs, in the MLSP programme, account for one and zero percent respectively of GVT and IFFDC development activity expenditure. The current emphasis of the programme is an awareness campaign, at the village levels, of the necessary requirements for, and rights of, household members when seeking employment as individuals or through work placement agencies, in urban centres. Expenditure at Jadha village, Gujarat, includes the construction of offices to accommodate trained staff to implement the programme in both the core and adjoining *prasaar* villages.

The quantified benefits of the MLSP programme are measured in terms of the potential incremental household income from migration labour both from the core village and in the case of Jadha village, Gujarat, *prasaar* villages. These benefits result from the incremental household income derived from migration labour, for both the 'before' and 'after' project situation and are based on estimates of: (a) the average increase in the daily wage rate secured, (b) the increase in the average number of days of work obtained, and (c) the number of households, within the village, engaged in migration labour. These initial estimates are set at levels to obtain a positive NPV. They are based on limited discussions during the field verification process and will need to be further adjusted as a result of the ongoing field survey and when projected investment expenditure is more clearly identified.

Sample Village Results

Details of the economic costs and associated benefits for the 20 sample villages are given in Annex 12.1 to 12.20 and results of the base case individual village cost benefit analysis, in terms of the EIRR and NPV assessed at 12 percent, and analysed over a 20 year period, are summarised in Table A12.1. The analysis indicates that six villages (Gujarat two, Madhya Pradesh two and Rajasthan two) achieved EIRRs equal to or in excess of 12 percent. There is a strong correlation between the six villages with EIRRs at or above 12 percent and the number of participating households in these same villages. This reflects the cost benefit analysis methodology in that the unit cost, of PPGF and VOD development activities per participating household, does not vary greatly between those villages with a smaller number of households when compared with those villages with a larger number of households. This is in contrast to the benefits from the crop technology, SWC and WRD development activities, where it is assumed that the benefit are directly proportional to the number of participating households in the individual village.

The result of the overall project sample, together with a sensitivity analysis of key variables for individual villages, is given in Annex 13.

AN12-4

Table AN12.1: Cost Benefit Analysis – Individual Village Results

Implementing Agency		HHs	Economic Costs			Cost Benefit Analysis		
District / State			Admin	Dev	Total	NPV	EIRR	Village
Sample Village		(No)	(Rs M)			(Rs M)	(%)	(No) ^{1/}
Gramin Vikas Trust (GVT)								
Dahod – Gujarat			2.3	2.2	2.5	6.5	23%	2
1	Jadha	363	2.3	5.3	7.6	4.4	28%	*
2	Kasotia	193	2.3	2.3	4.6	2.3	27%	*
3	Poyali	120	2.3	2.9	5.2	(0.2)	11%	
Jhabua - M Pradesh			1.5	1.5	3.0	(3.9)	6%	2
1	Bagoli	86	1.5	2.9	4.4	(1.4)	3%	
2	Borwa	36	1.5	1.0	2.5	(0.5)	5%	
3	Chamjar	79	1.5	2.7	4.2	(1.9)	N/A	
4	Chenpura	160	1.5	2.9	4.4	1.0	18%	*
5	Kadwapada	86	1.5	1.9	3.4	0.2	14%	*
6	Padabanda	37	1.5	2.1	3.6	(1.6)	N/A	
Banswara - Rajasthan			1.5	1.9	3.4	1.5	15%	2
1	Bakaner	90	1.5	2.6	4.1	(0.9)	4%	
2	Bhuripada	160	1.5	2.8	4.3	0.3	14%	*
3	Gara	120	1.5	4.2	5.7	(0.6)	4%	
4	Merana	147	1.5	1.8	3.3	2.9	32%	*
5	Sundripada	80	1.5	2.2	3.7	(0.1)	11%	
Indian Farm Forestry Development Cooperative (IFFDC)								
Pratapgarh – Rajasthan			2.2	1.4	3.6	(8.8)	-1%	0
1	Chhayan	60	2.2	2.7	4.9	(2.4)	N/A	
2	Chhota Mayanga	49	2.2	1.7	3.9	(1.6)	N/A	
3	Dharis Kheri	80	2.2	1.7	3.9	(1.1)	1%	
4	Kachotia	108	2.2	2.2	4.4	(0.5)	8%	
5	Moti Kheri	112	2.2	3.6	5.8	(1.5)	2%	
6	S Ka Khera	42	2.2	1.5	3.7	(1.5)	N/A	
Overall Cost Benefit						(4.6)	10%	6

Source: Cost Benefit Analysis Study, January 2005.

^{1/} Number of individual villages achieving an EIRR in excess of 12 percent (the opportunity cost of capital for rural development projects in India)

EIRR = Economic Internal Rate of Return, NPV = Net Present Value at 12% interest

HHs = Participating households per sample village, N/A = Not analysed as EIRR negative.

WIRFP - Phase II - Cost Benefit Analysis Study

Tables AN12.0 Individual Village Cost Benefit Analysis

Tables AN12.1 GVT - Gujarat - Dahod: Village Jadha

Table AN12.1.1 GVT - Gujarat - Dahod: Village Jadha: Village Profile.

Table AN12.1.2 GVT - Gujarat - Dahod: Village Jadha - Cost Benefit Analysis Summary (Rs'000).

Table AN12.1.3 GVT - Gujarat - Dahod: Village Jadha - Cost Benefit Analysis Development Activity Summary A (Rs'000).

Table AN12.1.4 GVT - Gujarat - Dahod: Village Jadha - Cost Benefit Analysis Development Activity Summary B (Rs'000).

Table AN12.1.5 GVT - Gujarat - Dahod: Village Jadha: Costs - Financial (Rs'000).

GVT - Gujarat - Dahod: Village Jadha: Costs - Economic (Rs'000).

Table AN12.1.6 GVT - Gujarat - Dahod: Village Jadha: VOD Household Assumptions.

GVT - Gujarat - Dahod: Village Jadha: Incremental VOD Benefit Stream (Rs'000).

Table AN12.1.7 GVT - Gujarat - Dahod: Village Jadha: Household Crop Net Margin Assumptions.

GVT - Gujarat - Dahod: Village Jadha: Incremental Crop Benefit Stream (Rs'000).

Table AN12.1.8 GVT - Gujarat - Dahod: Village Jadha: Household Livestock Net Margin Assumptions.

GVT - Gujarat - Dahod: Village Jadha: Incremental Livestock Benefit Stream (Rs'000).

Table AN12.1.9 GVT - Gujarat - Dahod: Village Jadha: Forestry Benefit Assumptions.

GVT - Gujarat - Dahod: Village Jadha: Incremental Forestry Benefit Stream (Rs'000).

Table AN12.1.10 GVT - Gujarat - Dahod: Village Jadha: Migration Support Benefit Assumptions.

GVT - Gujarat - Dahod: Village Jadha: Incremental Migration Support Benefit Stream (Rs'000).

Table AN12.1.11 GVT - Gujarat - Dahod: Village Jadha: Weighted Household Crop Net Margin Summary (Rs/Household).

Table AN12.1.12 GVT - Gujarat - Dahod: Village Jadha: Weighted Household Crop Net Margin Sensitivity Analysis (Rs/Household).

Table AN12.1.13 GVT - Gujarat - Dahod: Village Jadha: Weighted Household Livestock Net Margin Summary (Rs/Household).

Table AN12.1.1

GVT - Gujarat - Dahod: Village Jadha: Village Profile.

Village Profile \1			
A. Background			
Village Name	Jadha		
District	Dahod		
State	Gujarat		
B. Participatory Planning Process (PPP)			
Village entry	Nov-99		
PRA	Jul-00		
CPA	Jan-01		
C. Infrastructure			
Hand Pumps (no)	9		
Wells (no)	24		
Linked by Road	5 Kms		
Electrification	Yes		
School	1 - 7		
D. Demographic Data			
Households (no)	383		
Participating Households	363		
Population	1,197		
Adults:			
Male	549		
Female	648		
Children:			
Boys	N/A		
Girls	N/A		
E. Well Being Ranking (No Households)			
Very Poor	58	16.0%	
Poor	227	62.5%	
Moderate	67	18.5%	
Better Off	11	3.0%	
Total	363	100%	
F. Land Resource (ha)			
Total Area			1,185
Revenue Land (unused)			872
Forest Area - Revenue			50
Pasture Land			2
Arable Land			261
G. Livestock			
H. Self Help Groups (No Households)			
1	Group 1		20
2	Group 2		19
3	Group 3		20
4	Group 4		19
5	Group 5		20
6	Group 6		20
7	Group 7		20
8	Group 8		20
9	Group 9		19
10	Group 10		20
11	Group 11		18
12	Group 12		20
13	Group 13		20
14	Group 14		18
15	Group 15		20
16	Group 16		19
17	Group 17		20
18	Group 18		20
19	Group 19		11
	Total		363

Source: GVT Dahod Coordination Office - Gujarat.

\1 Subject to final adjustment following consolidation exercise prior to Annual Review Meeting (ARM) in Feb 2005.

Table AN12.1.2 GVT - Gujarat - Dahod: Village Jadha - Cost Benefit Analysis Summary (Rs'000).

Administration Costs / Development Activity	EIRR ¹	NPV ²		Year 1 1999/00	Year 2 2000/01	Year 3 2001/02	Year 4 2002/03	Year 5 2003/04	Year 6 2004/05	Year 7 2005/06	Year 8 2006/07	Year 9 2007/08	Year 10 2008/09
		(10%)	(%)										
A. Administration Costs													
Total A	N/A	(1,503)	-34%	35.9	454.8	335.6	294.3	302.5	488.0	354.9	35.5	35.5	35.5
B. Development Activity Component A													
1. PPGF													
Net Incremental Benefits	N/A	(200)	-5%	-	(3.4)	(68.3)	(66.6)	(54.7)	(56.0)	(57.3)	(7.3)	(7.3)	(7.3)
2. VOD													
Net Incremental Benefits	114%	1,231	28%	-	(48.3)	(62.1)	121.5	259.0	261.3	274.0	280.9	284.4	288.0
3/5. Crop Technology, SWC and WRD													
Net Incremental Benefits	29%	2,260	51%	-	(111.2)	(619.7)	(826.5)	(811.1)	760.8	908.7	1,025.2	1,025.2	1,025.2
6. Livestock													
Net Incremental Benefits	88%	2,350	53%	-	(62.5)	(52.7)	(68.1)	130.0	386.7	641.7	661.1	661.1	661.1
7. Forestry													
Net Incremental Benefits	26%	75	2%	-	(20.1)	(36.4)	19.6	(36.0)	0.5	37.2	37.2	37.2	37.2
8. Migration Support													
Net Incremental Benefits	50%	226	5%	-	-	-	(90.0)	20.0	36.8	48.3	79.7	79.7	79.7
Summary													
Net Incremental Benefits	28%	4,440	100%	(35.9)	(700.3)	(1,174.8)	(1,204.4)	(795.2)	902.1	1,497.7	2,041.4	2,044.9	2,048.5
Sensitivity Analysis													
Analysis Period													
12 Years	23%	1,828											
20 Years (Base Year)	28%	4,440											
25 Years	29%	5,205											
30 Years	29%	5,639											
Costs - Administration													
Investment Costs Decreased by 20 percent	30%	4,740											
Costs - Administration and Development													
Recurrent Costs Increased by 20 percent	27%	3,931											
Benefits - Crop, SWC and WRD and Livestock													
Crop Benefits Increased by 20 percent	31%	5,348											
Livestock Benefits Decreased by 20 percent	31%	5,265											

Source: Cost Benefit Analysis (CBA) Study Estimate Jan 2005.

¹ EIRR = Economic Internal Rate of Return (rate at which NPV equal to zero).

² NPV = Net Present Value of net incremental benefits at 12% (indicative opportunity cost of capital for rural development projects in India).

N/A = Not analysed as EIRR negative.

Table AN12.1.3 GVT - Gujarat - Dahod: Village Jadhva - Cost Benefit Analysis Development Activity Summary A (Rs'000).

Administration Costs / Development Activity	EIRR ¹	NPV ²		Year 1 1999/00	Year 2 2000/01	Year 3 2001/02	Year 4 2002/03	Year 5 2003/04	Year 6 2004/05	Year 7 2005/06	Year 8 2006/07	Year 9 2007/08	Year 10 2008/09
		(10%)	(%)										
A. Administration Costs													
Investment				35.9	454.8	335.6	294.3	302.5	488.0	354.9	-	-	-
Recurrent - Projected				-	-	-	-	-	-	-	35.5	35.5	35.5
Total A	N/A	(1,503)	-34%	35.9	454.8	335.6	294.3	302.5	488.0	354.9	35.5	35.5	35.5
B. Development Activity Component A													
1. PPGF													
Cost Stream													
Investment				-	3.4	68.2	64.8	51.3	51.3	51.3	-	-	-
Recurrent				-	-	0.1	1.8	3.4	4.7	6.0	7.3	7.3	7.3
Total Costs				-	3.4	68.3	66.6	54.7	56.0	57.3	7.3	7.3	7.3
Benefit Stream													
Before / Without Project				-	-	-	-	-	-	-	-	-	-
After / With Project				-	-	-	-	-	-	-	-	-	-
Incremental Benefits				-	-	-	-	-	-	-	-	-	-
Net Incremental Benefits	N/A	(200)	-5%	-	(3.4)	(68.3)	(66.6)	(54.7)	(56.0)	(57.3)	(7.3)	(7.3)	(7.3)
2. VOD													
Cost Stream													
Investment				-	48.3	62.1	140.6	18.8	28.3	3.8	-	-	-
Recurrent				-	-	-	-	-	-	14.9	15.1	15.1	15.1
Total Costs				-	48.3	62.1	140.6	18.8	28.3	18.7	15.1	15.1	15.1
Benefit Stream													
Before / Without Project				-	-	-	-	-	-	-	-	-	-
After / With Project				-	-	-	262.2	277.8	289.6	292.7	296.0	299.5	303.1
Incremental Benefits				-	-	-	262.2	277.8	289.6	292.7	296.0	299.5	303.1
Net Incremental Benefits	114%	1,231	28%	-	(48.3)	(62.1)	121.5	259.0	261.3	274.0	280.9	284.4	288.0
3/5. Crop Technology, SWC and WRD													
Cost Stream													
Investment													
Crop Tecnology				-	35.7	90.3	47.6	38.2	11.6	9.0	-	-	-
Soil Water Conservation				-	23.6	498.9	664.3	667.6	106.2	66.7	-	-	-
Water Resource Development				-	51.9	18.9	35.5	1,502.5	208.8	58.0	-	-	-
Recurrent													
Crop Tecnology				-	-	0.9	3.2	4.3	5.3	5.6	5.8	5.8	5.8
Soil Water Conservation				-	-	3.0	65.3	148.3	231.8	245.1	253.4	253.4	253.4
Water Resource Development				-	-	7.8	10.6	15.9	241.3	272.6	281.3	281.3	281.3
Total Costs				-	111.2	619.7	826.5	2,376.9	805.0	657.1	540.6	540.6	540.6
Benefit Stream													
Before / Without Project				-	-	-	-	357.5	357.5	357.5	357.5	357.5	357.5
After / With Project				-	-	-	-	1,923.3	1,923.3	1,923.3	1,923.3	1,923.3	1,923.3
Incremental Benefits				-	-	-	-	1,565.8	1,565.8	1,565.8	1,565.8	1,565.8	1,565.8
Net Incremental Benefits	29%	2,260	51%	-	(111.2)	(619.7)	(826.5)	(811.1)	760.8	908.7	1,025.2	1,025.2	1,025.2

Source: Cost Benefit Analysis (CBA) Study Estimate Jan 2005.

¹ EIRR = Economic Internal Rate of Return (rate at which NPV equal to zero).

² NPV = Net Present Value of net incremental benefits at 12% (indicative opportunity cost of capital for rural development projects in India).

N/A = Not analysed as EIRR negative.

Table AN12.1.4 GVT - Gujarat - Dahod: Village Jadhva - Cost Benefit Analysis Development Activity Summary B (Rs'000).

Administration Costs / Development Activity	EIRR ¹	NPV ²		Year 1 1999/00	Year 2 2000/01	Year 3 2001/02	Year 4 2002/03	Year 5 2003/04	Year 6 2004/05	Year 7 2005/06	Year 8 2006/07	Year 9 2007/08	Year 10 2008/09
		(10%)	(%)										
6. Livestock													
Cost Stream													
Investment				-	62.5	46.5	57.2	23.4	21.6	21.6	-	-	-
Recurrent				-	-	6.2	10.9	16.6	19.0	21.1	23.3	23.3	23.3
Total Costs				-	62.5	52.7	68.1	40.0	40.6	42.7	23.3	23.3	23.3
Benefit Stream													
Before / Without Project				-	-	-	-	458.7	458.7	458.7	458.7	458.7	458.7
After / With Project				-	-	-	-	628.7	885.9	1,143.1	1,143.1	1,143.1	1,143.1
Incremental Benefits				-	-	-	-	170.0	427.2	684.4	684.4	684.4	684.4
Net Incremental Benefits	88%	2,350	53%	-	(62.5)	(52.7)	(68.1)	130.0	386.7	641.7	661.1	661.1	661.1
7. Forestry													
Cost Stream													
Investment				-	20.1	34.3	5.0	72.5	40.8	-	-	-	-
Recurrent				-	-	2.0	5.4	5.9	13.2	17.3	17.3	17.3	17.3
Total Costs				-	20.1	36.4	10.4	78.5	54.0	17.3	17.3	17.3	17.3
Benefit Stream													
Before / Without Project				-	-	-	-	-	-	-	-	-	-
After / With Project				-	-	-	29.9	42.5	54.5	54.5	54.5	54.5	54.5
Incremental Benefits				-	-	-	29.9	42.5	54.5	54.5	54.5	54.5	54.5
Net Incremental Benefits	26%	75	2%	-	(20.1)	(36.4)	19.6	(36.0)	0.5	37.2	37.2	37.2	37.2
8. Migration Support													
Cost Stream													
Investment				-	-	-	90.0	51.8	34.9	34.9	-	-	-
Recurrent				-	-	-	-	9.0	14.2	17.7	21.2	21.2	21.2
Total Costs				-	-	-	90.0	60.8	49.1	52.5	21.2	21.2	21.2
Benefit Stream													
Before / Without Project				-	-	-	-	326.7	326.7	326.7	326.7	326.7	326.7
After / With Project				-	-	-	-	407.5	412.5	427.5	427.5	427.5	427.5
Incremental Benefits				-	-	-	-	80.8	85.8	100.8	100.8	100.8	100.8
Net Incremental Benefits	50%	226	5%	-	-	-	(90.0)	20.0	36.8	48.3	79.7	79.7	79.7
Summary													
Cost Stream													
Investment				35.9	700.3	1,154.9	1,399.3	2,728.6	991.4	600.3	-	-	-
Recurrent				-	-	20.0	97.2	203.6	529.4	600.2	660.1	660.1	660.1
Total Costs				35.9	700.3	1,174.8	1,496.5	2,932.2	1,520.8	1,200.5	660.1	660.1	660.1
Benefit Stream													
Before / Without Project				-	-	-	-	1,142.9	1,142.9	1,142.9	1,142.9	1,142.9	1,142.9
After / With Project				-	-	-	292.1	3,279.8	3,565.8	3,841.1	3,844.4	3,847.9	3,851.5
Incremental Benefits				-	-	-	292.1	2,137.0	2,422.9	2,698.3	2,701.5	2,705.0	2,708.6
Net Incremental Benefits	28%	4,440	100%	(35.9)	(700.3)	(1,174.8)	(1,204.4)	(795.2)	902.1	1,497.7	2,041.4	2,044.9	2,048.5

Source: Cost Benefit Analysis (CBA) Study Estimate Jan 2005.

¹ EIRR = Economic Internal Rate of Return (rate at which NPV equal to zero).

² NPV = Net Present Value of net incremental benefits at 12% (indicative opportunity cost of capital for rural development projects in India).

N/A = Not analysed as EIRR negative.

Table AN12.1.5

GVT - Gujarat - Dahod: Village Jadha: Costs - Financial (Rs'000).

Cost Head / Subhead	1999/00 Actual	2000/01 Actual	2001/02 Actual	2002/03 Actual	2003/04 Actual	2004/05 Budget	2005/06 Budget	Totals	
								(Rs'000)	(%)
A. Administration Costs									
GVT Bhopal (Project HQ)	-	60.3	75.4	67.3	52.8	66.8	61.1	383.7	4%
DFIDI	35.9	71.4	26.9	63.2	47.4	54.7	39.2	338.6	3%
Dahod Coordination Office	-	365.7	267.5	189.4	230.6	414.6	289.7	1,757.6	18%
Total A	35.9	497.4	369.9	319.9	330.8	536.1	390.0	2,480.0	25%
B. Development Costs									
Component A									
1. PPGF	-	3.7	75.8	72.0	57.0	57.0	57.0	322.5	3%
2. VOD	-	53.7	69.0	156.3	20.9	31.4	4.3	335.5	3%
3. Crop Technology	-	39.7	100.3	52.9	42.4	12.9	10.0	258.2	3%
4. SWC	-	35.0	739.1	984.1	989.1	157.3	98.9	3,003.4	30%
5. WRD	-	76.9	28.0	52.6	2,226.0	309.3	86.0	2,778.8	28%
6. Livestock	-	69.4	51.7	63.5	26.0	24.0	24.0	258.7	3%
7. Forestry	-	22.3	38.2	5.5	80.6	45.3	-	191.9	2%
8. Migration Support	-	-	-	100.1	57.6	38.7	38.7	235.1	2%
Subtotal	-	300.7	1,102.1	1,487.0	3,499.5	676.0	318.9	7,384.1	75%
Other Development Costs									
Subtotal	-	-	-	-	-	-	-	-	0%
Total B	-	300.7	1,102.1	1,487.0	3,499.5	676.0	318.9	7,384.1	75%
Total A + B	35.9	798.1	1,472.0	1,806.9	3,830.3	1,212.1	708.9	9,864.1	100%
GVT	-	675.7	1,046.8	1,208.8	3,166.4	1,044.3	602.3	7,744.2	79%
DFIDI	35.9	71.4	26.9	63.2	47.4	54.7	39.2	338.6	3%
Community	-	49.5	397.0	533.6	615.6	112.3	67.1	1,775.2	18%
Government	-	1.4	1.2	1.4	0.9	0.8	0.3	6.0	0%

Source:

GVT Dahod Coordination Office - Gujarat.

DFIDI = Department for International Development (India).

PPGF = Participatory Planning and Group Formation.

VOD = Village Organisation and Development.

SWC = Soil and Water Conservation.

WRD = Water Resource Development.

Table AN12.1.5

GVT - Gujarat - Dahod: Village Jajha: Costs - Economic (Rs'000).

Cost Head / Subhead	Conversion Factors		1999/00 Actual	2000/01 Actual	2001/02 Actual	2002/03 Actual	2003/04 Actual	2004/05 Budget	2005/06 Budget	Totals	
	CF	SCF								(Rs'000)	(%)
A. Administration Costs											
GVT Bhopal (Project HQ)	0.90	1.00	-	54.2	67.9	60.6	47.5	60.1	55.0	345.4	5%
DFIDI	1.00	1.00	35.9	71.4	26.9	63.2	47.4	54.7	39.2	338.6	4%
Dahod Coordination Office	0.90	1.00	-	329.2	240.8	170.5	207.5	373.1	260.7	1,581.8	21%
Total A			35.9	454.8	335.6	294.3	302.5	488.0	354.9	2,265.8	30%
B. Development Costs											
Component A											
1. PPGF	0.90	1.00	-	3.4	68.2	64.8	51.3	51.3	51.3	290.3	4%
2. VOD	0.90	1.00	-	48.3	62.1	140.6	18.8	28.3	3.8	301.9	4%
3. Crop Technology	0.90	1.00	-	35.7	90.3	47.6	38.2	11.6	9.0	232.4	3%
4. SWC	0.90	0.75	-	23.6	498.9	664.3	667.6	106.2	66.7	2,027.3	27%
5. WRD	0.90	0.75	-	51.9	18.9	35.5	1,502.5	208.8	58.0	1,875.7	25%
6. Livestock	0.90	1.00	-	62.5	46.5	57.2	23.4	21.6	21.6	232.8	3%
7. Forestry	0.90	1.00	-	20.1	34.3	5.0	72.5	40.8	-	172.7	2%
8. Migration Support	0.90	1.00	-	-	-	90.0	51.8	34.9	34.9	211.6	3%
Subtotal			-	245.5	819.3	1,105.0	2,426.1	503.4	245.4	5,344.7	70%
Other Development Costs											
Subtotal	0.90	1.00	-	-	-	-	-	-	-	-	0%
Total B			-	245.5	819.3	1,105.0	2,426.1	503.4	245.4	5,344.7	70%
Total A + B			35.9	700.3	1,154.9	1,399.3	2,728.6	991.4	600.3	7,610.5	100%
GVT			-	-	-	-	-	-	-	N/A	
DFIDI			-	-	-	-	-	-	-	N/A	
Community			-	-	-	-	-	-	-	N/A	
Government			-	-	-	-	-	-	-	N/A	

Source:

Cost Benefit Analysis (CBA) Study - field verification.

DFIDI = Department for International Development (India).

PPGF = Participatory Planning and Group Formation.

VOD = Village Organisation and Development.

SWC = Soil and Water Conservation.

WRD = Water Resource Development.

Table AN12.1.6

GVT - Gujarat - Dahod: Village Jadha: VOD Household Assumptions.

Without \ With Project	Units	Assumptions			Benefits		
					Year 1 (Rs)	Year 2 (Rs)	Year 3 (Rs)
Development Activity: Village Organisation and Development							
Before / Without Project Situation:							
A. Self Help Groups (SHGs)							
Assumption	Sum	Zero	Zero	Zero	-	-	-
B. Drudgery Reduction							
Assumption	Sum	Zero	Zero	Zero			
Total Without Project Benefits					-	-	-
After / With Project Situation:							
A. Self Help Groups (SHGs)							
Assumptions							
Average Savings / Household	Rs	1,600			900.0	1,300.0	1,600.0
Households / Village	No	363					
Present Group Savings	Rs'000	580.8			326.7	471.9	580.8
Annual Savings Increase	%	5%					
Deposits on Loan to Members	%	60%					
SHG Interest Income	% / Year	18%					
Assumed Benefit	Rs'000				35.3	51.0	62.7
B. Drudgery Reduction							
Assumptions							
Hours Saved / Day / Household	No	1.0					
Number of Days / Year / Household	No	200					
Days / Year / Household (8hrs/day)	No	25.0					
Households / Village	No	363					
Day Equivalent / Village	No	9,075					
Economic Value per Day	(Rs/day)	25					
Assumed Benefit	Rs'000				226.9	226.9	226.9
Total With Project Benefits	Rs'000				262.2	277.8	289.6
Incremental Benefits	Rs'000				262.2	277.8	289.6

Source:

VOD = Village Organisation and Development.
Households per village: Jadha

Cost Benefit Analysis (CBA) Study Estimate Jan 2005.

Table AN12.1.6

GVT - Gujarat - Dahod: Village Jadha: Incremental VOD Benefit Stream (Rs'000).

Without \ With Project	Benefit Streams (Rs '000)									
	Year 1 1999/00	Year 2 2000/01	Year 3 2001/02	Year 4 2002/03	Year 5 2003/04	Year 6 2004/05	Year 7 2005/06	Year 8 2006/07	Year 9 2007/08	Year 10 2008/09
Development Activity: Village Organisation and Development										
Before / Without Project Situation:										
A. Self Help Groups (SHGs) Assumption										
B. Drudgery Reduction Assumption										
Total Without Project Benefits	-	-	-	-	-	-	-	-	-	-
After / With Project Situation:										
A. Self Help Groups (SHGs) Assumptions										
Average Savings / Household										
Households / Village										
Present Group Savings	-	-	-	326.7	471.9	580.8	609.8	640.3	672.3	706.0
Annual Savings Increase										
Deposits on Loan to Members										
SHG Interest Income										
Assumed Benefit	-	-	-	35.3	51.0	62.7	65.9	69.2	72.6	76.2
B. Drudgery Reduction Assumptions										
Hours Saved / Day / Household										
Number of Days / Year / Household										
Days / Year / Household (8hrs/day)										
Households / Village										
Day Equivalent / Village										
Economic Value per Day										
Assumed Benefit	-	-	-	226.9	226.9	226.9	226.9	226.9	226.9	226.9
Total With Project Benefits	-	-	-	262.2	277.8	289.6	292.7	296.0	299.5	303.1
Incremental Benefits	-	-	-	262.2	277.8	289.6	292.7	296.0	299.5	303.1

Source:

VOD = Village Organisation and Development.
Households per village: Jadha

Cost Benefit Analysis (CBA) Study Estimate Jan 2005.

Table AN12.1.7

GVT - Gujarat - Dahod: Village Jadha: Household Crop Net Margin Assumptions.

Without \ With Project	Units	Assumptions			Benefits		
					Year 1 (Rs)	Year 2 (Rs)	Year 3 (Rs)
Development Activity: Crop Technology, SWC and WRD							
Before / Without Project Situation:							
Assumptions							
Households (HHs)	No	363					
Crop Adoption Assumptions	Percent	100%	100%	100%			
Kharif Crop Net Margin	Rs/HH				900	900	900
Rabi Crop Net Margin					85	85	85
Total Without Project Benefits	Rs/HH				985	985	985
After / With Project Situation:							
Assumptions							
Households (HHs)	No	363					
Crop Adoption Assumptions		100%	100%	100%			
Kharif Crop Net Margin	Rs/HH				4,475.8	4,475.8	4,475.8
Rabi Crop Net Margin	Rs/HH				822.5	822.5	822.5
Total With Project Benefits	Rs/HH				5,298.3	5,298.3	5,298.3
Incremental Benefits	Rs/HH				4,313.5	4,313.5	4,313.5

Source:

Cost Benefit Analysis (CBA) Study Estimate Jan 2005.

Table AN12.1.7

GVT - Gujarat - Dahod: Village Jadha: Incremental Crop Benefit Stream (Rs'000).

Without \ With Project	Benefit Streams (Rs '000)									
	Year 1 1999/00	Year 2 2000/01	Year 3 2001/02	Year 4 2002/03	Year 5 2003/04	Year 6 2004/05	Year 7 2005/06	Year 8 2006/07	Year 9 2007/08	Year 10 2008/09
Development Activity: Crop Technology, SWC and WRD										
Before / Without Project Situation:										
Assumptions										
Households (HHs)										
Crop Adoption Assumptions										
Kharif Crop Net Margin	-	-	-	-	326.6	326.6	326.6	326.6	326.6	326.6
Rabi Crop Net Margin	-	-	-	-	30.9	30.9	30.9	30.9	30.9	30.9
Total Without Project Benefits	-	-	-	-	357.5	357.5	357.5	357.5	357.5	357.5
After / With Project Situation:										
Assumptions										
Households (HHs)										
Crop Adoption Assumptions										
Kharif Crop Net Margin	-	-	-	-	1,624.7	1,624.7	1,624.7	1,624.7	1,624.7	1,624.7
Rabi Crop Net Margin	-	-	-	-	298.6	298.6	298.6	298.6	298.6	298.6
Total With Project Benefits	-	-	-	-	1,923.3	1,923.3	1,923.3	1,923.3	1,923.3	1,923.3
Incremental Benefits	-	-	-	-	1,565.8	1,565.8	1,565.8	1,565.8	1,565.8	1,565.8

Source:

Cost Benefit Analysis (CBA) Study Estimate Jan 2005.

Table AN12.1.8

GVT - Gujarat - Dahod: Village Jadha: Household Livestock Net Margin Assumptions.

Without \ With Project Livestock	Units	Assumptions			Benefits		
					Year 1 (Rs)	Year 2 (Rs)	Year 3 (Rs)
Development Activity: Livestock							
Before / Without Project Situation: Assumptions							
Households (HHs)	No	363					
Annual Livestock Net Margin	Rs/HH						
Total Without Project Benefits					1,263.6	1,263.6	1,263.6
After / With Project Situation:							
Development Activity: Assumptions							
Households (HHs)	No	363					
Adoption Assumptions	Percent	55%	78%	100%			
Annual Livestock Net Margin	Rs/HH						
Total With Project Benefits					1,732.0	2,440.5	3,149.1
Incremental Benefits	Rs/HH				468.4	1,176.9	1,885.4

Source:

Cost Benefit Analysis (CBA) Study Estimate Jan 2005.

Table AN12.1.8

GVT - Gujarat - Dahod: Village Jadha: Incremental Livestock Benefit Stream (Rs'000).

Without \ With Project Livestock	Benefit Streams (Rs '000)									
	Year 1 1999/00	Year 2 2000/01	Year 3 2001/02	Year 4 2002/03	Year 5 2003/04	Year 6 2004/05	Year 7 2005/06	Year 8 2006/07	Year 9 2007/08	Year 10 2008/09
Development Activity: Livestock										
Before / Without Project Situation: Assumptions										
Households (HHs)										
Annual Livestock Net Margin										
Total Without Project Benefits	-	-	-	-	458.7	458.7	458.7	458.7	458.7	458.7
After / With Project Situation:										
Development Activity: Assumptions										
Households (HHs)										
Adoption Assumptions										
Annual Livestock Net Margin										
Total With Project Benefits	-	-	-	-	628.7	885.9	1,143.1	1,143.1	1,143.1	1,143.1
Incremental Benefits	-	-	-	-	170.0	427.2	684.4	684.4	684.4	684.4

Source:

Cost Benefit Analysis (CBA) Study Estimate Jan 2005.

Table AN12.1.9

GVT - Gujarat - Dahod: Village Jadha: Forestry Benefit Assumptions.

Without \ With Project Forestry	Units	Assumptions			Benefits		
					Year 1 (Rs)	Year 2 (Rs)	Year 3 (Rs)
Development Activity: Forestry							
Before / Without Project Situation: Assumptions							
Households (HHs)	No	363					
Annual Forestry Net Margin	Rs/HH				-	-	-
Total Without Project Benefits							
After / With Project Situation: Assumptions							
Households (HHs)	No	363					
Adoption Assumptions	Percent	55%	78%	100%			
Annual Forestry Net Margin	Rs/HH				82.5	117.0	150.0
Total With Project Benefits							
Incremental Benefits	Rs/HH				82.5	117.0	150.0

Source:

Cost Benefit Analysis (CBA) Study Estimate Jan 2005.

Table AN12.1.9

GVT - Gujarat - Dahod: Village Jadha: Incremental Forestry Benefit Stream (Rs'000).

Without \ With Project Forestry	Benefit Streams (Rs '000)									
	Year 1 1999/00	Year 2 2000/01	Year 3 2001/02	Year 4 2002/03	Year 5 2003/04	Year 6 2004/05	Year 7 2005/06	Year 8 2006/07	Year 9 2007/08	Year 10 2008/09
Development Activity: Forestry										
Before / Without Project Situation: Assumptions										
Households (HHs)										
Annual Forestry Net Margin										
Total Without Project Benefits	-	-	-	-	-	-	-	-	-	-
After / With Project Situation: Assumptions										
Households (HHs)										
Adoption Assumptions										
Annual Forestry Net Margin										
Total With Project Benefits	-	-	-	29.9	42.5	54.5	54.5	54.5	54.5	54.5
Incremental Benefits	-	-	-	29.9	42.5	54.5	54.5	54.5	54.5	54.5

Source:

Cost Benefit Analysis (CBA) Study Estimate Jan 2005.

Table AN12.1.10

GVT - Gujarat - Dahod: Village Jadha: Migration Support Benefit Assumptions.

Without \ With Project	Assumptions				Benefits		
					Year 1 (Rs)	Year 2 (Rs)	Year 3 (Rs)
Development Activity: Migration Support							
Before / Without Project Situation: Assumptions							
Economic Value per Day	Rs/day	25.0					
Days / Month / Household	No	18					
Economic Value per Month	Rs/month	450.0					
Months Migration / Year	Months	4.0					
Economic Value per Household	Rs/HH	1,800.0					
Households per Village	No	363					
Households per Village Migrating	Percent	50%					
Total Without Project Benefits	Rs/Village				326.7	326.7	326.7
After / With Project Situation: Assumptions							
Economic Value per Day \1	Rs/day	25.0	25%	31.3			
Days / Month / Household	No	18	30%	24.0			
Economic Value per Month	Rs/month	450.0		750.0			
Months Migration / Year	Months	4.0	-25%	3.0			
Economic Value per Household	Rs/HH	1,800.0		2,250.0			
Households per Village	No	363		363.0			
Households per Village Migrating	Percent	50%	-10%	45%			
Subtotal Migration Benefits	Rs/Village				367.5	367.5	367.5
Other Income	Sum (Rs'000)	40.0	45.0	60.0	40.0	45.0	60.0
Total With Project Benefits	Rs/Village				407.5	412.5	427.5
Incremental Benefits	Rs/Village				80.8	85.8	100.8

Source:

Cost Benefit Analysis (CBA) Study Estimate Jan 2005.

- 1\ Financial Wages (Rs/day):
 - Skill Labour - Rs 160
 - Casual Labour :
 - Male - Rs 40
 - Female - Rs 30

Table AN12.1.10

GVT - Gujarat - Dahod: Village Jadha: Incremental Migration Support Benefit Stream (Rs'000).

Without \ With Project	Benefit Streams (Rs '000)									
	Year 1 1999/00	Year 2 2000/01	Year 3 2001/02	Year 4 2002/03	Year 5 2003/04	Year 6 2004/05	Year 7 2005/06	Year 8 2006/07	Year 9 2007/08	Year 10 2008/09
Development Activity: Migration Support Before / Without Project Situation: Assumptions Economic Value per Day Days / Month / Household Economic Value per Month Months Migration / Year Economic Value per Household Households per Village Households per Village Migrating Total Without Project Benefits	-	-	-	-	326.7	326.7	326.7	326.7	326.7	326.7
After / With Project Situation: Assumptions Economic Value per Day \1 Days / Month / Household Economic Value per Month Months Migration / Year Economic Value per Household Households per Village Households per Village Migrating Subtotal Migration Benefits Other Income Total With Project Benefits Incremental Benefits	-	-	-	-	367.5	367.5	367.5	367.5	367.5	367.5
	-	-	-	-	40.0	45.0	60.0	60.0	60.0	60.0
	-	-	-	-	407.5	412.5	427.5	427.5	427.5	427.5
	-	-	-	-	80.8	85.8	100.8	100.8	100.8	100.8

Source:

Cost Benefit Analysis (CBA) Study Estimate Jan 2005.

- 1\ Financial Wages (Rs/day):
 Skill Labour - Rs 160
 Casual Labour :
 Male - Rs 40
 Female - Rs 30

Table AN12.1.11 GVT - Gujarat - Dahod: Village Jadha: Weighted Household Crop Net Margin Summary (Rs/Household).

Item	WBR (%)	Before / Without Project			After / With Project			Increment		
		Khalif	Rabi	Total	Khalif	Rabi	Total	Khalif	Rabi	Total
Phase II										
Well Being Ranking - Very Poor										
Household Net Margin (Rs)	16.0%	834.6	102.5	937.1	1,849.8	1,067.8	2,917.6	1,015.2	965.3	1,980.5
Well Being Ranking - Poor										
Household Net Margin (Rs)	63.0%	637.7	-	637.7	4,803.0	220.7	5,023.7	4,019.3	204.0	4,223.3
Well Being Ranking - Moderate										
Household Net Margin (Rs)	18.0%	994.0	89.3	1,083.3	3,711.4	2,508.3	6,219.6	2,717.4	2,419.0	5,136.4
Well Being Ranking - Better Off										
Household Net Margin (Rs)	3.0%	6,180.9	1,756.7	7,937.5	16,195.9	2,039.3	18,235.2	10,015.0	282.7	10,297.7
Well Being Ranking - Weighted										
Household Net Margin (Rs)	100.0%	899.6	85.2	984.8	4,475.8	822.5	5,298.3	3,484.2	726.9	4,211.0
Phase I \1										
Well Being Ranking - Very Poor										
Household Net Margin (Rs)	16.0%	727.1	445.8	1,172.9	6,444.2	2,781.3	9,225.4	5,717.1	2,335.4	8,052.5
Well Being Ranking - Poor										
Household Net Margin (Rs)	63.0%	485.8	657.5	1,143.3	10,136.0	5,690.3	15,826.3	9,650.3	5,032.8	14,683.0
Well Being Ranking - Moderate										
Household Net Margin (Rs)	18.0%	986.3	3,385.0	4,371.3	9,457.5	5,195.0	14,652.5	8,471.3	1,810.0	10,281.3
Well Being Ranking - Better Off										
Household Net Margin (Rs)	3.0%	2,778.0	937.0	3,715.0	4,915.0	9,560.0	14,475.0	2,137.0	8,623.0	10,760.0
Well Being Ranking - Weighted										
Household Net Margin (Rs)	100.0%	683.2	1,123.0	1,806.2	9,266.5	5,251.8	14,518.3	8,583.3	4,128.8	12,712.1

Source: Study of Impact of WIRFP on Net Incomes of Target Households, Jan 2004.

WBR = GVT Household Well Being Ranking. Survey figures adjusted to Village Profile WBR.

\1 GVT - Madhya Pradesh - Phase I: Village Naganwat Choti: Weighted Household Crop Net Margin Summary.

Table AN12.1.12 GVT - Gujarat - Dahod: Village Jadha: Weighted Household Crop Net Margin Sensitivity Analysis (Rs/Household).

Item	EIRR	Before / Without Project			After / With Project			Increment		
		Khalif	Rabi	Total	Khalif	Rabi	Total	Khalif	Rabi	Total
Development Activity:										
Crop Technology, SWC and WRD										
Weighted Net Margin (Phase II)										
Household Net Margin (Rs)		899.6	85.2	984.8	4,475.8	822.5	5,298.3	3,576.2	737.4	4,313.5
Incremental Benefit (Phase II / Phase I)										34%
Base Case Assumptions										
Household Net Margin (Rs)		899.6	85.2	984.8	4,475.8	822.5	5,298.3	3,576.2	737.4	4,313.5
Incremental Benefit (Phase II / Phase I)										34%
Sensitivity Increase (%)	0%									
Development Activity	29%									
Overall Village	28%									
Sensitivity Assumptions										
Household Net Margin (Rs)		899.6	85.2	984.8	4,475.8	822.5	5,298.3	3,576.2	737.4	4,313.5
Incremental Benefit (Phase II / Phase I)										34%
Sensitivity Increase (%)	0%									
Development Activity	29%									
Overall Village	28%									
Weighted Net Margin (Phase I)										
Household Net Margin (Rs)		683.2	1,123.0	1,806.2	9,266.5	5,251.8	14,518.3	8,583.3	4,128.8	12,712.1

Source: Study of Impact of WIRFP on Net Incomes of Target Households, Jan 2004.
 EIRR = Economic Internal Rate of Return (rate at which NPV equal to zero).
 N/A = Not analysed as EIRR negative.

Table AN12.1.13 GVT - Gujarat - Dahod: Village Jadha: Weighted Household Livestock Net Margin Summary (Rs/Household).

Well Being Ranking	Weight (%)	Before / Without Project		After / With Project		Increment \1	
		Herd Value	Net Margin	Herd Value	Net Margin	Herd Value	Net Margin
Phase I - Well Being Ranking (WBR) \1							
Madhya Pradesh - WBR Weighted Data							
Very Poor	16.0%						
Average		580	(185.0)	5,650	412.5	474	597.5
Poor	63.0%						
Average		2,350	982.5	8,250	2,141.0	1,180	1,158.5
Moderate	18.0%						
Average		14,700	6,730.0	1,900	2,820.0	1,900	(3,910.0)
Better Off	3.0%						
Average		15,580	3,000.0	14,600	10,790.0	(196)	7,790.0
Phase I - WBR Weighted Data	100.0%	4,687	1,890.8	6,882	2,246.1	1,155	355.4
Phase II - Well Being Ranking (WBR)							
Very Poor	16.0%						
Average		5,756	149.2	10,970	1,446.4	1,043	1,297.2
Poor	63.0%						
Average		13,128	852.2	25,979	3,008.8	2,570	2,156.8
Moderate	18.0%						
Average		13,525	4,035.1	27,020	5,249.5	2,699	1,214.4
Better Off	3.0%						
Average		12,700	(781.7)	41,873	2,573.3	5,835	3,355.0
Phase II - WBR Weighted Data	100.0%	12,007	1,263.6	24,242	3,149.1	2,447	1,885.6

Source: Study of Impact of WIRFP on Net Incomes of Target Households, Jan 2004.

WBR = GVT Household Well Being Ranking.

Survey figures adjusted to Village Profile WBR.

\1 GVT - Madhya Pradesh - Phase I: Village Naganwat Choti: Weighted Household Livestock Net Margin Summary.

WIRFP - Phase II - Cost Benefit Analysis Study

Tables AN12.0 Individual Village Cost Benefit Analysis

Tables AN12.2 GVT Gujarat - Dahod: Village Kasotya

- Table AN12.2.1 GVT - Gujarat - Dahod: Village Kasotya: Village Profile.
- Table AN12.2.2 GVT - Gujarat - Dahod: Village Kasotya: Cost Benefit Analysis Summary (Rs'000).
- Table AN12.2.3 GVT - Gujarat - Dahod: Village Kasotya: Cost Benefit Analysis Development Activity Summary A (Rs'000).
- Table AN12.2.4 GVT - Gujarat - Dahod: Village Kasotya: Cost Benefit Analysis Development Activity Summary B (Rs'000).
- Table AN12.2.5 GVT - Gujarat - Dahod: Village Kasotya: Costs - Financial (Rs'000).
GVT - Gujarat - Dahod: Village Kasotya: Costs - Economic (Rs'000).
- Table AN12.2.6 GVT - Gujarat - Dahod: Village Kasotya: VOD Household Assumptions.
GVT - Gujarat - Dahod: Village Kasotya: Incremental VOD Benefit Stream (Rs'000).
- Table AN12.2.7 GVT - Gujarat - Dahod: Village Kasotya: Household Crop Net Margin Assumptions.
GVT - Gujarat - Dahod: Village Kasotya: Incremental Crop Benefit Stream (Rs'000).
- Table AN12.2.8 GVT - Gujarat - Dahod: Village Kasotya: Household Livestock Net Margin Assumptions.
GVT - Gujarat - Dahod: Village Kasotya: Incremental Livestock Benefit Stream (Rs'000).
- Table AN12.2.9 GVT - Gujarat - Dahod: Village Kasotya: Forestry Benefit Assumptions.
GVT - Gujarat - Dahod: Village Kasotya: Incremental Forestry Benefit Stream (Rs'000).
- Table AN12.2.10 GVT - Gujarat - Dahod: Village Kasotya: Migration Support Benefit Assumptions.
GVT - Gujarat - Dahod: Village Kasotya: Incremental Migration Support Benefit Stream (Rs'000).
- Table AN12.2.11 GVT - Gujarat - Dahod: Village Kasotya: Weighted Household Crop Net Margin Summary (Rs/Household).
- Table AN12.2.12 GVT - Gujarat - Dahod: Village Kasotya: Weighted Household Crop Net Margin Sensitivity Analysis (Rs/Household).
- Table AN12.2.13 GVT - Gujarat - Dahod: Village Kasotya: Weighted Household Livestock Net Margin Summary (Rs/Household).

Table AN12.2.1

GVT - Gujarat - Dahod: Village Kasotya: Village Profile.

Village Profile \1			
A. Background			
Village Name	Kasotya		
District	Dahod		
State	Gujarat		
B. Participatory Planning Process (PPP)			
Village entry	Apr-00		
PRA	Jan-01		
CPA	Jan-01		
C. Infrastructure			
Hand Pumps (no)	31		
Wells (no)	59		
Linked by Road	4 Kms		
Electrification	Yes		
School	1 - 7		
D. Demographic Data			
Households (no)	372		
Participating Households	190		
Population (Adults):	1,624		
Adults:			
Male	871		
Female	753		
Children:			
Boys	N/A		
Girls	N/A		
E. Well Being Ranking (No Households)			
Very Poor	34	17.6%	
Poor	122	63.2%	
Moderate	37	19.2%	
Better Off	-	0.0%	
Total	193	100%	
F. Land Resource (ha)			
Total Area			1,137
Revenue Land (unused)			367
Forest Area - Revenue			5
Pasture Land			468
Arable Land			468
G. Livestock			
H. Self Help Groups (No Households)			
1	Group 1		19
2	Group 2		19
3	Group 3		17
4	Group 4		19
5	Group 5		16
6	Group 6		16
7	Group 7		19
8	Group 8		13
9	Group 9		13
10	Group 10		13
11	Group 11		10
12	Group 12		19
13	Group 13		-
14	Group 14		-
15	Group 15		-
16	Group 16		-
17	Group 17		-
18	Group 18		-
19	Group 19		-
	Total		193

Source: GVT Dahod Coordination Office - Gujarat.

\1 Subject to final adjustment following consolidation exercise prior to Annual Review Meeting (ARM) in Feb 2005.

Table AN12.2.2 GVT - Gujarat - Dahod: Village Kasotya: Cost Benefit Analysis Summary (Rs'000).

Administration Cost / Development Activity	EIRR ¹	NPV ²		Year 1 1999/00	Year 2 2000/01	Year 3 2001/02	Year 4 2002/03	Year 5 2003/04	Year 6 2004/05	Year 7 2005/06	Year 8 2006/07	Year 9 2007/08	Year 10 2008/09
		(10%)	(%)										
A. Administration Costs													
Total A	N/A	(1,503)	-66%	35.9	454.8	335.6	294.3	302.5	488.0	354.9	35.5	35.5	35.5
B. Development Activity Component A													
1. PPGF													
Net Incremental Benefits	N/A	(107)	-5%	-	(33.6)	(35.4)	(19.5)	(19.9)	(22.5)	(20.9)	(3.5)	(3.5)	(3.5)
2. VOD													
Net Incremental Benefits	40%	454	20%	-	(144.6)	(78.7)	87.1	127.3	99.0	125.4	133.2	134.0	134.9
3/5. Crop Technology, SWC and WRD													
Net Incremental Benefits	67%	1,995	88%	-	(73.8)	(142.2)	(140.0)	459.8	106.1	345.3	610.1	610.1	610.1
6. Livestock													
Net Incremental Benefits	121%	1,304	58%	-	(40.3)	(21.5)	62.2	192.3	218.7	288.5	330.8	330.8	330.8
7. Forestry													
Net Incremental Benefits	69%	54	2%	-	(3.1)	(3.1)	(2.4)	15.4	(1.6)	15.5	15.5	15.5	15.5
8. Migration Support													
Net Incremental Benefits	89%	69	3%	-	-	-	-	-	(7.8)	(16.3)	27.7	27.7	27.7
Summary													
Net Incremental Benefits	27%	2,266	100%	(35.9)	(750.2)	(616.4)	(306.9)	472.4	(96.0)	382.6	1,078.3	1,079.1	1,080.0
Sensitivity Analysis													
Analysis Period													
12 Years	22%	889											
20 Years (Base Case)	27%	2,266											
25 Years	27%	2,669											
30 Years	27%	2,898											
Costs - Administration													
Investment Costs Decreased by 20 percent.	31%	2,566											
Costs - Administration and Development													
Recurrent Costs Increased by 20 percent.	26%	2,090											
Benefits - Crop, SWC and WRD and Livestock													
Crop Benefits Increased by 20 percent.	30%	2,945											
Livestock Benefits Increased by 20 percent.	30%	2,771											

Source: GVT Dahod Coordination Office - Gujarat.

¹ EIRR = Economic Internal Rate of Return (rate at which NPV equal to zero).

² NPV = Net Present Value of net incremental benefits at 12% (indicative opportunity cost of capital for rural development projects in India).

N/A = Not analysed as EIRR negative.

Table AN12.2.3 GVT - Gujarat - Dahod: Village Kasotya: Cost Benefit Analysis Development Activity Summary A (Rs'000).

Administration Cost / Development Activity	EIRR ¹	NPV ²		Year 1	Year 2	Year 3	Year 4	Year 5	Year 6	Year 7	Year 8	Year 9	Year 10
		(10%)	(%)	1999/00	2000/01	2001/02	2002/03	2003/04	2004/05	2005/06	2006/07	2007/08	2008/09
A. Administration Costs													
Investment				35.9	454.8	335.6	294.3	302.5	488.0	354.9	-	-	-
Projected				-	-	-	-	-	-	-	35.5	35.5	35.5
Total A	N/A	(1,503.0)	-66%	35.9	454.8	335.6	294.3	302.5	488.0	354.9	35.5	35.5	35.5
B. Development Activity Component A													
1. PPGF													
Cost Stream													
Investment				-	33.6	34.5	17.8	17.8	19.9	17.8	-	-	-
Recurrent				-	-	0.8	1.7	2.1	2.6	3.1	3.5	3.5	3.5
Total Costs				-	33.6	35.4	19.5	19.9	22.5	20.9	3.5	3.5	3.5
Benefit Stream													
Before / Without Project				-	-	-	-	-	-	-	-	-	-
After / With Project				-	-	-	-	-	-	-	-	-	-
Incremental Benefits				-	-	-	-	-	-	-	-	-	-
Net Incremental Benefits	N/A	(106.8)	-5%	-	(33.6)	(35.4)	(19.5)	(19.9)	(22.5)	(20.9)	(3.5)	(3.5)	(3.5)
2. VOD													
Cost Stream													
Investment				-	144.6	71.5	47.7	5.9	34.7	7.3	-	-	-
Recurrent				-	-	7.2	10.8	13.2	13.5	15.2	15.6	15.6	15.6
Total Costs				-	144.6	78.7	58.5	19.1	48.1	22.5	15.6	15.6	15.6
Benefit Stream													
Before / Without Project				-	-	-	-	-	-	-	-	-	-
After / With Project				-	-	-	145.6	146.4	147.2	148.0	148.8	149.6	150.5
Incremental Benefits				-	-	-	145.6	146.4	147.2	148.0	148.8	149.6	150.5
Net Incremental Benefits	40%	454.3	20%	-	(144.6)	(78.7)	87.1	127.3	99.0	125.4	133.2	134.0	134.9
3/5. Crop Technology, SWC and WRD													
Cost Stream													
Investment													
Crop Technology				-	28.1	64.5	52.2	11.0	13.3	12.7	-	-	-
Soil Water Conservation				-	-	-	-	288.4	576.9	288.5	-	-	-
Water Resource Development				-	45.7	70.2	68.1	-	26.6	-	-	-	-
Recurrent													
Crop Technology				-	-	0.7	2.3	3.6	3.9	4.2	4.5	4.5	4.5
Soil Water Conservation				-	-	-	-	-	36.0	108.2	144.2	144.2	144.2
Water Resource Development				-	-	6.9	17.4	27.6	27.6	31.6	31.6	31.6	31.6
Total Costs				-	73.8	142.2	140.0	330.6	684.3	445.1	180.3	180.3	180.3
Benefit Stream													
Before / Without Project				-	-	-	-	149.8	149.8	149.8	149.8	149.8	149.8
After / With Project				-	-	-	-	940.3	940.3	940.3	940.3	940.3	940.3
Incremental Benefits				-	-	-	-	790.4	790.4	790.4	790.4	790.4	790.4
Net Incremental Benefits	67%	1,994.6	88%	-	(73.8)	(142.2)	(140.0)	459.8	106.1	345.3	610.1	610.1	610.1

Source: GVT Dahod Coordination Office - Gujarat.

¹ EIRR = Economic Internal Rate of Return (rate at which NPV equal to zero).

² NPV = Net Present Value of net incremental benefits at 12% (indicative opportunity cost of capital for rural development projects in India).

N/A = Not analysed as EIRR negative.

Table AN12.2.4 GVT - Gujarat - Dahod: Village Kasotya: Cost Benefit Analysis Development Activity Summary B (Rs'000).

Administration Cost / Development Activity	EIRR ¹	NPV ²		Year 1 1999/00	Year 2 2000/01	Year 3 2001/02	Year 4 2002/03	Year 5 2003/04	Year 6 2004/05	Year 7 2005/06	Year 8 2006/07	Year 9 2007/08	Year 10 2008/09
		(10%)	(%)										
6. Livestock													
Cost Stream													
Investment				-	40.3	16.9	4.2	4.2	114.8	42.3	-	-	-
Recurrent				-	-	4.6	11.6	18.4	18.4	21.1	21.1	21.1	21.1
Total Costs				-	40.3	21.5	15.8	22.6	133.2	63.3	21.1	21.1	21.1
Benefit Stream													
Before / Without Project				-	-	-	256.7	256.7	256.7	256.7	256.7	256.7	256.7
After / With Project				-	-	-	334.7	471.7	608.6	608.6	608.6	608.6	608.6
Incremental Benefits				-	-	-	78.0	214.9	351.8	351.8	351.8	351.8	351.8
Net Incremental Benefits	121%	1,303.6	58%	-	(40.3)	(21.5)	62.2	192.3	218.7	288.5	330.8	330.8	330.8
7. Forestry													
Cost Stream													
Investment				-	3.1	2.8	12.4	1.1	19.0	-	-	-	-
Recurrent				-	-	0.3	0.6	1.8	1.9	3.8	3.8	3.8	3.8
Total Costs				-	3.1	3.1	13.0	2.9	20.9	3.8	3.8	3.8	3.8
Benefit Stream													
Before / Without Project				-	-	-	-	-	-	-	-	-	-
After / With Project				-	-	-	10.6	18.3	19.3	19.3	19.3	19.3	19.3
Incremental Benefits				-	-	-	10.6	18.3	19.3	19.3	19.3	19.3	19.3
Net Incremental Benefits	69%	53.6	2%	-	(3.1)	(3.1)	(2.4)	15.4	(1.6)	15.5	15.5	15.5	15.5
8. Migration Support													
Cost Stream													
Investment				-	-	-	-	-	7.8	15.6	-	-	-
Recurrent				-	-	-	-	-	-	0.8	2.3	2.3	2.3
Total Costs				-	-	-	-	-	7.8	16.3	2.3	2.3	2.3
Benefit Stream													
Before / Without Project				-	-	-	-	-	-	-	126.7	126.7	126.7
After / With Project				-	-	-	-	-	-	-	156.7	156.7	156.7
Incremental Benefits				-	-	-	-	-	-	-	30.1	30.1	30.1
Net Incremental Benefits	89%	69.3	3%	-	-	-	-	-	(7.8)	(16.3)	27.7	27.7	27.7
EIRR													
Summary													
Cost Stream													
Investment				35.9	750.2	595.9	496.7	630.9	1,300.8	739.0	-	-	-
Recurrent				-	-	20.5	44.4	66.8	104.0	188.0	262.2	262.2	262.2
Total Costs				35.9	750.2	616.4	541.1	697.7	1,404.7	927.0	262.2	262.2	262.2
Benefit Stream													
Before / Without Project				-	-	-	256.7	406.6	406.6	406.6	533.2	533.2	533.2
After / With Project				-	-	-	491.0	1,576.6	1,715.3	1,716.1	1,873.7	1,874.5	1,875.4
Incremental Benefits				-	-	-	234.2	1,170.1	1,308.7	1,309.5	1,340.4	1,341.3	1,342.2
Net Incremental Benefits	27%	2,265.7	100%	(35.9)	(750.2)	(616.4)	(306.9)	472.4	(96.0)	382.6	1,078.3	1,079.1	1,080.0

Source: GVT Dahod Coordination Office - Gujarat.

¹ EIRR = Economic Internal Rate of Return (rate at which NPV equal to zero).

² NPV = Net Present Value of net incremental benefits at 12% (indicative opportunity cost of capital for rural development projects in India).

N/A = Not analysed as EIRR negative.

Table AN12.2.5

GVT - Gujarat - Dahod: Village Kasotiya: Costs - Financial (Rs'000).

Cost Head / Subhead	1999/00 Actual	2000/01 Actual	2001/02 Actual	2002/03 Actual	2003/04 Actual	2004/05 Budget	2005/06 Budget	Totals	
								(Rs'000)	(%)
A. Administration Costs									
GVT Bhopal (PHQ)	-	60.3	75.4	67.3	52.8	66.8	61.1	383.7	7%
DFIDI	35.9	71.4	26.9	63.2	47.4	54.7	39.2	338.6	6%
Dahod Coordination Office	-	365.7	267.5	189.4	230.6	414.6	289.7	1,757.6	32%
Total A	35.9	497.4	369.9	319.9	330.8	536.1	390.0	2,480.0	45%
B. Development Costs									
Component A									
1. PPGF	-	37.3	38.4	19.8	19.8	22.1	19.8	157.1	3%
2. VOT	-	160.6	79.4	53.0	6.6	38.5	8.1	346.2	6%
3. Crop Technology	-	31.2	71.6	58.0	12.3	14.7	14.1	202.0	4%
4. SWC	-	-	-	-	427.2	854.7	427.4	1,709.2	31%
5. WRD	-	67.7	104.0	100.9	-	39.4	-	312.0	6%
6. Livestock	-	44.8	18.8	4.7	4.7	127.5	47.0	247.5	4%
7. Forestry	-	3.5	3.1	13.8	1.2	21.1	-	42.7	1%
8. Migration Support	-	-	-	-	-	8.6	17.3	25.9	0%
Subtotal	-	345.1	315.3	250.2	471.7	1,126.6	533.6	3,042.5	55%
Other Development Costs									
Subtotal	-	-	-	-	-	-	-	-	0%
Total B	-	345.1	315.3	250.2	471.7	1,126.6	533.6	3,042.5	55%
Total A + B	35.9	842.5	685.2	570.1	802.5	1,662.7	923.6	5,522.5	100%
GVT	-	718.4	605.2	466.1	521.6	1,102.5	639.5	4,053.4	73%
DFIDI	35.9	71.4	26.9	63.2	47.4	54.7	39.2	338.6	6%
Community	-	48.5	51.2	40.0	233.3	499.3	242.8	1,115.0	20%
Government	-	4.2	1.9	0.8	0.2	6.2	2.2	15.5	0%

Source:

GVT Dahod Coordination Office - Gujarat.

DFIDI = Department for International Development (India).

PPGF = Participatory Planning and Group Formation.

VOD = Village Organisation and Development.

SWC = Soil and Water Conservation.

WRD = Water Resource Development.

Table AN12.2.5

GVT - Gujarat - Dahod: Village Kasotiya: Costs - Financial (Rs'000).

Cost Head / Subhead	1999/00 Actual	2000/01 Actual	2001/02 Actual	2002/03 Actual	2003/04 Actual	2004/05 Budget	2005/06 Budget	Totals	
								(Rs'000)	(%)
A. Administration Costs									
GVT Bhopal (PHQ)	-	60.3	75.4	67.3	52.8	66.8	61.1	383.7	7%
DFIDI	35.9	71.4	26.9	63.2	47.4	54.7	39.2	338.6	6%
Dahod Coordination Office	-	365.7	267.5	189.4	230.6	414.6	289.7	1,757.6	32%
Total A	35.9	497.4	369.9	319.9	330.8	536.1	390.0	2,480.0	45%
B. Development Costs									
Component A									
1. PPGF	-	37.3	38.4	19.8	19.8	22.1	19.8	157.1	3%
2. VOT	-	160.6	79.4	53.0	6.6	38.5	8.1	346.2	6%
3. Crop Technology	-	31.2	71.6	58.0	12.3	14.7	14.1	202.0	4%
4. SWC	-	-	-	-	427.2	854.7	427.4	1,709.2	31%
5. WRD	-	67.7	104.0	100.9	-	39.4	-	312.0	6%
6. Livestock	-	44.8	18.8	4.7	4.7	127.5	47.0	247.5	4%
7. Forestry	-	3.5	3.1	13.8	1.2	21.1	-	42.7	1%
8. Migration Support	-	-	-	-	-	8.6	17.3	25.9	0%
Subtotal	-	345.1	315.3	250.2	471.7	1,126.6	533.6	3,042.5	55%
Other Development Costs									
Subtotal	-	-	-	-	-	-	-	-	0%
Total B	-	345.1	315.3	250.2	471.7	1,126.6	533.6	3,042.5	55%
Total A + B	35.9	842.5	685.2	570.1	802.5	1,662.7	923.6	5,522.5	100%
GVT	-	718.4	605.2	466.1	521.6	1,102.5	639.5	4,053.4	73%
DFIDI	35.9	71.4	26.9	63.2	47.4	54.7	39.2	338.6	6%
Community	-	48.5	51.2	40.0	233.3	499.3	242.8	1,115.0	20%
Government	-	4.2	1.9	0.8	0.2	6.2	2.2	15.5	0%

Source:

GVT Dahod Coordination Office - Gujarat.

DFIDI = Department for International Development (India).

PPGF = Participatory Planning and Group Formation.

VOD = Village Organisation and Development.

SWC = Soil and Water Conservation.

WRD = Water Resource Development.

Table AN12.2.5

GVT - Gujarat - Dahod: Village Kasotiya: Costs - Economic (Rs'000).

Cost Head / Subhead	Conversion Factors		1999/00 Actual	2000/01 Actual	2001/02 Actual	2002/03 Actual	2003/04 Actual	2004/05 Budget	2005/06 Budget	Totals	
	CF	SCF								(Rs'000)	(%)
A. Administration Costs											
GVT Bhopal (PHQ)	0.90	1.00	-	54.2	67.9	60.6	47.5	60.1	55.0	345.4	8%
DFIDI	1.00	1.00	35.9	71.4	26.9	63.2	47.4	54.7	39.2	338.6	7%
Dahod Coordination Office	0.90	1.00	-	329.2	240.8	170.5	207.5	373.1	260.7	1,581.8	35%
Total A			35.9	454.8	335.6	294.3	302.5	488.0	354.9	2,265.8	50%
B. Development Costs											
Component A											
1. PPGF	0.90	1.00	-	33.6	34.5	17.8	17.8	19.9	17.8	141.4	3%
2. VOT	0.90	1.00	-	144.6	71.5	47.7	5.9	34.7	7.3	311.6	7%
3. Crop Technology	0.90	1.00	-	28.1	64.5	52.2	11.0	13.3	12.7	181.8	4%
4. SWC	0.90	0.75	-	-	-	-	288.4	576.9	288.5	1,153.7	25%
5. WRD	0.90	0.75	-	45.7	70.2	68.1	-	26.6	-	210.6	5%
6. Livestock	0.90	1.00	-	40.3	16.9	4.2	4.2	114.8	42.3	222.7	5%
7. Forestry	0.90	1.00	-	3.1	2.8	12.4	1.1	19.0	-	38.4	1%
8. Migration Support	0.90	1.00	-	-	-	-	-	7.8	15.6	23.3	1%
Subtotal			-	295.4	260.4	202.5	328.4	812.8	384.1	2,283.5	50%
Other Development Costs											
Subtotal	0.90	1.00	-	-	-	-	-	-	-	-	0%
Total B			-	295.4	260.4	202.5	328.4	812.8	384.1	2,283.5	50%
Total A + B			35.9	750.2	595.9	496.7	630.9	1,300.8	739.0	4,549.4	100%
GVT			-	-	-	-	-	-	-	N/A	
DFIDI			-	-	-	-	-	-	-	N/A	
Community			-	-	-	-	-	-	-	N/A	
Government			-	-	-	-	-	-	-	N/A	

Source:

Cost Benefit Analysis (CBA) Study Estimate Jan 2005.

DFIDI = Department for International Development (India).

PPGF = Participatory Planning and Group Formation.

VOD = Village Organisation and Development.

SWC = Soil and Water Conservation.

WRD = Water Resource Development.

Table AN12.2.6

GVT - Gujarat - Dahod: Village Kasotya: VOD Household Assumptions.

Without \ With Project	Units	Assumptions			Benefits		
					Year 1 (Rs)	Year 2 (Rs)	Year 3 (Rs)
Development Activity: Village Organisation and Development							
Before / Without Project Situation:							
A. Self Help Groups (SHGs)							
Assumption	Sum	Zero	Zero	Zero	-	-	-
B. Drudgery Reduction							
Assumption	Sum	Zero	Zero	Zero			
Total Without Project Benefits					-	-	-
After / With Project Situation:							
A. Self Help Groups (SHGs)							
Assumptions							
Average Savings / Household	Rs	1,200					
Households / Village	No	193					
Present Group Savings	Rs'000	231.6			231.6	238.5	245.7
Annual Savings Increase	%	3%					
Deposits on Loan to Members	%	60%					
SHG Interest Income	% / Year	18%					
Assumed Benefit	Rs'000				25.0	25.8	26.5
B. Drudgery Reduction							
Assumptions							
Hours Saved / Day / Household	No	1.0					
Number of Days / Year / Household	No	200					
Days / Year / Household (8hrs/day)	No	25.0					
Households / Village	No	193					
Day Equivalent / Village	No	4,825					
Economic Value per Day	(Rs/day)	25					
Assumed Benefit	Rs'000				120.6	120.6	120.6
Total With Project Benefits	Rs'000				145.6	146.4	147.2
Incremental Benefits	Rs'000				145.6	146.4	147.2

Source: GVT Dahod Coordination Office - Gujarat.

PPGF = Participatory Planning and Group Formation.

Households per village: Kasotya

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Table AN12.2.6

GVT - Gujarat - Dahod: Village Kasotya: Incremental VOD Benefit Stream (Rs'000).

Without \ With Project	Benefit Streams (Rs '000)									
	Year 1 1999/00	Year 2 2000/01	Year 3 2001/02	Year 4 2002/03	Year 5 2003/04	Year 6 2004/05	Year 7 2005/06	Year 8 2006/07	Year 9 2007/08	Year 10 2008/09
Development Activity: Village Organisation and Development										
Before / Without Project Situation:										
A. Self Help Groups (SHGs) Assumption										
B. Drudgery Reduction Assumption										
Total Without Project Benefits	-	-	-	-	-	-	-	-	-	-
After / With Project Situation:										
A. Self Help Groups (SHGs) Assumptions										
Average Savings / Household Households / Village										
Present Group Savings	-	-	-	231.6	238.5	245.7	253.1	260.7	268.5	276.5
Annual Savings Increase										
Deposits on Loan to Members										
SHG Interest Income										
Assumed Benefit			-	25.0	25.8	26.5	27.3	28.2	29.0	29.9
B. Drudgery Reduction Assumptions										
Hours Saved / Day / Household										
Number of Days / Year / Household										
Days / Year / Household (8hrs/day)										
Households / Village										
Day Equivalent / Village										
Economic Value per Day										
Assumed Benefit	-	-	-	120.6	120.6	120.6	120.6	120.6	120.6	120.6
Total With Project Benefits	-	-	-	145.6	146.4	147.2	148.0	148.8	149.6	150.5
Incremental Benefits	-	-	-	145.6	146.4	147.2	148.0	148.8	149.6	150.5

Source: Cost Benefit Analysis (CBA) Study Estimate Jan 2005.

PPGF = Participatory Planning and Group Formation
Households per village: Kasotya

Table AN12.2.7

GVT - Gujarat - Dahod: Village Kasotya: Household Crop Net Margin Assumptions.

Without \ With Project	Units	Assumptions			Benefits		
					Year 1 (Rs)	Year 2 (Rs)	Year 3 (Rs)
Development Activity: Crop Technology, SWC and WRD							
Before / Without Project Situation:							
Assumptions							
Households (HHs)	No	193					
Crop Adoption Assumptions	Percent	100%	100%	100%			
Kharif Crop Net Margin	Rs/HH				741	741	741
Rabi Crop Net Margin					35	35	35
Total Without Project Benefits	Rs/HH				776	776	776
After / With Project Situation:							
Assumptions							
Households (HHs)	No	193					
Crop Adoption Assumptions		100%	100%	100%			
Kharif Crop Net Margin	Rs/HH				4,064.0	4,064.0	4,064.0
Rabi Crop Net Margin	Rs/HH				807.8	807.8	807.8
Total With Project Benefits	Rs/HH				4,871.8	4,871.8	4,871.8
Incremental Benefits	Rs/HH				4,095.6	4,095.6	4,095.6

Source:

GVT Dahod Coordination Office - Gujarat.

Table AN12.2.7

GVT - Gujarat - Dahod: Village Kasotya: Incremental Crop Benefit Stream (Rs'000).

Without \ With Project	Benefit Streams (Rs '000)									
	Year 1 1999/00	Year 2 2000/01	Year 3 2001/02	Year 4 2002/03	Year 5 2003/04	Year 6 2004/05	Year 7 2005/06	Year 8 2006/07	Year 9 2007/08	Year 10 2008/09
Development Activity: Crop Technology, SWC and WRD										
Before / Without Project Situation: Assumptions										
Households (HHs)										
Crop Adoption Assumptions										
Kharif Crop Net Margin	-	-	-	-	143.0	143.0	143.0	143.0	143.0	143.0
Rabi Crop Net Margin	-	-	-	-	6.8	6.8	6.8	6.8	6.8	6.8
Total Without Project Benefits	-	-	-	-	149.8	149.8	149.8	149.8	149.8	149.8
After / With Project Situation: Assumptions										
Households (HHs)										
Crop Adoption Assumptions										
Kharif Crop Net Margin	-	-	-	-	784.4	784.4	784.4	784.4	784.4	784.4
Rabi Crop Net Margin	-	-	-	-	155.9	155.9	155.9	155.9	155.9	155.9
Total With Project Benefits	-	-	-	-	940.3	940.3	940.3	940.3	940.3	940.3
Incremental Benefits	-	-	-	-	790.4	790.4	790.4	790.4	790.4	790.4

Source:

Cost Benefit Analysis (CBA) Study Estimate Jan 2005.

Table AN12.2.8

GVT - Gujarat - Dahod: Village Kasotya: Household Livestock Net Margin Assumptions.

Without \ With Project Livestock	Units	Assumptions			Benefits		
					Year 1 (Rs)	Year 2 (Rs)	Year 3 (Rs)
Development Activity: Livestock Before / Without Project Situation: Assumptions Households (HHs) Annual Livestock Net Margin Total Without Project Benefits	No Rs/HH	193			1,330.3	1,330.3	1,330.3
After / With Project Situation: Development Activity: Assumptions Households (HHs) Adoption Assumptions Annual Livestock Net Margin Total With Project Benefits Incremental Benefits	No Percent Rs/HH	193 55%	78%	100%	1,734.3	2,443.8	3,153.3
	Rs/HH				404.0	1,113.5	1,823.0

Source:

GVT Dahod Coordination Office - Gujarat.

Table AN12.2.8

GVT - Gujarat - Dahod: Village Kasotya: Incremental Livestock Benefit Stream (Rs'000).

Without \ With Project Livestock	Benefit Streams (Rs '000)									
	Year 1 1999/00	Year 2 2000/01	Year 3 2001/02	Year 4 2002/03	Year 5 2003/04	Year 6 2004/05	Year 7 2005/06	Year 8 2006/07	Year 9 2007/08	Year 10 2008/09
Development Activity: Livestock Before / Without Project Situation: Assumptions Households (HHs) Annual Livestock Net Margin Total Without Project Benefits	-	-	-	256.7	256.7	256.7	256.7	256.7	256.7	256.7
After / With Project Situation: Development Activity: Assumptions Households (HHs) Adoption Assumptions Annual Livestock Net Margin Total With Project Benefits Incremental Benefits	-	-	-	334.7	471.7	608.6	608.6	608.6	608.6	608.6
	-	-	-	78.0	214.9	351.8	351.8	351.8	351.8	351.8

Source:

Cost Benefit Analysis (CBA) Study Estimate Jan 2005.

Table AN12.2.9

GVT - Gujarat - Dahod: Village Kasotya: Forestry Benefit Assumptions.

Without \ With Project Forestry	Units	Assumptions			Benefits		
					Year 1 (Rs)	Year 2 (Rs)	Year 3 (Rs)
Development Activity: Forestry							
Before / Without Project Situation: Assumptions							
Households (HHs)	No	193					
Annual Forestry Net Margin	Rs/HH				-	-	-
Total Without Project Benefits							
After / With Project Situation: Assumptions							
Households (HHs)	No	193					
Adoption Assumptions	Percent	55%	95%	100%			
Annual Forestry Net Margin	Rs/HH				55.0	95.0	100.0
Total With Project Benefits							
Incremental Benefits	Rs/HH				55.0	95.0	100.0

Source:

GVT Dahod Coordination Office - Gujarat.

Table AN12.2.9

GVT - Gujarat - Dahod: Village Kasotya: Incremental Forestry Benefit Stream (Rs'000).

Without \ With Project Forestry	Benefit Streams (Rs '000)									
	Year 1 1999/00	Year 2 2000/01	Year 3 2001/02	Year 4 2002/03	Year 5 2003/04	Year 6 2004/05	Year 7 2005/06	Year 8 2006/07	Year 9 2007/08	Year 10 2008/09
Development Activity: Forestry										
Before / Without Project Situation: Assumptions										
Households (HHs)										
Annual Forestry Net Margin										
Total Without Project Benefits	-	-	-	-	-	-	-	-	-	-
After / With Project Situation: Assumptions										
Households (HHs)										
Adoption Assumptions										
Annual Forestry Net Margin										
Total With Project Benefits	-	-	-	10.6	18.3	19.3	19.3	19.3	19.3	19.3
Incremental Benefits	-	-	-	10.6	18.3	19.3	19.3	19.3	19.3	19.3

Source:

Cost Benefit Analysis (CBA) Study Estimate Jan 2005.

Table AN12.2.10

GVT - Gujarat - Dahod: Village Kasotya: Migration Support Benefit Assumptions.

Without \ With Project	Assumptions				Benefits		
					Year 1 (Rs)	Year 2 (Rs)	Year 3 (Rs)
Development Activity: Migration Support							
Before / Without Project Situation: Assumptions							
Economic Value per Day	Rs/day	25.0					
Days / Month / Household	No	15					
Economic Value per Month	Rs/month	375.0					
Months Migration / Year	Months	3.5					
Economic Value per Household	Rs/HH	1,312.5					
Households per Village	No	193					
Households per Village Migrating	Percent	50%					
Total Without Project Benefits	Rs/Village				126.7	126.7	126.7
After / With Project Situation: Assumptions							
Economic Value per Day \1	Rs/day	25.0	25%	31.3			
Days / Month / Household	No	15	45%	22.0			
Economic Value per Month	Rs/month	375.0		687.5			
Months Migration / Year	Months	3.5	-25%	2.6			
Economic Value per Household	Rs/HH	1,312.5		1,804.7			
Households per Village	No	193		193.0			
Households per Village Migrating	Percent	50%	-10%	45%			
Adoption Assumptions	Percent				75%	85%	100%
Subtotal Migration Benefits	Rs/Village				117.6	133.2	156.7
Other Income	Sum (Rs'000)	-	-	-	-	-	-
Total With Project Benefits	Rs/Village				117.6	133.2	156.7
Incremental Benefits	Rs/Village				(9.1)	6.6	30.1

Source:

GVT Dahod Coordination Office - Gujarat.

- 1\ Financial Wages (Rs/day):
Skill Labour - Rs 160
Casual Labour :
Male - Rs 40
Female - Rs 30

Table AN12.2.10

GVT - Gujarat - Dahod: Village Kasotya: Incremental Migration Support Benefit Stream (Rs'000).

Without \ With Project	Benefit Streams (Rs '000)									
	Year 1 1999/00	Year 2 2000/01	Year 3 2001/02	Year 4 2002/03	Year 5 2003/04	Year 6 2004/05	Year 7 2005/06	Year 8 2006/07	Year 9 2007/08	Year 10 2008/09
Development Activity: Migration Support Before / Without Project Situation: Assumptions Economic Value per Day Days / Month / Household Economic Value per Month Months Migration / Year Economic Value per Household Households per Village Households per Village Migrating Total Without Project Benefits	-	-	-	-	-	-	-	126.7	126.7	126.7
After / With Project Situation: Assumptions Economic Value per Day \1 Days / Month / Household Economic Value per Month Months Migration / Year Economic Value per Household Households per Village Households per Village Migrating Adoption Assumptions Subtotal Migration Benefits Other Income Total With Project Benefits Incremental Benefits	-	-	-	-	-	-	-	156.7	156.7	156.7
	-	-	-	-	-	-	-	-	-	-
	-	-	-	-	-	-	-	156.7	156.7	156.7
	-	-	-	-	-	-	-	30.1	30.1	30.1

Source:

Cost Benefit Analysis (CBA) Study Estimate Jan 2005.

- 1\ Financial Wages (Rs/day):
 Skill Labour - Rs 160
 Casual Labour :
 Male - Rs 40
 Female - Rs 30

Table AN12.2.11 GVT - Gujarat - Dahod: Village Kasoty: Weighted Household Crop Net Margin Summary (Rs/Household).

Item	WBR (%)	Before / Without Project			After / With Project			Increment		
		Khalif	Rabi	Total	Khalif	Rabi	Total	Khalif	Rabi	Total
Phase II Villages										
Well Being Ranking - Very Poor Household Net Margin (Rs)	18.0%	834.6	102.5	937.1	1,849.8	1,067.8	2,917.6	1,015.2	965.3	1,980.5
Well Being Ranking - Poor Household Net Margin (Rs)	63.0%	637.7	-	637.7	4,803.0	220.7	5,023.7	4,165.3	220.7	4,386.0
Well Being Ranking - Moderate Household Net Margin (Rs)	19.0%	994.0	89.3	1,083.3	3,711.4	2,508.3	6,219.6	2,717.4	2,419.0	5,136.4
Well Being Ranking - Better Off Household Net Margin (Rs)	0.0%	6,180.9	1,756.7	7,937.5	16,195.9	2,039.3	18,235.2	10,015.0	282.7	10,297.7
Well Being Ranking - Weighted Household Net Margin (Rs)	100.0%	740.8	35.4	776.2	4,064.0	807.8	4,871.8	3,323.2	772.4	4,095.6
Phase I Villages V1										
Well Being Ranking - Very Poor Household Net Margin (Rs)	18.0%	436.3	267.5	703.8	3,866.5	1,668.8	5,535.3	3,430.3	1,401.3	4,831.5
Well Being Ranking - Poor Household Net Margin (Rs)	63.0%	485.8	657.5	1,143.3	10,136.0	5,690.3	15,826.3	9,650.3	5,032.8	14,683.0
Well Being Ranking - Moderate Household Net Margin (Rs)	19.0%	986.3	3,385.0	4,371.3	9,457.5	5,195.0	14,652.5	8,471.3	1,810.0	10,281.3
Well Being Ranking - Better Off Household Net Margin (Rs)	0.0%	2,778.0	937.0	3,715.0	4,915.0	9,560.0	14,475.0	2,137.0	8,623.0	10,760.0
Well Being Ranking - Weighted Household Net Margin (Rs)	100.0%	571.9	1,105.5	1,677.5	8,878.6	4,872.3	13,750.9	8,306.6	3,766.8	12,073.4

Source: Study of Impact of WIRFP on Net Incomes of Target Households, Jan 2004.
WBR = GVT Household Well Being Ranking. Survey figures adjusted to Village Profile WBR.

\1 GVT - Madhya Pradesh - Phase I: Village Naganwat Choti: Weighted Household Crop Net Margin Summary.

Table AN12.2.12 GVT - Gujarat - Dahod: Village Kasotya: Weighted Household Crop Net Margin Sensitivity Analysis (Rs/Household).

Item	EIRR	Before / Without Project			After / With Project			Increment		
		Khalif	Rabi	Total	Khalif	Rabi	Total	Khalif	Rabi	Total
Development Activity: Crop Technology, SWC and WRD										
Weighted Net Margin (Phase II)										
Household Net Margin (Rs)		740.8	35.4	776.2	4,064.0	807.8	4,871.8	3,323.2	772.4	4,095.6
Incremental Benefit (Phase II / Phase I)										34%
Base Case Assumptions										
Household Net Margin (Rs)		740.8	35.4	776.2	4,064.0	807.8	4,871.8	3,323.2	772.4	4,095.6
Incremental Benefit (Phase II / Phase I)										34%
Sensitivity Increase (%)	0%									
Development Activity	67%									
Overall Village	27%									
Sensitivity Assumptions										
Household Net Margin (Rs)		740.8	35.4	776.2	4,064.0	807.8	4,871.8	3,323.2	772.4	4,095.6
Incremental Benefit (Phase II / Phase I)										34%
Sensitivity Increase (%)	0%									
Development Activity	67%									
Overall Village	27%									
Weighted Net Margin (Phase I)										
Household Net Margin (Rs)		571.9	1,105.5	1,677.5	8,878.6	4,872.3	13,750.9	8,306.6	3,766.8	12,073.4

Source: Cost Benefit Analysis (CBA) Study Estimate Jan 2005.

EIRR = Economic Internal Rate of Return (rate at which NPV equal to zero).

Table AN12.2.13 GVT - Gujarat - Dahod: Village Kasotya: Weighted Household Livestock Net Margin Summary (Rs/Household).

Well Being Ranking	Weight (%)	Before / Without Project		After / With Project		Increment \1	
		Herd Value	Net Margin	Herd Value	Net Margin	Herd Value	Net Margin
Phase I - Well Being Ranking (WBR) \1							
Madhya Pradesh - WBR Weighted Data							
Very Poor	18.0%						
Average		580	(185.0)	5,650	412.5	474	597.5
Poor	63.0%						
Average		2,350	982.5	8,250	2,141.0	1,180	1,158.5
Moderate	19.0%						
Average		14,700	6,730.0	1,900	2,820.0	1,900	(3,910.0)
Better Off	0.0%						
Average		15,580	3,000.0	14,600	10,790.0	(196)	7,790.0
Phase I - WBR Weighted Data	100.0%	4,378	1,864.4	6,576	1,958.9	1,190	94.5
Phase II - Well Being Ranking (WBR)							
Very Poor	18.0%						
Average		5,756	149.2	10,970	1,446.4	1,043	1,297.2
Poor	63.0%						
Average		13,128	852.0	25,979	3,008.8	2,570	2,156.8
Moderate	19.0%						
Average		13,525	4,035.1	27,020	5,249.5	2,699	1,214.4
Better Off	0.0%						
Average		12,700	(781.7)	41,873	2,573.3	5,835	3,355.0
Phase II - WBR Weighted Data	100.0%	11,876	1,330.3	23,475	3,153.3	2,320	1,823.0

Source: Study of Impact of WIRFP on Net Incomes of Target Households, Jan 2004.

WBR = GVT Household Well Being Ranking. Survey figures adjusted to Village Profile WBR.

\1 GVT - Madhya Pradesh - Phase I: Village Naganwat Choti: Weighted Household Crop Net Margin Summary.

WIRFP - Phase II - Cost Benefit Analysis Study

Tables AN12.0 Individual Village Cost Benefit Analysis

Tables AN12.3 GVT - Gujarat - Dahod: Village Poyali

Table AN12.3.1 GVT - Gujarat - Dahod: Village Poyali: Village Profile.

Table AN12.3.2 GVT - Gujarat - Dahod: Village Poyali: Cost Benefit Analysis Summary (Rs'000).

Table AN12.3.3 GVT - Gujarat - Dahod: Village Poyali: Cost Benefit Analysis Development Activity Summary A (Rs'000).

Table AN12.3.4 GVT - Gujarat - Dahod: Village Poyali: Cost Benefit Analysis Development Activity Summary B (Rs'000).

Table AN12.3.5 GVT - Gujarat - Dahod: Village Poyali: Costs - Financial (Rs'000).

GVT - Gujarat - Dahod: Village Poyali: Costs - Economic (Rs'000).

Table AN12.3.6 GVT - Gujarat - Dahod: Village Poyali: VOD Household Assumptions.

GVT - Gujarat - Dahod: Village Poyali: Incremental VOD Benefit Stream (Rs'000).

Table AN12.3.7 GVT - Gujarat - Dahod: Village Poyali: Household Crop Net Margin Assumptions.

GVT - Gujarat - Dahod: Village Poyali: Incremental Crop Benefit Stream (Rs'000).

Table AN12.3.8 GVT - Gujarat - Dahod: Village Poyali: Household Livestock Net Margin Assumptions.

GVT - Gujarat - Dahod: Village Poyali: Incremental Livestock Benefit Stream (Rs'000).

Table AN12.3.9 GVT - Gujarat - Dahod: Village Poyali: Forestry Benefit Assumptions.

GVT - Gujarat - Dahod: Village Poyali: Incremental Forestry Benefit Stream (Rs'000).

Table AN12.3.10 GVT - Gujarat - Dahod: Village Poyali: Migration Support Benefit Assumptions.

GVT - Gujarat - Dahod: Village Poyali: Incremental Migration Support Benefit Stream (Rs'000).

Table AN12.3.11 GVT - Gujarat - Dahod: Village Poyali: Weighted Household Crop Net Margin Summary (Rs/Household).

Table AN12.3.12 GVT - Gujarat - Dahod: Village Poyali: Weighted Household Crop Net Margin Sensitivity Analysis (Rs/Household).

Table AN12.3.13 GVT - Gujarat - Dahod: Village Poyali: Weighted Household Livestock Net Margin Summary (Rs/Household).

Table AN12.3.1

GVT - Gujarat - Dahod: Village Poyali: Village Profile.

Village Profile \1			
A. Background			
Village Name	Poyali		
District	Dahod		
State	Gujarat		
B. Participatory Planning Process (PPP)			
Village entry	Apr-00		
PRA	Dec-00		
CPA	Dec-00		
C. Infrastructure			
Hand Pumps (no)	11		
Wells (no)	22		
Linked by Road	Kms		
Electrification	Yes		
School	1 - 7		
D. Demographic Data			
Households (no)	115		
Participating Households	85		
Population (Adults)	750		
Adults:			
Male	390		
Female	360		
Children:			
Boys	N/A		
Girls	N/A		
E. Well Being Ranking (No Households)			
Very Poor	45	28.8%	
Poor	40	25.6%	
Moderate	48	30.8%	
Better Off	23	14.7%	
Total	156	100%	
F. Land Resource (ha)			
Total Area	200		
Revenue Land (unused)	38		
Forest Area - Revenue	42		
Pasture Land	8		
Arable Land	112		
	200		
G. Livestock			
H. Self Help Groups (Membership)			
1	Group 1	18	
2	Group 2	16	
3	Group 3	17	
4	Group 4	15	
5	Group 5	15	
6	Group 6	12	
7	Group 7	20	
8	Group 8	14	
9	Group 9	16	
10	Group 10	14	
11	Group 11	-	
12	Group 12	-	
13	Group 13	-	
14	Group 14	-	
15	Group 15	-	
16	Group 16	-	
17	Group 17	-	
18	Group 18	-	
19	Group 19	-	
	Total	157	

Source: GVT Dahod Coordination Office - Gujarat.

\1 Subject to final adjustment following consolidation exercise prior to Annual Review Meeting (ARM) in Feb 2005.

Table AN12.3.2 GVT - Gujarat - Dahod: Village Poyali: Cost Benefit Analysis Summary (Rs'000).

Administration Cost / Development Activity	EIRR ¹	NPV ²		Year 1 1999/00	Year 2 2000/01	Year 3 2001/02	Year 4 2002/03	Year 5 2003/04	Year 6 2004/05	Year 7 2005/06	Year 8 2006/07	Year 9 2007/08	Year 10 2008/09
		(10%)	(%)										
A. Administration Costs													
Total A	N/A	(1,503.0)	844%	35.9	454.8	335.6	294.3	302.5	488.0	354.9	35.5	35.5	35.5
B. Development Intervention Component A													
1. PPGF													
Net Incremental Benefits	N/A	(103)	58%	-	-	(13.7)	(1.6)	(51.0)	(52.3)	(53.5)	(4.2)	(4.2)	(4.2)
2. VOD													
Net Incremental Benefits	39%	220	-124%	-	(14.6)	(71.5)	(23.9)	40.1	43.0	71.3	75.5	75.9	76.3
3/5. Crop Technology, SWC and WRD													
Net Incremental Benefits	22%	484	-272%	-	-	(697.0)	78.1	(103.5)	28.0	186.1	306.7	306.7	306.7
6. Livestock													
Net Incremental Benefits	84%	605	-339%	-	-	-	(46.7)	(25.9)	17.0	101.0	204.7	204.7	204.7
7. Forestry													
Net Incremental Benefits	30%	48	-27%	-	-	-	(0.4)	(48.5)	(17.3)	25.3	25.3	25.3	25.3
8. Migration Support													
Net Incremental Benefits	43%	70	-39%	-	-	-	-	(29.4)	(7.4)	(0.9)	31.1	31.1	31.1
Summary													
Net Incremental Benefits	11%	(178)	100%	(35.9)	(469.4)	(1,117.7)	(288.7)	(520.6)	(476.9)	(25.7)	603.6	604.0	604.4
Sensitivity Analysis													
Analysis Period													
12 Years	0%	(949)											
20 Years (Base Case)	11%	(178)											
25 Years	12%	48											
30 Years	13%	176											
Costs - Administration													
Investment Costs Decreased by 20 percent	13%	122											
Costs - Administration and Development													
Recurrent Costs Increased by 20 percent	9%	(456)											
Benefits - Crop, SWC and WRD													
Crop Benefits Increased by 20 percent.	15%	495											
Livestock Benefits Increased by 20 percent.	12%	61											

Source: Cost Benefit Analysis (CBA) Study Estimate Jan 2005.

¹ EIRR = Economic Internal Rate of Return (rate at which NPV equal to zero).

² NPV = Net Present Value of net incremental benefits at 12% (indicative opportunity cost of capital for rural development projects in India).

N/A = Not analysed as EIRR negative.

Table AN12.3.3 GVT - Gujarat - Dahod: Village Poyali: Cost Benefit Analysis Development Activity Summary A (Rs'000).

Administration Cost / Development Activity	EIRR ¹	NPV ²		Year 1 1999/00	Year 2 2000/01	Year 3 2001/02	Year 4 2002/03	Year 5 2003/04	Year 6 2004/05	Year 7 2005/06	Year 8 2006/07	Year 9 2007/08	Year 10 2008/09
		(10%)	(%)										
A. Administration Costs													
Investment				35.9	454.8	335.6	294.3	302.5	488.0	354.9	-	-	-
Recurrent				-	-	-	-	-	-	-	35.5	35.5	35.5
Total A	N/A	(1,503)	844%	35.9	454.8	335.6	294.3	302.5	488.0	354.9	35.5	35.5	35.5
B. Development Intervention Component A													
1. PPGF													
Cost Stream													
Investment				-	-	13.7	1.3	50.6	50.6	50.6	-	-	-
Recurrent				-	-	-	0.3	0.4	1.6	2.9	4.2	4.2	4.2
Total Costs				-	-	13.7	1.6	51.0	52.3	53.5	4.2	4.2	4.2
Benefit Stream													
Before / Without Project				-	-	-	-	-	-	-	-	-	-
After / With Project				-	-	-	-	-	-	-	-	-	-
Incremental Benefits				-	-	-	-	-	-	-	-	-	-
Net Incremental Benefits	N/A	(103)	58%	-	-	(13.7)	(1.6)	(51.0)	(52.3)	(53.5)	(4.2)	(4.2)	(4.2)
2. VOD													
Cost Stream													
Investment				-	14.6	70.8	106.9	38.0	33.5	4.0	-	-	-
Recurrent				-	-	0.7	4.3	9.6	11.5	13.2	13.4	13.4	13.4
Total Costs				-	14.6	71.5	111.2	47.6	45.0	17.1	13.4	13.4	13.4
Benefit Stream													
Before / Without Project				-	-	-	-	-	-	-	-	-	-
After / With Project				-	-	-	87.3	87.7	88.1	88.5	88.9	89.3	89.7
Incremental Benefits				-	-	-	87.3	87.7	88.1	88.5	88.9	89.3	89.7
Net Incremental Benefits	39%	220	-124%	-	(14.6)	(71.5)	(23.9)	40.1	43.0	71.3	75.5	75.9	76.3
3/5. Crop Technology, SWC and WRD													
Cost Stream													
Investment													
Crop Tecnology				-	-	36.6	43.3	40.7	10.5	9.8	-	-	-
Soil Water Conservation				-	-	632.5	281.8	252.6	102.7	64.5	-	-	-
Water Resource Development				-	-	27.8	89.6	253.1	231.3	64.3	-	-	-
Recurrent													
Crop Tecnology				-	-	-	0.9	2.0	3.0	3.3	3.5	3.5	3.5
Soil Water Conservation				-	-	-	79.1	114.3	145.9	158.7	166.8	166.8	166.8
Water Resource Development				-	-	-	4.2	17.6	55.6	90.3	99.9	99.9	99.9
Total Costs				-	-	697.0	498.8	680.4	549.0	390.9	270.2	270.2	270.2
Benefit Stream													
Before / Without Project				-	-	-	234.9	234.9	234.9	234.9	234.9	234.9	234.9
After / With Project				-	-	-	811.8	811.8	811.8	811.8	811.8	811.8	811.8
Incremental Benefits				-	-	-	576.9	576.9	576.9	576.9	576.9	576.9	576.9
Net Incremental Benefits	22%	484	-272%	-	-	(697.0)	78.1	(103.5)	28.0	186.1	306.7	306.7	306.7

Source: Cost Benefit Analysis (CBA) Study Estimate Jan 2005.

¹ EIRR = Economic Internal Rate of Return (rate at which NPV equal to zero).

² NPV = Net Present Value of net incremental benefits at 12% (indicative opportunity cost of capital for rural development projects in India).

N/A = Not analysed as EIRR negative.

Table AN12.3.4 GVT - Gujarat - Dahod: Village Poyali: Cost Benefit Analysis Development Activity Summary B (Rs'000).

Administration Cost / Development Activity				Year 1 1999/00	Year 2 2000/01	Year 3 2001/02	Year 4 2002/03	Year 5 2003/04	Year 6 2004/05	Year 7 2005/06	Year 8 2006/07	Year 9 2007/08	Year 10 2008/09
6. Livestock													
Cost Stream													
Investment				-	-	-	46.7	21.3	19.6	19.6	-	-	-
Recurrent				-	-	-	-	4.7	6.8	8.8	10.7	10.7	10.7
Total Costs				-	-	-	46.7	25.9	26.4	28.4	10.7	10.7	10.7
Benefit Stream													
Before / Without Project				-	-	-	-	-	166.8	166.8	166.8	166.8	166.8
After / With Project				-	-	-	-	-	210.2	296.2	382.2	382.2	382.2
Incremental Benefits				-	-	-	-	-	43.4	129.4	215.4	215.4	215.4
Net Incremental Benefits	84%	605	-339%	-	-	-	(46.7)	(25.9)	17.0	101.0	204.7	204.7	204.7
7. Forestry													
Cost Stream													
Investment				-	-	-	0.4	68.3	38.5	-	-	-	-
Recurrent				-	-	-	-	0.0	6.9	10.7	10.7	10.7	10.7
Total Costs				-	-	-	0.4	68.3	45.4	10.7	10.7	10.7	10.7
Benefit Stream													
Before / Without Project				-	-	-	-	-	-	-	-	-	-
After / With Project				-	-	-	-	19.8	28.1	36.0	36.0	36.0	36.0
Incremental Benefits				-	-	-	-	19.8	28.1	36.0	36.0	36.0	36.0
Net Incremental Benefits	30%	48	-27%	-	-	-	(0.4)	(48.5)	(17.3)	25.3	25.3	25.3	25.3
8. Migration Support													
Cost Stream													
Investment				-	-	-	-	52.9	35.6	35.6	-	-	-
Recurrent				-	-	-	-	-	5.3	8.8	12.4	12.4	12.4
Total Costs				-	-	-	-	52.9	40.9	44.4	12.4	12.4	12.4
Benefit Stream													
Before / Without Project				-	-	-	-	108.0	108.0	108.0	108.0	108.0	108.0
After / With Project				-	-	-	-	131.5	141.5	151.5	151.5	151.5	151.5
Incremental Benefits				-	-	-	-	23.5	33.5	43.5	43.5	43.5	43.5
Net Incremental Benefits	43%	70	-39%	-	-	-	-	(29.4)	(7.4)	(0.9)	31.1	31.1	31.1
Summary													
Cost Stream													
Investment				35.9	469.4	1,117.0	864.2	1,079.9	1,010.3	603.3	-	-	-
Recurrent				-	-	0.7	88.8	148.6	236.6	296.7	357.1	357.1	357.1
Total Costs				35.9	469.4	1,117.7	953.0	1,228.5	1,246.9	900.0	357.1	357.1	357.1
Benefit Stream													
Before / Without Project				-	-	-	234.9	342.9	509.7	509.7	509.7	509.7	509.7
After / With Project				-	-	-	899.2	1,050.8	1,279.7	1,384.0	1,470.4	1,470.8	1,471.2
Incremental Benefits				-	-	-	664.2	707.9	770.0	874.3	960.7	961.1	961.5
Net Incremental Benefits	11%	(178)	100%	(35.9)	(469.4)	(1,117.7)	(288.7)	(520.6)	(476.9)	(25.7)	603.6	604.0	604.4

Source: Cost Benefit Analysis (CBA) Study Estimate Jan 2005.

\1 EIRR = Economic Internal Rate of Return (rate at which NPV equal to zero).

\2 NPV = Net Present Value of net incremental benefits at 12% (indicative opportunity cost of capital for rural development projects in India).

N/A = Not analysed as EIRR negative.

Table AN12.3.5

GVT - Gujarat - Dahod: Village Poyali: Costs - Financial (Rs'000).

Cost Head / Subhead	1999/00 Actual	2000/01 Actual	2001/02 Actual	2002/03 Actual	2003/04 Actual	2004/05 Budget	2005/06 Budget	Totals	
								(Rs'000)	(%)
A. Administration Costs									
GVT Bhopal (PHQ)	-	60.3	75.4	67.3	52.8	66.8	61.1	383.7	6%
DFIDI	35.9	71.4	26.9	63.2	47.4	54.7	39.2	338.6	5%
Dahod Coordination Office	-	365.7	267.5	189.4	230.6	414.6	289.7	1,757.6	27%
Total A	35.9	497.4	369.9	319.9	330.8	536.1	390.0	2,480.0	38%
B. Development Costs									
Component A									
1. PPGF	-	-	15.2	1.4	56.2	56.2	56.2	185.4	3%
2. VOT	-	16.2	78.6	118.8	42.2	37.3	4.4	297.5	5%
3. Crop Technology	-	-	40.7	48.1	45.3	11.7	10.9	156.6	2%
4. SWC	-	-	937.1	417.5	374.3	152.1	95.6	1,976.6	31%
5. WRD	-	-	41.2	132.7	375.0	342.7	95.3	986.9	15%
6. Livestock	-	-	-	51.9	23.6	21.8	21.8	119.2	2%
7. Forestry	-	-	-	0.5	75.9	42.8	-	119.1	2%
8. Migration Support	-	-	-	-	58.7	39.5	39.5	137.8	2%
Subtotal	-	16.2	1,112.8	770.8	1,051.2	704.1	323.7	3,978.9	62%
Other Development Costs									
Subtotal	-	-	-	-	-	-	-	-	0%
Total B	-	16.2	1,112.8	770.8	1,051.2	704.1	323.7	3,978.9	62%
Total A + B	35.9	513.6	1,482.7	1,090.8	1,382.0	1,240.2	713.7	6,458.8	100%
GVT	-	441.0	988.0	779.0	1,081.2	1,047.1	602.3	4,938.6	76%
DFIDI	35.9	71.4	26.9	63.2	47.4	54.7	39.2	338.6	5%
Community	-	1.2	467.4	247.8	253.3	138.3	72.2	1,180.1	18%
Government	-	0.0	0.4	0.7	0.2	0.2	0.0	1.5	0%

Source:

GVT Dahod Coordination Office - Gujarat.

DFIDI = Department for International Development (India).

PPGF = Participatory Planning and Group Formation.

VOD = Village Organisation and Development.

SWC = Soil and Water Conservation.

WRD = Water Resource Development.

Table AN12.3.5

GVT - Gujarat - Dahod: Village Poyali: Costs - Economic (Rs'000).

Cost Head / Subhead	Conversion Factors		1999/00 Actual	2000/01 Actual	2001/02 Actual	2002/03 Actual	2003/04 Actual	2004/05 Budget	2005/06 Budget	Totals	
	CF	SCF								(Rs'000)	(%)
A. Administration Costs											
GVT Bhopal (PHQ)	0.90	1.00	-	54.2	67.9	60.6	47.5	60.1	55.0	345.4	7%
DFIDI	1.00	1.00	35.9	71.4	26.9	63.2	47.4	54.7	39.2	338.6	7%
Dahod Coordination Office	0.90	1.00	-	329.2	240.8	170.5	207.5	373.1	260.7	1,581.8	31%
Total A			35.9	454.8	335.6	294.3	302.5	488.0	354.9	2,265.8	44%
B. Development Costs											
Component A											
1. PPGF	0.90	1.00	-	-	13.7	1.3	50.6	50.6	50.6	166.8	3%
2. VOT	0.90	1.00	-	14.6	70.8	106.9	38.0	33.5	4.0	267.7	5%
3. Crop Technology	0.90	1.00	-	-	36.6	43.3	40.7	10.5	9.8	140.9	3%
4. SWC	0.90	0.75	-	-	632.5	281.8	252.6	102.7	64.5	1,334.2	26%
5. WRD	0.90	0.75	-	-	27.8	89.6	253.1	231.3	64.3	666.1	13%
6. Livestock	0.90	1.00	-	-	-	46.7	21.3	19.6	19.6	107.2	2%
7. Forestry	0.90	1.00	-	-	-	0.4	68.3	38.5	-	107.2	2%
8. Migration Support	0.90	1.00	-	-	-	-	52.9	35.6	35.6	124.0	2%
Subtotal			-	14.6	781.4	570.0	777.5	522.4	248.4	2,914.2	56%
Other Development Costs											
Subtotal	0.90	1.00	-	-	-	-	-	-	-	-	0%
Total B			-	14.6	781.4	570.0	777.5	522.4	248.4	2,914.2	56%
Total A + B			35.9	469.4	1,117.0	864.2	1,079.9	1,010.3	603.3	5,180.0	100%
GVT			-	-	-	-	-	-	-	N/A	
DFIDI			-	-	-	-	-	-	-	N/A	
Community			-	-	-	-	-	-	-	N/A	
Government			-	-	-	-	-	-	-	N/A	

Source:

Cost Benefit Analysis (CBA) Study Estimate Jan 2005.

DFIDI = Department for International Development (India).

PPGF = Participatory Planning and Group Formation.

VOD = Village Organisation and Development.

SWC = Soil and Water Conservation.

WRD = Water Resource Development.

Table AN12.3.6

GVT - Gujarat - Dahod: Village Poyali: VOD Household Assumptions.

Without \ With Project	Units	Assumptions			Benefits		
					Year 1 (Rs)	Year 2 (Rs)	Year 3 (Rs)
Development Activity: Village Organisation and Development							
Before / Without Project Situation:							
A. Self Help Groups (SHGs)							
Assumption	Sum	Zero	Zero	Zero	-	-	-
B. Drudgery Reduction							
Assumption	Sum	Zero	Zero	Zero			
Total Without Project Benefits					-	-	-
After / With Project Situation:							
A. Self Help Groups (SHGs)							
Assumptions							
Average Savings / Household	Rs	950					
Households / Village	No	120					
Present Group Savings	Rs'000	114.0			114.0	117.4	120.9
Annual Savings Increase	%	3%					
Deposits on Loan to Members	%	60%					
SHG Interest Income	% / Year	18%					
Assumed Benefit	Rs'000				12.3	12.7	13.1
B. Drudgery Reduction							
Assumptions							
Hours Saved / Day / Household	No	1.0					
Number of Days / Year / Household	No	200					
Days / Year / Household (8hrs/day)	No	25.0					
Households / Village	No	120					
Day Equivalent / Village	No	3,000					
Economic Value per Day	(Rs/day)	25					
Assumed Benefit	Rs'000				75.0	75.0	75.0
Total With Project Benefits	Rs'000				87.3	87.7	88.1
Incremental Benefits	Rs'000				87.3	87.7	88.1

Source:

VOD = Village Organisation and Development.
Households per village: Poyali

Cost Benefit Analysis (CBA) Study Estimate Jan 2005.

Table AN12.3.6

GVT - Gujarat - Dahod: Village Poyali: Incremental VOD Benefit Stream (Rs'000).

Without \ With Project	Benefit Streams (Rs '000)									
	Year 1 1999/00	Year 2 2000/01	Year 3 2001/02	Year 4 2002/03	Year 5 2003/04	Year 6 2004/05	Year 7 2005/06	Year 8 2006/07	Year 9 2007/08	Year 10 2008/09
Development Activity: Village Organisation and Development										
Before / Without Project Situation:										
A. Self Help Groups (SHGs) Assumption										
B. Drudgery Reduction Assumption										
Total Without Project Benefits	-	-	-	-	-	-	-	-	-	-
After / With Project Situation:										
A. Self Help Groups (SHGs) Assumptions										
Average Savings / Household										
Households / Village										
Present Group Savings	-	-	-	114.0	117.4	120.9	124.6	128.3	132.2	136.1
Annual Savings Increase										
Deposits on Loan to Members										
SHG Interest Income										
Assumed Benefit			-	12.3	12.7	13.1	13.5	13.9	14.3	14.7
B. Drudgery Reduction Assumptions										
Hours Saved / Day / Household										
Number of Days / Year / Household										
Days / Year / Household (8hrs/day)										
Households / Village										
Day Equivalent / Village										
Economic Value per Day										
Assumed Benefit	-	-	-	75.0	75.0	75.0	75.0	75.0	75.0	75.0
Total With Project Benefits	-	-	-	87.3	87.7	88.1	88.5	88.9	89.3	89.7
Incremental Benefits	-	-	-	87.3	87.7	88.1	88.5	88.9	89.3	89.7

Source:

VOD = Village Organisation and Development.
Households per village: Poyali

Cost Benefit Analysis (CBA) Study Estimate Jan 2005.

Table AN12.3.7

GVT - Gujarat - Dahod: Village Poyali: Household Crop Net Margin Assumptions.

Without \ With Project	Units	Assumptions			Benefits		
					Year 1 (Rs)	Year 2 (Rs)	Year 3 (Rs)
Development Activity: Crop Technology, SWC and WRD							
Before / Without Project Situation:							
Assumptions							
Households (HHs)	No	120					
Crop Adoption Assumptions	Percent	100%	100%	100%			
Kharif Crop Net Margin	Rs/HH				1,637	1,637	1,637
Rabi Crop Net Margin					321	321	321
Total Without Project Benefits	Rs/HH				1,958	1,958	1,958
After / With Project Situation:							
Assumptions							
Households (HHs)	No	120					
Crop Adoption Assumptions		100%	100%	100%			
Kharif Crop Net Margin	Rs/HH				5,317.1	5,317.1	5,317.1
Rabi Crop Net Margin	Rs/HH				1,448.3	1,448.3	1,448.3
Total With Project Benefits	Rs/HH				6,765.4	6,765.4	6,765.4
Incremental Benefits	Rs/HH				4,807.8	4,807.8	4,807.8

Source:

Cost Benefit Analysis (CBA) Study Estimate Jan 2005.

Table AN12.3.7

GVT - Gujarat - Dahod: Village Poyali: Incremental Crop Benefit Stream (Rs'000).

Without \ With Project	Benefit Streams (Rs '000)									
	Year 1 1999/00	Year 2 2000/01	Year 3 2001/02	Year 4 2002/03	Year 5 2003/04	Year 6 2004/05	Year 7 2005/06	Year 8 2006/07	Year 9 2007/08	Year 10 2008/09
Development Activity: Crop Technology, SWC and WRD										
Before / Without Project Situation:										
Assumptions										
Households (HHs)										
Crop Adoption Assumptions										
Kharif Crop Net Margin	-	-	-	196.4	196.4	196.4	196.4	196.4	196.4	196.4
Rabi Crop Net Margin	-	-	-	38.5	38.5	38.5	38.5	38.5	38.5	38.5
Total Without Project Benefits	-	-	-	234.9	234.9	234.9	234.9	234.9	234.9	234.9
After / With Project Situation:										
Assumptions										
Households (HHs)										
Crop Adoption Assumptions										
Kharif Crop Net Margin	-	-	-	638.1	638.1	638.1	638.1	638.1	638.1	638.1
Rabi Crop Net Margin	-	-	-	173.8	173.8	173.8	173.8	173.8	173.8	173.8
Total With Project Benefits	-	-	-	811.8	811.8	811.8	811.8	811.8	811.8	811.8
Incremental Benefits	-	-	-	576.9	576.9	576.9	576.9	576.9	576.9	576.9

Source:

Cost Benefit Analysis (CBA) Study Estimate Jan 2005.

Table AN12.3.8

GVT - Gujarat - Dahod: Village Poyali: Household Livestock Net Margin Assumptions.

Without \ With Project Livestock	Units	Assumptions			Benefits		
					Year 1 (Rs)	Year 2 (Rs)	Year 3 (Rs)
Development Activity: Livestock							
Before / Without Project Situation: Assumptions							
Households (HHs)	No	120					
Annual Livestock Net Margin	Rs/HH						
Total Without Project Benefits					1,390.0	1,390.0	1,390.0
After / With Project Situation:							
Development Activity: Assumptions							
Households (HHs)	No	120					
Adoption Assumptions	Percent	55%	78%	100%			
Annual Livestock Net Margin	Rs/HH						
Total With Project Benefits					1,751.8	2,468.4	3,185.0
Incremental Benefits	Rs/HH				361.8	1,078.4	1,795.0

Source:

Cost Benefit Analysis (CBA) Study Estimate Jan 2005.

Table AN12.3.8

GVT - Gujarat - Dahod: Village Poyali: Incremental Livestock Benefit Stream (Rs'000).

Without \ With Project Livestock	Benefit Streams (Rs '000)									
	Year 1 1999/00	Year 2 2000/01	Year 3 2001/02	Year 4 2002/03	Year 5 2003/04	Year 6 2004/05	Year 7 2005/06	Year 8 2006/07	Year 9 2007/08	Year 10 2008/09
Development Activity: Livestock										
Before / Without Project Situation:										
Assumptions										
Households (HHs)										
Annual Livestock Net Margin										
Total Without Project Benefits	-	-	-	-	-	166.8	166.8	166.8	166.8	166.8
After / With Project Situation:										
Development Activity:										
Assumptions										
Households (HHs)										
Adoption Assumptions										
Annual Livestock Net Margin										
Total With Project Benefits	-	-	-	-	-	210.2	296.2	382.2	382.2	382.2
Incremental Benefits	-	-	-	-	-	43.4	129.4	215.4	215.4	215.4

Source:

Cost Benefit Analysis (CBA) Study Estimate Jan 2005.

Table AN12.3.9

GVT - Gujarat - Dahod: Village Poyali: Forestry Benefit Assumptions.

Without \ With Project Forestry	Units	Assumptions			Benefits		
					Year 1 (Rs)	Year 2 (Rs)	Year 3 (Rs)
Development Activity: Forestry							
Before / Without Project Situation: Assumptions							
Households (HHs)	No	120					
Annual Forestry Net Margin	Rs/HH				-	-	-
Total Without Project Benefits							
After / With Project Situation: Assumptions							
Households (HHs)	No	120					
Adoption Assumptions	Percent	55%	78%	100%			
Annual Forestry Net Margin	Rs/HH						
Total With Project Benefits					165.0	234.0	300.0
Incremental Benefits	Rs/HH				165.0	234.0	300.0

Source:

Cost Benefit Analysis (CBA) Study Estimate Jan 2005.

Table AN12.3.9

GVT - Gujarat - Dahod: Village Poyali: Incremental Forestry Benefit Stream (Rs'000).

Without \ With Project Forestry	Benefit Streams (Rs '000)									
	Year 1 1999/00	Year 2 2000/01	Year 3 2001/02	Year 4 2002/03	Year 5 2003/04	Year 6 2004/05	Year 7 2005/06	Year 8 2006/07	Year 9 2007/08	Year 10 2008/09
Development Activity: Forestry										
Before / Without Project Situation: Assumptions										
Households (HHs)										
Annual Forestry Net Margin										
Total Without Project Benefits	-	-	-	-	-	-	-	-	-	-
After / With Project Situation: Assumptions										
Households (HHs)										
Adoption Assumptions										
Annual Forestry Net Margin										
Total With Project Benefits	-	-	-	-	19.8	28.1	36.0	36.0	36.0	36.0
Incremental Benefits	-	-	-	19.8	28.1	36.0	36.0	36.0	36.0	36.0

Source:

Cost Benefit Analysis (CBA) Study Estimate Jan 2005.

Table AN12.3.10

GVT - Gujarat - Dahod: Village Poyali: Migration Support Benefit Assumptions.

Without \ With Project	Assumptions				Benefits		
					Year 1 (Rs)	Year 2 (Rs)	Year 3 (Rs)
Development Activity: Migration Support							
Before / Without Project Situation: Assumptions							
Economic Value per Day	Rs/day	25.0					
Days / Month / Household	No	18					
Economic Value per Month	Rs/month	450.0					
Months Migration / Year	Months	4.0					
Economic Value per Household	Rs/HH	1,800.0					
Households per Village	No	120					
Households per Village Migrating	Percent	50%					
Total Without Project Benefits	Rs/Village				108.0	108.0	108.0
After / With Project Situation: Assumptions							
Economic Value per Day \1	Rs/day	25.0	25%	31.3			
Days / Month / Household	No	18	30%	24.0			
Economic Value per Month	Rs/month	450.0		750.0			
Months Migration / Year	Months	4.0	-25%	3.0			
Economic Value per Household	Rs/HH	1,800.0		2,250.0			
Households per Village	No	120		120.0			
Households per Village Migrating	Percent	50%	-10%	45%			
Subtotal Migration Benefits	Rs/Village				121.5	121.5	121.5
Other Income	Sum (Rs'000)	10.0	20.0	30.0	10.0	20.0	30.0
Total With Project Benefits	Rs/Village				131.5	141.5	151.5
Incremental Benefits	Rs/Village				23.5	33.5	43.5

Source:

Cost Benefit Analysis (CBA) Study Estimate Jan 2005.

- 1\ Financial Wages (Rs/day):
 - Skill Labour - Rs 160
 - Casual Labour :
 - Male - Rs 40
 - Female - Rs 30

Table AN12.3.10

GVT - Gujarat - Dahod: Village Poyali: Incremental Migration Support Benefit Stream (Rs'000).

Without \ With Project	Benefit Streams (Rs '000)									
	Year 1 1999/00	Year 2 2000/01	Year 3 2001/02	Year 4 2002/03	Year 5 2003/04	Year 6 2004/05	Year 7 2005/06	Year 8 2006/07	Year 9 2007/08	Year 10 2008/09
Development Activity: Migration Support Before / Without Project Situation: Assumptions Economic Value per Day Days / Month / Household Economic Value per Month Months Migration / Year Economic Value per Household Households per Village Households per Village Migrating Total Without Project Benefits	-	-	-	-	108.0	108.0	108.0	108.0	108.0	108.0
After / With Project Situation: Assumptions Economic Value per Day \1 Days / Month / Household Economic Value per Month Months Migration / Year Economic Value per Household Households per Village Households per Village Migrating Subtotal Migration Benefits Other Income Total With Project Benefits Incremental Benefits	-	-	-	-	121.5	121.5	121.5	121.5	121.5	121.5
	-	-	-	-	10.0	20.0	30.0	30.0	30.0	30.0
	-	-	-	-	131.5	141.5	151.5	151.5	151.5	151.5
	-	-	-	-	23.5	33.5	43.5	43.5	43.5	43.5

Source:

Cost Benefit Analysis (CBA) Study Estimate Jan 2005.

- 1\ Financial Wages (Rs/day):
 Skill Labour - Rs 160
 Casual Labour :
 Male - Rs 40
 Female - Rs 30

Table AN12.3.11 GVT - Gujarat - Dahod: Village Poyali: Weighted Household Crop Net Margin Summary (Rs/Household).

Item	WBR (%)	Before / Without Project			After / With Project			Increment		
		Khalif	Rabi	Total	Khalif	Rabi	Total	Khalif	Rabi	Total
Phase II										
Well Being Ranking - Very Poor Household Net Margin (Rs)	29.0%	834.6	102.5	937.1	1,849.8	1,067.8	2,917.6	1,015.2	965.3	1,980.5
Well Being Ranking - Poor Household Net Margin (Rs)	25.0%	637.7	-	637.7	4,803.0	220.7	5,023.7	4,165.3	220.7	4,386.0
Well Being Ranking - Moderate Household Net Margin (Rs)	31.0%	994.0	89.3	1,083.3	3,711.4	2,508.3	6,219.6	2,717.4	2,419.0	5,136.4
Well Being Ranking - Better Off Household Net Margin (Rs)	15.0%	6,180.9	1,756.7	7,937.5	16,195.9	2,039.3	18,235.2	10,015.0	282.7	10,297.7
Well Being Ranking - Weighted Household Net Margin (Rs)	100.0%	1,636.7	320.9	1,957.6	5,317.1	1,448.3	6,765.4	3,680.4	1,127.4	4,807.8
Phase I \1										
Well Being Ranking - Very Poor Household Net Margin (Rs)	29.0%	436.3	267.5	703.8	3,866.5	1,668.8	5,535.3	3,430.3	1,401.3	4,831.5
Well Being Ranking - Poor Household Net Margin (Rs)	25.0%	485.8	657.5	1,143.3	10,136.0	5,690.3	15,826.3	9,650.3	5,032.8	14,683.0
Well Being Ranking - Moderate Household Net Margin (Rs)	31.0%	986.3	3,385.0	4,371.3	9,457.5	5,195.0	14,652.5	8,471.3	1,810.0	10,281.3
Well Being Ranking - Better Off Household Net Margin (Rs)	15.0%	2,778.0	937.0	3,715.0	4,915.0	9,560.0	14,475.0	2,137.0	8,623.0	10,760.0
Well Being Ranking - Weighted Household Net Margin (Rs)	100.0%	970.4	1,431.9	2,402.2	7,324.4	4,951.0	12,275.3	6,354.0	3,519.1	9,873.1

Source: Study of Impact of WIRFP on Net Incomes of Target Households, Jan 2004.

WBR = GVT Household Well Being Ranking. Survey figures adjusted to Village Profile WBR.

\1 GVT - Madhya Pradesh - Phase I: Village Naganwat Choti: Weighted Household Crop Net Margin Summary.

Table AN12.3.12 GVT - Gujarat - Dahod: Village Poyali: Weighted Household Crop Net Margin Sensitivity Analysis (Rs/Household).

Item	EIRR	Before / Without Project			After / With Project			Increment		
		Khalif	Rabi	Total	Khalif	Rabi	Total	Khalif	Rabi	Total
Development Activity:										
Crop Technology, SWC and WRD										
Weighted Net Margin (Phase II)										
Household Net Margin (Rs)		1,636.7	320.9	1,957.6	5,317.1	1,448.3	6,765.4	3,680.4	1,127.4	4,807.8
Incremental Benefit (Phase II / Phase I)										49%
Base Case Assumptions										
Household Net Margin (Rs)		1,636.7	320.9	1,957.6	5,317.1	1,448.3	6,765.4	3,680.4	1,127.4	4,807.8
Incremental Benefit (Phase II / Phase I)										49%
Sensitivity Increase (%)	0%									
Development Activity EIRR	22%									
Overall Village EIRR	11%									
Sensitivity Assumptions										
Household Net Margin (Rs)		1,636.7	320.9	1,957.6	5,582.9	1,520.7	7,103.6	3,946.2	1,199.8	5,146.0
Incremental Benefit (Phase II / Phase I)										52%
Sensitivity Increase (%)	0%									
Development Activity EIRR	24%									
Overall Village EIRR	12%									
Weighted Net Margin (Phase I)										
Household Net Margin (Rs)		970.4	1,431.9	2,402.2	7,324.4	4,951.0	12,275.3	6,354.0	3,519.1	9,873.1

Source: Cost Benefit Analysis (CBA) Study Estimate Jan 2005.

EIRR = Economic Internal Rate of Return (rate at which NPV equal to zero).

Table AN12.3.13 GVT - Gujarat - Dahod: Village Poyali: Weighted Household Livestock Net Margin Summary (Rs/Household).

Well Being Ranking	Weight (%)	Before / Without Project		After / With Project		Increment \1	
		Herd Value	Net Margin	Herd Value	Net Margin	Herd Value	Net Margin
Phase I - Well Being Ranking (WBR) \1							
Madhya Pradesh - WBR Weighted Data							
Very Poor	29.0%						
Average		580	(185.0)	5,650	412.5	474	597.5
Poor	25.0%						
Average		2,350	982.5	8,250	2,141.0	1,180	1,158.5
Moderate	31.0%						
Average		14,700	6,730.0	1,900	2,820.0	1,900	(3,910.0)
Better Off	15.0%						
Average		15,580	3,000.0	14,600	10,790.0	(196)	7,790.0
Phase I - WBR Weighted Data	100.0%	7,650	2,728.3	6,480	3,147.6	992	419.3
Phase II - Well Being Ranking (WBR)							
Very Poor	29.0%						
Average		5,756	149.2	10,970	1,446.4	1,043	1,297.2
Poor	25.0%						
Average		13,128	852.2	25,979	3,008.8	2,570	2,156.8
Moderate	31.0%						
Average		13,525	4,035.1	27,020	5,249.5	2,699	1,214.4
Better Off	15.0%						
Average		12,700	(781.7)	41,873	2,573.3	5,835	3,355.0
Phase II - WBR Weighted Data	100.0%	11,049	1,390.0	24,333	3,185.0	2,657	1,795.1

Source: Study of Impact of WIRFP on Net Incomes of Target Households, Jan 2004.

WBR = GVT Household Well Being Ranking.

Survey figures adjusted to Village Profile WBR.

\1 GVT - Madhya Pradesh - Phase I: Village Naganwat Choti: Weighted Household Livestock Net Margin Summary.

WIRFP - Phase II - Cost Benefit Analysis Study

Table AN12.0 Individual Village Cost Benefit Analysis

Table AN12.4 GVT - Madhya Pradesh - Jhabua: Village Bagoli

- Table AN12.4.1 GVT - M Pradesh - Jhabua: Village Bagoli: Village Profile.
- Table AN12.4.2 GVT - M Pradesh - Jhabua: Village Bagoli: Cost Benefit Analysis Summary (Rs'000).
- Table AN12.4.3 GVT - M Pradesh - Jhabua: Village Bagoli: Cost Benefit Analysis Development Activity Summary A (Rs'000).
- Table AN12.4.4 GVT - M Pradesh - Jhabua: Village Bagoli: Cost Benefit Analysis Development Activity Summary B (Rs'000).
- Table AN12.4.5 GVT - M Pradesh - Jhabua: Village Bagoli: Costs - Financial (Rs'000).
GVT - M Pradesh - Jhabua: Village Bagoli: Costs - Economic (Rs'000).
- Table AN12.4.6 GVT - M Pradesh - Jhabua: Village Bagoli: VOD Household Assumptions.
GVT - M Pradesh - Jhabua: Village Bagoli: Incremental VOD Benefit Stream (Rs'000).
- Table AN12.4.7 GVT - M Pradesh - Jhabua: Village Bagoli: Household Crop Net Margin Assumptions.
GVT - M Pradesh - Jhabua: Village Bagoli: Incremental Crop Benefit Stream (Rs'000).
- Table AN12.4.8 GVT - M Pradesh - Jhabua: Village Bagoli: Household Livestock Net Margin Assumptions.
GVT - M Pradesh - Jhabua: Village Bagoli: Incremental Livestock Benefit Stream (Rs'000).
- Table AN12.4.9 GVT - M Pradesh - Jhabua: Village Bagoli: Forestry Benefit Assumptions.
GVT - M Pradesh - Jhabua: Village Bagoli: Incremental Forestry Benefit Stream (Rs'000).
- Table AN12.4.10 GVT - M Pradesh - Jhabua: Village Bagoli: Migration Support Benefit Assumptions.
GVT - M Pradesh - Jhabua: Village Bagoli: Incremental Migration Support Benefit Stream (Rs'000).
- Table AN12.4.11 GVT - M Pradesh - Jhabua: Village Bagoli: Weighted Household Crop Net Margin Summary.
- Table AN12.4.12 GVT - M Pradesh - Jhabua: Village Bagoli: Weighted Household Crop Net Margin Sensitivity Analysis (Rs/Household).
- Table AN12.4.13 GVT - M Pradesh - Jhabua: Village Bagoli: Weighted Household Livestock Net Margin Summary.

Table AN12.4.1 GVT - M Pradesh - Jhabua: Village Bagoli: Village Profile.

Village Profile \1			
A. Background			
Village Name	Bagoli		
District	Jhabua		
State	M P		
Participatory Planning Process (PPP)			
Village entry	Nov-99		
PRA	Jul-00		
CPA	Jan-01		
B. Infrastructure			
Hand Pumps (no)	8		
Wells (no)	20		
Linked by Road	1 km		
Electrification	Yes		
School	Primary		
C. Demographic Data			
Households (no)	125		
Participating Households	96		
Population	1,935		
Adults:			
Male	401		
Female	375		
Children:			
Boys	603		
Girls	556		
D. Well Being Ranking (No Households)			
Very Poor	8	9.2%	
Poor	26	29.9%	
Moderate	40	46.0%	
Better Off	13	14.9%	
Total	87	100%	
E. Land Resource (ha)			
Total Area	291		
Revenue Land	159		
Forest Area - F	61		
Pasture Land	8		
Arable Land	63		
	291		
F. Livestock			
G. Self Help Groups (No Households)			
1. Group 1	18		
2. Group 2	18		
3. Group 3	12		
4. Group 4	13		
5. Group 5	11		
6. Group 6	14		
	86		

Source: GVT Jhabua Coordination Office - Madhya Pradesh.

\1 Subject to final adjustment following consolidation exercise prior to Annual Review Meeting (ARM) in Feb 2005.

Table AN12.4.2 GVT - M Pradesh - Jhabua: Village Bagoli: Cost Benefit Analysis Summary (Rs'000).

Administration Costs / Development Activities	EIRR ¹	NPV ²		Year 1 1999/00	Year 2 2000/01	Year 3 2001/02	Year 4 2002/03	Year 5 2003/04	Year 6 2004/05	Year 7 2005/06	Year 8 2006/07	Year 9 2007/08	Year 10 2008/09
		(10%)	(%)										
A. Administration Costs													
Total A	N/A	(985)	(0.9)	35.9	227.2	236.8	235.6	317.7	236.8	206.7	20.7	20.7	20.7
B. Development Intervention Component A													
1. PPGF													
Net Incremental Benefits	N/A	(46)	(0.0)	-	(15.8)	(8.3)	(16.4)	(6.5)	(7.0)	(12.1)	(1.5)	(1.5)	(1.5)
2. VOD													
Net Incremental Benefits	4%	(103)	-10%	-	(31.3)	(42.0)	(161.8)	(142.2)	18.0	27.1	38.4	38.8	39.3
3/5. Crop Technology, SWC and WRD													
Net Incremental Benefits	9%	(166)	-16%	-	(201.4)	(751.1)	(118.9)	(297.8)	176.1	185.3	206.9	206.9	206.9
6. Livestock													
Net Incremental Benefits	49%	220	21%	-	-	(23.8)	(53.6)	(1.8)	57.2	70.1	72.7	72.7	72.7
7. Forestry													
Net Incremental Benefits	23%	34	3%	-	(15.0)	(30.7)	(5.8)	16.0	17.2	12.3	16.7	16.7	16.7
8. Migration Support													
Net Incremental Benefits	N/A	-	0%	-	-	-	-	-	-	-	-	-	-
Summary													
Net Incremental Benefits	3%	(1,046)	100%	(35.9)	(490.6)	(1,092.7)	(592.1)	(749.8)	24.7	76.0	312.5	312.9	313.3
Sensitivity Analysis													
Analysis Period													
12 Years	-9%	(1,445)											
20 Years (Base Case)	3%	(1,046)											
25 Years	6%	(929)											
30 Years	7%	(862)											
Costs - Administration													
Investment Costs Decreased by 20 percent.	5%	(849)											
Costs - Administration and Development													
Recurrent Costs Increased by 20 percent.	1%	(1,327)											
Benefits - Crop, SWC and WRD													
Crop Benefits Increased by 20 percent.	8%	(520)											
Livestock Benefits Increased by 20 percent.	3%	(1,046)											

Source: Cost Benefit Analysis (CBA) Study Estimate Jan 2005.

¹ EIRR = Economic Internal Rate of Return (rate at which NPV equal to zero).

² NPV = Net Present Value of net incremental benefits at 12% (indicative opportunity cost of capital for rural development projects in India).

N/A = Not analysed as EIRR negative.

Table AN12.4.3 GVT - M Pradesh - Jhabua: Village Bagoli: Cost Benefit Analysis Development Activity Summary A (Rs'000).

Administration Costs / Development Activities	EIRR ¹	NPV ²		Year 1 1999/00	Year 2 2000/01	Year 3 2001/02	Year 4 2002/03	Year 5 2003/04	Year 6 2004/05	Year 7 2005/06	Year 8 2006/07	Year 9 2007/08	Year 10 2008/09
		(10%)	(%)										
A. Administration Costs													
Investment				35.9	227.2	236.8	235.6	317.7	236.8	206.7	-	-	-
Recurrent				-	-	-	-	-	-	-	20.7	20.7	20.7
Total (A)	N/A	(985)	-94%	35.9	227.2	236.8	235.6	317.7	236.8	206.7	20.7	20.7	20.7
B. Development Intervention Component A													
1. PPGF													
Cost Stream													
Investment				-	15.8	7.9	15.8	5.5	5.9	10.8	-	-	-
Recurrent				-	-	0.4	0.6	1.0	1.1	1.3	1.5	1.5	1.5
Total Costs				-	15.8	8.3	16.4	6.5	7.0	12.1	1.5	1.5	1.5
Benefit Stream													
Before / Without Project				-	-	-	-	-	-	-	-	-	-
After / With Project				-	-	-	-	-	-	-	-	-	-
Incremental Benefits				-	-	-	-	-	-	-	-	-	-
Net Incremental Benefits	N/A	(46)	-4%	-	(15.8)	(8.3)	(16.4)	(6.5)	(7.0)	(12.1)	(1.5)	(1.5)	(1.5)
2. VOD													
Cost Stream													
Investment				-	31.3	106.0	220.9	190.6	21.3	11.5	-	-	-
Recurrent				-	-	1.6	6.9	17.9	27.4	28.5	29.1	29.1	29.1
Total Costs				-	31.3	107.6	227.8	208.5	48.7	40.0	29.1	29.1	29.1
Benefit Stream													
Before / Without Project				-	-	-	-	-	-	-	-	-	-
After / With Project				-	-	65.6	66.0	66.3	66.7	67.1	67.5	67.9	68.3
Incremental Benefits				-	-	65.6	66.0	66.3	66.7	67.1	67.5	67.9	68.3
Net Incremental Benefits	4%	(103)	-10%	-	(31.3)	(42.0)	(161.8)	(142.2)	18.0	27.1	38.4	38.8	39.3
3/5. Crop Technology, SWC and WRD													
Cost Stream													
Investment													
Crop Technology				-	10.6	37.3	52.8	89.0	-	9.0	-	-	-
Soil Water Conservation				-	190.9	626.5	146.0	46.3	-	-	-	-	-
Water Resource Development				-	-	63.2	271.7	453.8	39.1	15.1	-	-	-
Recurrent													
Crop Technology				-	-	0.3	1.2	2.5	4.7	4.7	5.0	5.0	5.0
Soil Water Conservation				-	-	23.9	102.2	120.4	126.2	126.2	126.2	126.2	126.2
Water Resource Development				-	-	-	9.5	50.2	118.3	124.2	126.4	126.4	126.4
Total Costs				-	201.4	751.1	583.4	762.3	288.4	279.2	257.6	257.6	257.6
Benefit Stream													
Before / Without Project				-	-	-	169.0	169.0	169.0	169.0	169.0	169.0	169.0
After / With Project				-	-	-	633.5	633.5	633.5	633.5	633.5	633.5	633.5
Incremental Benefits				-	-	-	464.5	464.5	464.5	464.5	464.5	464.5	464.5
Net Incremental Benefits	9%	(166)	-16%	-	(201.4)	(751.1)	(118.9)	(297.8)	176.1	185.3	206.9	206.9	206.9

Source: Cost Benefit Analysis (CBA) Study Estimate Jan 2005.

¹ EIRR = Economic Internal Rate of Return (rate at which NPV equal to zero).

² NPV = Net Present Value of net incremental benefits at 12% (indicative opportunity cost of capital for rural development projects in India).

N/A = Not analysed as EIRR negative.

Table AN12.4.4 GVT - M Pradesh - Jhabua: Village Bagoli: Cost Benefit Analysis Development Activity Summary B (Rs'000).

Administration Costs / Development Activities				Year 1 1999/00	Year 2 2000/01	Year 3 2001/02	Year 4 2002/03	Year 5 2003/04	Year 6 2004/05	Year 7 2005/06	Year 8 2006/07	Year 9 2007/08	Year 10 2008/09
6. Livestock													
Cost Stream													
Investment				-	-	23.8	55.9	9.9	21.0	4.2	-	-	-
Recurrent				-	-	-	6.3	33.5	78.9	82.8	84.3	84.3	84.3
Total Costs				-	-	23.8	62.2	43.4	99.8	87.0	84.3	84.3	84.3
Benefit Stream													
Before / Without Project				-	-	-	172.7	172.7	172.7	172.7	172.7	172.7	172.7
After / With Project				-	-	-	181.3	214.3	329.7	329.7	329.7	329.7	329.7
Incremental Benefits				-	-	-	8.6	41.6	157.0	157.0	157.0	157.0	157.0
Net Incremental Benefits	49%	220	21%	-	-	(23.8)	(53.6)	(1.8)	57.2	70.1	72.7	72.7	72.7
7. Forestry													
Cost Stream													
Investment				-	15.0	29.2	22.9	-	-	4.8	-	-	-
Recurrent				-	-	1.5	4.4	6.7	6.7	6.7	7.2	7.2	7.2
Total Costs				-	15.0	30.7	27.3	6.7	6.7	11.5	7.2	7.2	7.2
Benefit Stream													
Before / Without Project				-	-	-	-	-	-	-	-	-	-
After / With Project				-	-	-	21.5	22.7	23.9	23.9	23.9	23.9	23.9
Incremental Benefits				-	-	-	21.5	22.7	23.9	23.9	23.9	23.9	23.9
Net Incremental Benefits	23%	34	3%	-	(15.0)	(30.7)	(5.8)	16.0	17.2	12.3	16.7	16.7	16.7
8. Migration Support													
Cost Stream													
Investment				-	-	-	-	-	-	-	-	-	-
Recurrent				-	-	-	-	-	-	-	-	-	-
Total Costs				-	-	-	-	-	-	-	-	-	-
Benefit Stream													
Before / Without Project				-	-	-	-	-	-	-	-	-	-
After / With Project				-	-	-	-	-	-	-	-	-	-
Incremental Benefits				-	-	-	-	-	-	-	-	-	-
Net Incremental Benefits	N/A	-	0%	-	-	-	-	-	-	-	-	-	-
Summary													
Cost Stream													
Investment				35.9	490.6	1,130.7	1,021.7	1,112.7	324.0	262.1	-	-	-
Recurrent				-	-	27.6	131.0	232.3	363.4	374.4	400.4	400.4	400.4
Total Costs				35.9	490.6	1,158.3	1,152.7	1,345.0	687.4	636.5	400.4	400.4	400.4
Benefit Stream													
Before / Without Project				-	-	-	341.6	341.6	341.6	341.6	341.6	341.6	341.6
After / With Project				-	-	65.6	902.3	936.8	1,053.8	1,054.1	1,054.5	1,055.0	1,055.4
Incremental Benefits				-	-	65.6	560.6	595.2	712.1	712.5	712.9	713.3	713.7
Net Incremental Benefits	3%	(1,046)	100%	(35.9)	(490.6)	(1,092.7)	(592.1)	(749.8)	24.7	76.0	312.5	312.9	313.3

Source: Cost Benefit Analysis (CBA) Study Estimate Jan 2005.

Table AN12.4.5

GVT - M Pradesh - Jhabua: Village Bagoli: Costs - Financial (Rs'000).

Cost Head / Subhead	1999/00	2000/01	2001/02	2002/03	2003/04	2004/05	2005/06	Totals	
	Actual	Actual	Actual	Actual	Actual	Budget	Budget	(Rs'000)	(%)
A. Administration Costs									
GVT Bhopal (PHQ)	-	60.3	75.4	67.3	52.8	66.8	61.1	383.7	7%
DFIDI Consultancy	35.9	71.4	26.9	63.2	47.4	54.7	39.2	338.6	6%
Jhabua Coordination Office	-	112.9	157.8	124.3	247.5	135.5	125.0	903.0	16%
Total A	35.9	244.5	260.2	254.8	347.7	257.0	225.3	1,625.4	29%
B. Development Costs									
Component A									
1. PPGF	-	17.5	8.8	17.6	6.1	6.5	12.0	68.4	1%
2. VOD	-	34.7	117.8	245.5	211.8	23.6	12.8	646.2	12%
3. Crop Technology	-	11.7	41.4	58.7	98.8	-	10.0	220.7	4%
4. SWC	-	282.8	928.2	216.3	68.7	-	-	1,495.9	27%
5. WRD	-	-	93.7	402.6	672.3	57.9	22.3	1,248.8	23%
6. Livestock	-	-	26.4	62.1	11.0	23.3	4.6	127.4	2%
7. Forestry	-	16.6	32.4	25.4	-	-	5.4	79.8	1%
8. Migration Support	-	-	-	-	-	-	-	-	0%
Subtotal	-	363.4	1,248.6	1,028.1	1,068.6	111.3	67.2	3,887.2	71%
Other Development Costs									
Subtotal	-	-	-	-	-	-	-	-	0%
Total B	-	363.4	1,248.6	1,028.1	1,068.6	111.3	67.2	3,887.2	71%
Total A + B	35.9	607.9	1,508.8	1,282.9	1,416.3	368.4	292.5	5,512.6	100%
GVT	-	390.7	991.4	1,095.4	1,309.0	308.6	249.2	4,344.2	79%
DFIDI	35.9	71.4	26.9	63.2	47.4	54.7	39.2	338.6	6%
Community	-	145.3	485.6	119.5	41.4	3.8	3.2	798.7	14%
Government	-	0.6	4.9	4.8	18.6	1.3	1.0	31.1	1%

Source:

GVT Jhabua Coordination Office - Madhya Pradesh.

DFIDI = Department for International Development (India).

PPGF = Participatory Planning and Group Formation.

VOD = Village Organisation and Development.

SWC = Soil and Water Conservation.

WRD = Water Resource Development.

Table AN12.4.5

GVT - M Pradesh - Jhabua: Village Bagoli: Costs - Economic (Rs'000).

Cost Head / Subhead	Conversion Factors		1999/00 Actual	2000/01 Actual	2001/02 Actual	2002/03 Actual	2003/04 Actual	2004/05 Budget	2005/06 Budget	Totals	
	CF	SCF								(Rs'000)	(%)
A. Administration Costs											
GVT Bhopal (PHQ)	0.90	1.00	-	54.2	67.9	60.6	47.5	60.1	55.0	345.4	8%
DFIDI Consultancy	1.00	1.00	35.9	71.4	26.9	63.2	47.4	54.7	39.2	338.6	8%
Jhabua Coordination Office	0.90	1.00	-	101.6	142.0	111.9	222.7	122.0	112.5	812.7	19%
Total A			35.9	227.2	236.8	235.6	317.7	236.8	206.7	1,496.7	34%
B. Development Costs											
Component A											
1. PPGF	0.90	1.00	-	15.8	7.9	15.8	5.5	5.9	10.8	61.5	1%
2. VOD	0.90	1.00	-	31.3	106.0	220.9	190.6	21.3	11.5	581.5	13%
3. Crop Technology	0.90	1.00	-	10.6	37.3	52.8	89.0	-	9.0	198.6	5%
4. SWC	0.90	0.75	-	190.9	626.5	146.0	46.3	-	-	1,009.7	23%
5. WRD	0.90	0.75	-	-	63.2	271.7	453.8	39.1	15.1	843.0	19%
6. Livestock	0.90	1.00	-	-	23.8	55.9	9.9	21.0	4.2	114.7	3%
7. Forestry	0.90	1.00	-	15.0	29.2	22.9	-	-	4.8	71.9	2%
8. Migration Support	0.90	1.00	-	-	-	-	-	-	-	-	0%
Subtotal			-	263.4	893.8	786.0	795.1	87.2	55.4	2,880.9	66%
Other Development Costs											
Subtotal	0.90	1.00	-	-	-	-	-	-	-	-	0%
Total B			-	263.4	893.8	786.0	795.1	87.2	55.4	2,880.9	66%
Total A + B			35.9	490.6	1,130.7	1,021.7	1,112.7	324.0	262.1	4,377.6	100%
GVT			-	-	-	-	-	-	-	N/A	
DFIDI			-	-	-	-	-	-	-	N/A	
Community			-	-	-	-	-	-	-	N/A	
Government			-	-	-	-	-	-	-	N/A	

Source:

Cost Benefit Analysis (CBA) Study Estimate Jan 2005.

DFIDI = Department for International Development (India).

PPGF = Participatory Planning and Group Formation.

VOD = Village Organisation and Development.

SWC = Soil and Water Conservation.

WRD = Water Resource Development.

Table AN12.4.6

GVT - M Pradesh - Jhabua: Village Bagoli: VOD Household Assumptions.

Without \ With Project Village Organisation and Development	Units	Assumptions			Benefits		
					Year 1 (Rs)	Year 2 (Rs)	Year 3 (Rs)
Development Activity: Village Organisation and Development							
Before / Without Project Situation:							
A. Self Help Groups (SHGs)							
Assumption	Sum	Zero	Zero	Zero	-	-	-
B. Drudgery Reduction							
Assumption	Sum	Zero	Zero	Zero			
Total Without Project Benefits					-	-	-
After / With Project Situation:							
A. Self Help Groups (SHGs)							
Assumptions							
Average Saving / Household	Rs	1,531					
Households / Village	No	86					
Present Group Deposits	Rs'000	131.7			131.7	135.7	139.7
Annual Savings Increase	%	3%					
Deposits on Loan to Members	%	60%					
SHG Interest Income	% / Year	15%					
Assumed Benefit	Rs'000				11.9	12.2	12.6
B. Drudgery Reduction							
Assumptions							
Hours Saved / Day / Household	No	1.0					
Number of Days / Year / Household	No	200					
Days / Year / Household (8hrs/day)	No	25.0					
Households / Village	No	86					
Day Equivalent / Village	No	2,150					
Economic Value per Day	(Rs/day)	25					
Assumed Benefit	Rs'000				53.8	53.8	53.8
Total With Project Benefits	Rs'000				65.6	66.0	66.3
Incremental Benefits	Rs'000				65.6	66.0	66.3

Source:

VOD = Village Organisation and Development.
Households per village: Bagoli

Cost Benefit Analysis (CBA) Study Estimate Jan 2005.

Table AN12.4.6

GVT - M Pradesh - Jhabua: Village Bagoli: Incremental VOD Benefit Stream (Rs'000).

Without \ With Project Village Organisation and Development	Benefit Streams (Rs '000)									
	Year 1 1999/00	Year 2 2000/01	Year 3 2001/02	Year 4 2002/03	Year 5 2003/04	Year 6 2004/05	Year 7 2005/06	Year 8 2006/07	Year 9 2007/08	Year 10 2008/09
Development Activity: Village Organisation and Development										
Before / Without Project Situation:										
A. Self Help Groups (SHGs) Assumption										
B. Drudgery Reduction Assumption										
Total Without Project Benefits	-	-	-	-	-	-	-	-	-	-
After / With Project Situation:										
A. Self Help Groups (SHGs) Assumptions Average Saving / Household Households / Village										
Present Group Deposits	-	-	131.7	135.7	139.7	143.9	148.2	152.7	157.3	162.0
Annual Savings Increase										
Deposits on Loan to Members										
SHG Interest Income										
Assumed Benefit	-	-	11.9	12.2	12.6	13.0	13.3	13.7	14.2	14.6
B. Drudgery Reduction Assumptions Hours Saved / Day / Household Number of Days / Year / Household Days / Year / Household (8hrs/day) Households / Village Day Equivalent / Village Economic Value per Day										
Assumed Benefit	-	-	53.8	53.8	53.8	53.8	53.8	53.8	53.8	53.8
Total With Project Benefits	-	-	65.6	66.0	66.3	66.7	67.1	67.5	67.9	68.3
Incremental Benefits	-	-	65.6	66.0	66.3	66.7	67.1	67.5	67.9	68.3

Source:

VOD = Village Organisation and Development.
Households per village: Bagoli

Cost Benefit Analysis (CBA) Study Estimate Jan 2005.

Table AN12.4.7

GVT - M Pradesh - Jhabua: Village Bagoli: Household Crop Net Margin Assumptions.

Without \ With Project Crop Technology, SWC and WRD	Units	Assumptions			Benefits		
					Year 1 (Rs/HH)	Year 2 (Rs/HH)	Year 3 (Rs/HH)
Development Activity: Crop Technology, SWC and WRD							
Before / Without Project Situation: Assumptions							
Households (HHs)	No	86					
Crop Adoption Assumptions		100%	100%	100%			
Kharif Crop Net Margin	Rs/HH				1,650.8	1,650.8	1,650.8
Rabi Crop Net Margin	Rs/HH				314	313.8	313.8
Total Without Project Benefits	Rs/HH				1,964.6	1,964.6	1,964.6
After / With Project Situation: Assumptions							
Households (HHs)	No	86					
Crop Adoption Assumptions		100%	100%	100%			
Kharif Crop Net Margin	Rs/HH				5,744.0	5,744.0	5,744.0
Rabi Crop Net Margin	Rs/HH				1,622.0	1,622.0	1,622.0
Total With Project Benefits	Rs/HH				7,366.0	7,366.0	7,366.0
Incremental Benefits	Rs/HH				5,401.4	5,401.4	5,401.4

Source:

Cost Benefit Analysis (CBA) Study Estimate Jan 2005.

Table AN12.4.7

GVT - M Pradesh - Jhabua: Village Bagoli: Incremental Crop Benefit Stream (Rs'000).

Without \ With Project Crop Technology, SWC and WRD	Benefit Streams (Rs '000)									
	Year 1 1999/00	Year 2 2000/01	Year 3 2001/02	Year 4 2002/03	Year 5 2003/04	Year 6 2004/05	Year 7 2005/06	Year 8 2006/07	Year 9 2007/08	Year 10 2008/09
Development Activity: Crop Technology, SWC and WRD										
Before / Without Project Situation: Assumptions										
Households (HHs)										
Crop Adoption Assumptions										
Kharif Crop Net Margin	-	-	-	142.0	142.0	142.0	142.0	142.0	142.0	142.0
Rabi Crop Net Margin	-	-	-	27.0	27.0	27.0	27.0	27.0	27.0	27.0
Total Without Project Benefits	-	-	-	169.0	169.0	169.0	169.0	169.0	169.0	169.0
After / With Project Situation: Assumptions										
Households (HHs)										
Crop Adoption Assumptions										
Kharif Crop Net Margin	-	-	-	494.0	494.0	494.0	494.0	494.0	494.0	494.0
Rabi Crop Net Margin	-	-	-	139.5	139.5	139.5	139.5	139.5	139.5	139.5
Total With Project Benefits	-	-	-	633.5	633.5	633.5	633.5	633.5	633.5	633.5
Incremental Benefits	-	-	-	464.5	464.5	464.5	464.5	464.5	464.5	464.5

Source:

Cost Benefit Analysis (CBA) Study Estimate Jan 2005.

Table AN12.4.8

GVT - M Pradesh - Jhabua: Village Bagoli: Household Livestock Net Margin Assumptions.

Without \ With Project Livestock	Units	Assumptions			Benefits		
					Year 1 (Rs)	Year 2 (Rs)	Year 3 (Rs)
Development Activity: Livestock							
Before / Without Project Situation: Assumptions							
Households (HHs)	No	86					
Annual Livestock Net Margin	Rs/HH						
Total Without Project Benefits					2,008.0	2,008.0	2,008.0
After / With Project Situation:							
Development Activity: Assumptions							
Households (HHs)	No	86					
Adoption Assumptions	Percent	55%	65%	100%			
Annual Livestock Net Margin	Rs/HH						
Total With Project Benefits					2,108.5	2,491.8	3,833.6
Incremental Benefits	Rs/HH				100.5	483.8	1,825.6

Source:

Cost Benefit Analysis (CBA) Study Estimate Jan 2005.

Table AN12.4.8

GVT - M Pradesh - Jhabua: Village Bagoli: Incremental Livestock Benefit Stream (Rs'000).

Without \ With Project Livestock	Benefit Streams (Rs '000)									
	Year 1 1999/00	Year 2 2000/01	Year 3 2001/02	Year 4 2002/03	Year 5 2003/04	Year 6 2004/05	Year 7 2005/06	Year 8 2006/07	Year 9 2007/08	Year 10 2008/09
Development Activity: Livestock										
Before / Without Project Situation:										
Assumptions										
Households (HHs)										
Annual Livestock Net Margin										
Total Without Project Benefits	-	-	-	172.7	172.7	172.7	172.7	172.7	172.7	172.7
After / With Project Situation:										
Development Activity:										
Assumptions										
Households (HHs)										
Adoption Assumptions										
Annual Livestock Net Margin										
Total With Project Benefits	-	-	-	181.3	214.3	329.7	329.7	329.7	329.7	329.7
Incremental Benefits	-	-	-	8.6	41.6	157.0	157.0	157.0	157.0	157.0

Source:

Cost Benefit Analysis (CBA) Study Estimate Jan 2005.

Table AN12.4.9

GVT - M Pradesh - Jhabua: Village Bagoli: Forestry Benefit Assumptions.

Without \ With Project Forestry	Units	Assumptions			Benefits		
					Year 1 (Rs)	Year 2 (Rs)	Year 3 (Rs)
Development Activity: Forestry							
Before / Without Project Situation:							
Assumptions							
Households (HHs)	No	86					
Annual Forestry Net Margin	Rs/HH						
Total Without Project Benefits					-	-	-
After / With Project Situation:							
Assumptions							
Households (HHs)	No	86					
Adoption Assumptions	Percent	90%	95%	100%			
Annual Forestry Net Margin	Rs/HH						
Total With Project Benefits					250.0	263.9	277.8
Incremental Benefits	Rs/HH				250.0	263.9	277.8

Source:

Cost Benefit Analysis (CBA) Study Estimate Jan 2005.

Table AN12.4.9

GVT - M Pradesh - Jhabua: Village Bagoli: Incremental Forestry Benefit Stream (Rs'000).

Without \ With Project Forestry	Benefit Streams (Rs '000)									
	Year 1 1999/00	Year 2 2000/01	Year 3 2001/02	Year 4 2002/03	Year 5 2003/04	Year 6 2004/05	Year 7 2005/06	Year 8 2006/07	Year 9 2007/08	Year 10 2008/09
Development Activity: Forestry										
Before / Without Project Situation: Assumptions										
Households (HHs)										
Annual Forestry Net Margin										
Total Without Project Benefits	-	-	-	-	-	-	-	-	-	-
After / With Project Situation: Assumptions										
Households (HHs)										
Adoption Assumptions										
Annual Forestry Net Margin										
Total With Project Benefits	-	-	-	21.5	22.7	23.9	23.9	23.9	23.9	23.9
Incremental Benefits	-	-	-	21.5	22.7	23.9	23.9	23.9	23.9	23.9

Source:

Cost Benefit Analysis (CBA) Study Estimate Jan 2005.

Table AN12.4.10

GVT - M Pradesh - Jhabua: Village Bagoli: Migration Support Benefit Assumptions.

Without \ With Project Migration Support	Assumptions			Benefits		
				Year 1 (Rs)	Year 2 (Rs)	Year 3 (Rs)
Development Activity: Migration Support						
Before / Without Project Situation: Assumptions						
Economic Value per Day	Rs/day	-				
Days / Month / Household	No	-				
Economic Value per Month	Rs/month	-				
Months Migration / Year	Months	-				
Economic Value per Household	Rs/HH	-				
Households per Village	No	86				
Households per Village Migrating	Percent	0%				
Total Without Project Benefits	Rs/Village			-	-	-
After / With Project Situation: Assumptions						
Economic Value per Day \1	Rs/day	-	60%	-		
Days / Month / Household	No	-	30%	-		
Economic Value per Month	Rs/month	-		-		
Months Migration / Year	Months	-	-20%	-		
Economic Value per Household	Rs/HH	-		-		
Households per Village	No	86		80.0		
Households per Village Migrating	Percent	0%	-20%	0%		
Subtotal Migration Income	Rs/Village				-	-
Other Income	Sum (Rs)	-	-	-	-	-
Total With Project Benefits	Rs/Village				-	-
Incremental Benefits	Rs/Village				-	-

Source:

Cost Benefit Analysis (CBA) Study Estimate Jan 2005.

- 1\ Financial Wages (Rs/day):
 Skill Labour - Rs 160
 Casual Labour :
 Male - Rs 40
 Female - Rs 30

Table AN12.4.10

GVT - M Pradesh - Jhabua: Village Bagoli: Incremental Migration Support Benefit Stream (Rs'000).

Without \ With Project Migration Support	Benefit Streams (Rs '000)									
	Year 1 1999/00	Year 2 2000/01	Year 3 2001/02	Year 4 2002/03	Year 5 2003/04	Year 6 2004/05	Year 7 2005/06	Year 8 2006/07	Year 9 2007/08	Year 10 2008/09
Development Activity: Migration Support Before / Without Project Situation: Assumptions Economic Value per Day Days / Month / Household Economic Value per Month Months Migration / Year Economic Value per Household Households per Village Households per Village Migrating Total Without Project Benefits	-	-	-	-	-	-	-	-	-	-
After / With Project Situation: Assumptions Economic Value per Day \1 Days / Month / Household Economic Value per Month Months Migration / Year Economic Value per Household Households per Village Households per Village Migrating Subtotal Migration Income Other Income Total With Project Benefits Incremental Benefits	-	-	-	-	-	-	-	-	-	-

Source:

Cost Benefit Analysis (CBA) Study Estimate Jan 2005.

- 1\ Financial Wages (Rs/day):
 Skill Labour - Rs 160
 Casual Labour :
 Male - Rs 40
 Female - Rs 30

Table AN12.4.11 GVT - M Pradesh - Jhabua: Village Bagoli: Weighted Household Crop Net Margin Summary.

Item	WBR (%)	Before / Without Project			After / With Project			Increment		
		Khalif	Rabi	Total	Khalif	Rabi	Total	Khalif	Rabi	Total
Phase II										
Well Being Ranking - Very Poor Household Net Margin (Rs)	9.0%	834.6	102.5	937.1	1,849.8	1,067.8	2,917.6	1,015.2	965.3	1,980.5
Well Being Ranking - Poor Household Net Margin (Rs)	30.0%	637.7	-	637.7	4,803.0	220.7	5,023.7	4,165.3	220.7	4,386.0
Well Being Ranking - Moderate Household Net Margin (Rs)	46.0%	994.0	89.3	1,083.3	3,711.4	2,508.3	6,219.6	2,717.4	2,419.0	5,136.4
Well Being Ranking - Better Off Household Net Margin (Rs)	15.0%	6,180.9	1,756.7	7,937.5	16,195.9	2,039.3	18,235.2	10,015.0	282.7	10,297.7
Well Being Ranking - Weighted Household Net Margin (Rs)	100.0%	1,650.8	313.8	1,964.6	5,744.0	1,622.0	7,366.0	4,093.2	1,308.2	5,401.4
Phase I \1										
Well Being Ranking - Very Poor Household Net Margin (Rs)	9.0%	436.3	267.5	703.8	3,866.5	1,668.8	5,535.3	3,430.3	1,401.3	4,831.5
Well Being Ranking - Poor Household Net Margin (Rs)	30.0%	485.8	657.5	1,143.3	10,136.0	5,690.3	15,826.3	9,650.3	5,032.8	14,683.0
Well Being Ranking - Moderate Household Net Margin (Rs)	46.0%	986.3	3,385.0	4,371.3	9,457.5	5,195.0	14,652.5	8,471.3	1,810.0	10,281.3
Well Being Ranking - Better Off Household Net Margin (Rs)	15.0%	2,778.0	937.0	3,715.0	4,915.0	9,560.0	14,475.0	2,137.0	8,623.0	10,760.0
Well Being Ranking - Weighted Household Net Margin (Rs)	100.0%	1,055.4	1,919.0	2,974.3	8,476.5	5,681.0	14,157.4	7,421.1	3,762.0	11,183.1

Source: Study of Impact of WIRFP on Net Incomes of Target Households, Jan 2004.

WBR = GVT Household Well Being Ranking. Survey figures adjusted to Village Profile WBR.

\1 GVT - Madhya Pradesh - Phase I: Village Naganwat Choti: Weighted Household Crop Net Margin Summary.

Table AN12.4.12 GVT - M Pradesh - Jhabua: Village Bagoli: Weighted Household Crop Net Margin Sensitivity Analysis (Rs/Household).

Item	EIRR	Before / Without Project			After / With Project			Increment		
		Khalif	Rabi	Total	Khalif	Rabi	Total	Khalif	Rabi	Total
Development Activity: Crop Technology, SWC and WRD										
Weighted Net Margin (Phase II)										
Household Net Margin (Rs)		1,650.8	313.8	1,964.6	5,744.0	1,622.0	7,366.0	4,093.2	1,308.2	5,401.4
Incremental Benefit (Phase II / Phase I)										48%
Base Case Assumptions										
Household Net Margin (Rs)		1,650.8	313.8	1,964.6	5,744.0	1,622.0	7,366.0	4,093.2	1,308.2	5,401.4
Incremental Benefit (Phase II / Phase I)										48%
Sensitivity Increase (%)	0%									
Development Activity										
Overall Village										
Sensitivity Assumptions										
Household Net Margin (Rs)		1,650.8	313.8	1,964.6	8,041.6	2,270.8	10,312.4	6,390.8	1,957.0	8,347.8
Incremental Benefit (Phase II / Phase I)										75%
Sensitivity Increase (%)	0%									
Development Activity										
Overall Village										
Weighted Net Margin (Phase I)										
Household Net Margin (Rs)		1,055.4	1,919.0	2,974.3	8,476.5	5,681.0	14,157.4	7,421.1	3,762.0	11,183.1

Source: Study of Impact of WIRFP on Net Incomes of Target Households, Jan 2004.

EIRR = Economic Internal Rate of Return (rate at which NPV equal to zero).

Table AN12.4.13 GVT - M Pradesh - Jhabua: Village Bagoli: Weighted Household Livestock Net Margin Summary.

Well Being Ranking	Weight (%)	Before / Without Project		After / With Project		Increment \1	
		Herd Value	Net Margin	Herd Value	Net Margin	Herd Value	Net Margin
Phase I - Well Being Ranking (WBR) \1							
Madhya Pradesh - WBR Weighted Data							
Very Poor	9.0%						
Average		580	(185.0)	5,650	412.5	474	597.5
Poor	30.0%						
Average		2,350	982.5	8,250	2,141.0	1,180	1,158.5
Moderate	46.0%						
Average		14,700	6,730.0	1,900	2,820.0	1,900	(3,910.0)
Better Off	15.0%						
Average		15,580	3,000.0	14,600	10,790.0	(196)	7,790.0
Phase I - WBR Weighted Data	100.0%	9,856	3,823.9	6,048	3,595.1	1,241	(228.8)
Phase II - Well Being Ranking (WBR)							
Very Poor	9.0%						
Average		5,756	149.2	10,970	1,446.4	1,043	1,297.2
Poor	30.0%						
Average		13,128	852.2	25,979	3,008.8	2,570	2,156.8
Moderate	46.0%						
Average		13,525	4,035.1	27,020	5,249.5	2,699	1,214.4
Better Off	15.0%						
Average		12,700	(781.7)	41,873	2,573.3	5,835	3,355.0
Phase II - WBR Weighted Data	100.0%	12,583	2,008.0	27,491	3,833.6	2,982	1,825.7

Source: Study of Impact of WIRFP on Net Incomes of Target Households, Jan 2004.

WBR = GVT Household Well Being Ranking.

Survey figures adjusted to Village Profile WBR.

\1 GVT - Madhya Pradesh - Phase I: Village Naganwat Choti: Weighted Household Livestock Net Margin Summary.

WIRFP - Phase II - Cost Benefit Analysis Study

Tables AN12.0 Individual Village Cost Benefit Analysis

Tables AN12.5 GVT Madhya Pradesh - Jhabua: Village Borwa

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Table AN12.5.1 GVT - M Pradesh - Jhabua: Village Borwa: Village Profile.

Village Profile \1			
A. Background			
Village Name	Borwa		
District	Jhabua		
State	M Pradesh		
B. Participatory Planning Process (PPP)			
Village entry	Jan-01		
PRA	Feb-01		
CPA	Jan-01		
C. Infrastructure			
Hand Pumps (no)	5		
Wells (no)	33		
Linked by Road	5 km		
Electrification	Yes		
School	Primary		
D. Demographic Data			
Households (no)	109		
Participating Households	39		
Population (Adults)	470		
Adults:			
Male	270		
Female	200		
Children:			
Boys	225		
Girls	212		
E. Well Being Ranking (No Households)			
Very Poor	3	7.7%	
Poor	12	30.8%	
Moderate	11	28.2%	
Better Off	13	33.3%	
Total	39	100%	
F. Land Resource (ha)			
Total Area		290	
Revenue Land (unused)		151	
Forest Area - Revenue		-	
Pasture Land		12	
Arable Land		127	
		290	
G. Livestock			
H. Self Help Groups (No Households)			
1. Group 1		15	
2. Group 2		5	
3. Group 3		10	
4. Group 4		-	
5. Group 5		-	
6. Group 6		-	
		30	

Source: Cost Benefit Analysis (CBA) Study Estimate Jan 2005.

\1 Subject to final adjustment following consolidation exercise prior to Annual Review Meeting (ARM) in Feb 2005.

Table AN12.5.2 GVT - M Pradesh - Jhabua: Village Borwa: Cost Benefit Analysis Summary (Rs'000).

Administration Costs / Development Activities	EIRR ¹	NPV ²		Year 1 1999/00	Year 2 2000/01	Year 3 2001/02	Year 4 2002/03	Year 5 2003/04	Year 6 2004/05	Year 7 2005/06	Year 8 2006/07	Year 9 2007/08	Year 10 2008/09
		(10%)	(%)										
A. Administration Costs													
Total A	N/A	(985)	191%	35.9	227.2	236.8	235.6	317.7	236.8	206.7	20.7	20.7	20.7
B. Development Intervention Component A													
1. PPGF													
Net Incremental Benefits	N/A	(40)	8%	-	-	(8.6)	(21.4)	(12.0)	(6.9)	(12.0)	(1.4)	(1.4)	(1.4)
2. VOD													
Net Incremental Benefits	8%	(13)	3%	-	-	16.2	(33.4)	(48.5)	(13.4)	(20.6)	13.9	13.9	13.9
3/5. Crop Technology, SWC and WRD													
Net Incremental Benefits	34%	334	-65%	-	-	(33.4)	(100.4)	(109.8)	156.6	(131.8)	159.7	159.7	159.7
6. Livestock													
Net Incremental Benefits	75%	152	-29%	-	-	-	(13.5)	(11.4)	14.0	11.8	53.1	53.1	53.1
7. Forestry													
Net Incremental Benefits	21%	8	-2%	-	-	-	(4.5)	(12.9)	6.1	(9.5)	6.7	6.7	6.7
8. Migration Support													
Net Incremental Benefits	122%	28	-5%	-	-	-	-	-	-	(9.0)	11.0	11.0	11.0
Summary													
Net Incremental Benefits	5%	(516)	7%	(35.9)	(227.2)	(262.6)	(408.9)	(512.2)	(80.4)	(377.7)	222.3	222.3	222.4
Sensitivity Analysis													
Analysis Period													
12 Years	5%	(800)											
20 Years (Base Case)	5%	(516)											
25 Years	7%	(433)											
30 Years	8%	(386)											
Costs - Administration													
Investment Costs Decreased by 20 percent	7%	(319)											
Costs - Administration and Development													
Recurrent Costs	3%	(586)											
Benefits - Crop, SWC and WRD													
Crop Benefits Increased by 20 percent	9%	(250)											
Livestock Benefits Increased by 20 percent	6%	(440)											

Source: Cost Benefit Analysis (CBA) Study Estimate Jan 2005.

¹ EIRR = Economic Internal Rate of Return (rate at which NPV equal to zero).

² NPV = Net Present Value of net incremental benefits at 12% (indicative opportunity cost of capital for rural development projects in India).

N/A = Not analysed as EIRR negative.

Table AN12.5.3 GVT - M Pradesh - Jhabua: Village Borwa: Cost Benefit Analysis Development Activity Summary A (Rs'000).

Administration Costs / Development Activities	EIRR ¹	NPV ²		Year 1 1999/00	Year 2 2000/01	Year 3 2001/02	Year 4 2002/03	Year 5 2003/04	Year 6 2004/05	Year 7 2005/06	Year 8 2006/07	Year 9 2007/08	Year 10 2008/09
		(10%)	(%)										
A. Administration Costs													
Investment				35.9	227.2	236.8	235.6	317.7	236.8	206.7	-	-	-
Recurrent				-	-	-	-	-	-	-	20.7	20.7	20.7
Total (A)	N/A	(985.3)	191%	35.9	227.2	236.8	235.6	317.7	236.8	206.7	20.7	20.7	20.7
B. Development Intervention Component A													
1. PPGF													
Cost Stream													
Investment				-	-	8.6	21.2	11.3	5.9	10.8	-	-	-
Recurrent				-	-	-	0.2	0.7	1.0	1.2	1.4	1.4	1.4
Total Costs				-	-	8.6	21.4	12.0	6.9	12.0	1.4	1.4	1.4
Benefit Stream													
Before / Without Project				-	-	-	-	-	-	-	-	-	-
After / With Project				-	-	-	-	-	-	-	-	-	-
Incremental Benefits				-	-	-	-	-	-	-	-	-	-
Net Incremental Benefits	N/A	(39.5)	8%	-	-	(8.6)	(21.4)	(12.0)	(6.9)	(12.0)	(1.4)	(1.4)	(1.4)
2. VOD													
Cost Stream													
Investment				-	-	7.5	56.8	69.0	30.6	36.2	-	-	-
Recurrent				-	-	-	0.4	3.2	6.7	8.2	10.0	10.0	10.0
Total Costs				-	-	7.5	57.2	72.2	37.2	44.4	10.0	10.0	10.0
Benefit Stream													
Before / Without Project				-	-	-	-	-	-	-	-	-	-
After / With Project				-	-	23.7	23.7	23.8	23.8	23.8	23.9	23.9	24.0
Incremental Benefits				-	-	23.7	23.7	23.8	23.8	23.8	23.9	23.9	24.0
Net Incremental Benefits	8%	(12.9)	3%	-	-	16.2	(33.4)	(48.5)	(13.4)	(20.6)	13.9	13.9	13.9
3/5. Crop Technology, SWC and WRD													
Cost Stream													
Investment													
Crop Technology				-	-	33.4	53.6	-	-	56.1	-	-	-
Soil Water Conservation				-	-	-	-	33.7	33.7	135.0	-	-	-
Water Resource Development				-	-	-	46.0	67.0	15.2	139.6	-	-	-
Recurrent													
Crop Technology				-	-	-	0.8	2.2	2.2	2.2	3.6	3.6	3.6
Soil Water Conservation				-	-	-	-	-	4.2	8.4	25.3	25.3	25.3
Water Resource Development				-	-	-	-	6.9	17.0	19.2	40.2	40.2	40.2
Total Costs				-	-	33.4	100.4	109.8	72.2	360.6	69.0	69.0	69.0
Benefit Stream													
Before / Without Project				-	-	-	-	-	115.0	115.0	115.0	115.0	115.0
After / With Project				-	-	-	-	-	343.8	343.8	343.8	343.8	343.8
Incremental Benefits				-	-	-	-	-	228.8	228.8	228.8	228.8	228.8
Net Incremental Benefits	34%	333.9	-65%	-	-	(33.4)	(100.4)	(109.8)	156.6	(131.8)	159.7	159.7	159.7

Source: Cost Benefit Analysis (CBA) Study Estimate Jan 2005.

¹ EIRR = Economic Internal Rate of Return (rate at which NPV equal to zero).

² NPV = Net Present Value of net incremental benefits at 12% (indicative opportunity cost of capital for rural development projects in India).

N/A = Not analysed as EIRR negative.

Table AN12.5.4 GVT - M Pradesh - Jhabua: Village Borwa: Cost Benefit Analysis Development Activity Summary B (Rs'000).

Administration Costs / Development Activities	EIRR 11	NPV 12		Year 1 1999/00	Year 2 2000/01	Year 3 2001/02	Year 4 2002/03	Year 5 2003/04	Year 6 2004/05	Year 7 2005/06	Year 8 2006/07	Year 9 2007/08	Year 10 2008/09
		(10%)	(%)										
6. Livestock													
Cost Stream													
Investment				-	-	-	13.5	6.8	-	28.0	-	-	-
Recurrent				-	-	-	-	4.6	11.3	12.8	26.8	26.8	26.8
Total Costs				-	-	-	13.5	11.4	11.3	40.8	26.8	26.8	26.8
Benefit Stream													
Before / Without Project				-	-	-	-	-	41.3	41.3	41.3	41.3	41.3
After / With Project				-	-	-	-	-	66.7	94.0	121.2	121.2	121.2
Incremental Benefits				-	-	-	-	-	25.3	52.6	79.9	79.9	79.9
Net Incremental Benefits	75%	151.8	-29%	-	-	-	(13.5)	(11.4)	14.0	11.8	53.1	53.1	53.1
7. Forestry													
Cost Stream													
Investment				-	-	-	4.5	18.3	-	18.0	-	-	-
Recurrent				-	-	-	-	0.5	2.3	2.3	4.1	4.1	4.1
Total Costs				-	-	-	4.5	18.8	2.3	20.3	4.1	4.1	4.1
Benefit Stream													
Before / Without Project				-	-	-	-	-	-	-	-	-	-
After / With Project				-	-	-	-	5.9	8.4	10.8	10.8	10.8	10.8
Incremental Benefits				-	-	-	-	5.9	8.4	10.8	10.8	10.8	10.8
Net Incremental Benefits	21%	8.2	-2%	-	-	-	(4.5)	(12.9)	6.1	(9.5)	6.7	6.7	6.7
8. Migration Support													
Cost Stream													
Investment				-	-	-	-	-	-	9.0	-	-	-
Recurrent				-	-	-	-	-	-	-	0.9	0.9	0.9
Total Costs				-	-	-	-	-	-	9.0	0.9	0.9	0.9
Benefit Stream													
Before / Without Project				-	-	-	-	-	-	-	8.3	8.3	8.3
After / With Project				-	-	-	-	-	-	-	20.2	20.2	20.2
Incremental Benefits				-	-	-	-	-	-	-	11.9	11.9	11.9
Net Incremental Benefits	122%	27.9	-5%	-	-	-	-	-	-	(9.0)	11.0	11.0	11.0
Summary													
Cost Stream													
Investment				35.9	227.2	286.3	431.2	523.8	322.1	639.4	-	-	-
Recurrent				-	-	-	1.4	18.1	44.6	54.3	132.9	132.9	132.9
Total Costs				35.9	227.2	286.3	432.6	541.9	366.7	693.7	132.9	132.9	132.9
Benefit Stream													
Before / Without Project				-	-	-	-	-	156.4	156.4	164.7	164.7	164.7
After / With Project				-	-	23.7	23.7	29.7	442.7	472.4	519.9	519.9	520.0
Incremental Benefits				-	-	23.7	23.7	29.7	286.3	316.0	355.2	355.3	355.3
Net Incremental Benefits	5%	(516.0)	100%	(35.9)	(227.2)	(262.6)	(408.9)	(512.2)	(80.4)	(377.7)	222.3	222.3	222.4

Source: Cost Benefit Analysis (CBA) Study Estimate Jan 2005.

Table AN12.5.5

GVT - M Pradesh - Jhabua: Village Borwa: Costs - Financial (Rs'000).

Cost Head / Subhead	1999/00	2000/01	2001/02	2002/03	2003/04	2004/05	2005/06	Totals	
	Actual	Actual	Actual	Actual	Actual	Budget	Budget	(Rs'000)	(%)
A. Administration Costs									
GVT Bhopal (PHQ)	-	60.3	75.4	67.3	52.8	66.8	61.1	383.7	13%
DFIDI Consultancy	35.9	71.4	26.9	63.2	47.4	54.7	39.2	338.6	12%
Jhabua Coordination Office	-	112.9	157.8	124.3	247.5	135.5	125.0	903.0	31%
Total A	35.9	244.5	260.2	254.8	347.7	257.0	225.3	1,625.4	57%
B. Development Costs						80%	60%		
Component A									
1. PPGF	-	-	9.5	23.5	12.5	6.5	12.0	64.0	2%
2. VOD	-	-	8.4	63.1	76.7	34.0	40.2	222.4	8%
3. Crop Technology	-	-	37.1	59.6	-	-	62.4	159.0	6%
4. SWC	-	-	-	-	49.9	49.9	200.0	299.8	10%
5. WRD	-	-	-	68.1	99.3	22.5	206.8	396.8	14%
6. Livestock	-	-	-	15.0	7.5	-	31.1	53.6	2%
7. Forestry	-	-	-	5.0	20.4	-	20.0	45.4	2%
8. Migration Support	-	-	-	-	-	-	10.0	10.0	0%
Subtotal	-	-	54.9	234.3	266.3	112.9	582.5	1,250.9	43%
Other Development Costs									
Subtotal	-	-	-	-	-	-	-	-	-
Total B	-	-	54.9	234.3	266.3	112.9	582.5	1,250.9	43%
Total A + B	35.9	244.5	315.1	489.1	614.0	369.9	807.8	2,876.3	100%
GVT	-	173.1	280.2	413.3	561.1	311.7	758.2	2,497.7	87%
DFIDI	35.9	71.4	26.9	63.2	47.4	54.7	39.2	338.6	12%
Community	-	-	6.9	11.2	4.7	2.5	9.7	34.9	1%
Government	-	-	1.0	1.4	0.8	1.0	0.8	5.0	0%

Source:

Cost Benefit Analysis (CBA) Study Estimate Jan 2005.

DFIDI = Department for International Development (India).

PPGF = Participatory Planning and Group Formation.

VOD = Village Organisation and Development.

SWC = Soil and Water Conservation.

WRD = Water Resource Development.

Table AN12.5.5

GVT - M Pradesh - Jhabua: Village Borwa: Costs - Economic (Rs'000).

Cost Head / Subhead	Conversion Factors		1999/00 Actual	2000/01 Actual	2001/02 Actual	2002/03 Actual	2003/04 Actual	2004/05 Budget	2005/06 Budget	Totals	
	CF	SCF								(Rs'000)	(%)
A. Administration Costs											
GVT Bhopal (PHQ)	0.90	1.00	-	54.2	67.9	60.6	47.5	60.1	55.0	345.4	14%
DFIDI Consultancy	1.00	1.00	35.9	71.4	26.9	63.2	47.4	54.7	39.2	338.6	14%
Jhabua Coordination Office	0.90	1.00	-	101.6	142.0	111.9	222.7	122.0	112.5	812.7	33%
Total A			35.9	227.2	236.8	235.6	317.7	236.8	206.7	1,496.7	61%
B. Development Costs											
Component A											
1. PPGF	0.90	1.00	-	-	8.6	21.2	11.3	5.9	10.8	57.6	2%
2. VOD	0.90	1.00	-	-	7.5	56.8	69.0	30.6	36.2	200.1	8%
3. Crop Technology	0.90	1.00	-	-	33.4	53.6	-	-	56.1	143.1	6%
4. SWC	0.90	0.75	-	-	-	-	33.7	33.7	135.0	202.4	8%
5. WRD	0.90	0.75	-	-	-	46.0	67.0	15.2	139.6	267.8	11%
6. Livestock	0.90	1.00	-	-	-	13.5	6.8	-	28.0	48.2	2%
7. Forestry	0.90	1.00	-	-	-	4.5	18.3	-	18.0	40.8	2%
8. Migration Support	0.90	1.00	-	-	-	-	-	-	9.0	9.0	0%
Subtotal			-	-	49.4	195.5	206.1	85.3	432.7	969.1	39%
Other Development Costs											
Subtotal	0.90	1.00	-	-	-	-	-	-	-	-	0%
Total B			-	-	49.4	195.5	206.1	85.3	432.7	969.1	39%
Total A + B			35.9	227.2	286.3	431.2	523.8	322.1	639.4	2,465.8	100%
GVT			-	-	-	-	-	-	-	N/A	
DFIDI			-	-	-	-	-	-	-	N/A	
Community			-	-	-	-	-	-	-	N/A	
Government			-	-	-	-	-	-	-	N/A	

Source:

Cost Benefit Analysis (CBA) Study - field verification.

DFIDI = Department for International Development (India).

PPGF = Participatory Planning and Group Formation.

VOD = Village Organisation and Development.

SWC = Soil and Water Conservation.

WRD = Water Resource Development.

Table AN12.5.6

GVT - M Pradesh - Jhabua: Village Borwa: VOD Household Assumptions.

Without \ With Project Village Organisation and Development	Units	Assumptions			Benefits		
					Year 1 (Rs)	Year 2 (Rs)	Year 3 (Rs)
Development Activity: Village Organisation and Development							
Before / Without Project Situation:							
A. Self Help Groups (SHGs) Assumption	Sum	Zero	Zero	Zero	-	-	-
B. Drudgery Reduction Assumption	Sum	Zero	Zero	Zero	-	-	-
Total Without Project Benefits					-	-	-
After / With Project Situation:							
A. Self Help Groups (SHGs) Assumptions							
Average Saving / Household	Rs	292					
Households / Village	No	36					
Present Group Deposits	Rs'000	10.5			10.5	10.8	11.1
Annual Savings Increase	%	3%					
Deposits on Loan Savings	%	75%					
SHG Interest Income	% / Year	15%					
Assumed Benefit	Rs'000				1.2	1.2	1.3
B. Drudgery Reduction Assumptions							
Hours Saved / Day / Household	No	1.0					
Number of Days / Year / Household	No	200					
Days / Year / Household (8hrs/day)	No	25.0					
Households / Village	No	36					
Day Equivalent / Village	No	900					
Economic Value per Day	(Rs/day)	25					
Assumed Benefit	Rs'000				22.5	22.5	22.5
Total With Project Benefits	Rs'000				23.7	23.7	23.8
Incremental Benefits	Rs'000				23.7	23.7	23.8

Source:

Cost Benefit Analysis (CBA) Study Estimate Jan 2005.

SWC = Soil and Water Conservation.

Participating households per village: Borwa

Table AN12.5.6

GVT - M Pradesh - Jhabua: Village Borwa: Incremental VOD Benefit Stream (Rs'000).

Without \ With Project Village Organisation and Development	Benefit Streams (Rs '000)									
	Year 1 1999/00	Year 2 2000/01	Year 3 2001/02	Year 4 2002/03	Year 5 2003/04	Year 6 2004/05	Year 7 2005/06	Year 8 2006/07	Year 9 2007/08	Year 10 2008/09
Development Activity: Village Organisation and Development										
Before / Without Project Situation:										
A. Self Help Groups (SHGs) Assumption										
B. Drudgery Reduction Assumption										
Total Without Project Benefits	-	-	-	-	-	-	-	-	-	-
After / With Project Situation:										
A. Self Help Groups (SHGs) Assumptions										
Average Saving / Household Households / Village										
Present Group Deposits Annual Savings Increase	-	-	10.5	10.8	11.1	11.5	11.8	12.2	12.5	12.9
Deposits on Loan Savings SHG Interest Income										
Assumed Benefit	-	-	1.2	1.2	1.3	1.3	1.3	1.4	1.4	1.5
B. Drudgery Reduction Assumptions										
Hours Saved / Day / Household Number of Days / Year / Household Days / Year / Household (8hrs/day) Households / Village Day Equivalent / Village Economic Value per Day										
Assumed Benefit	-	-	22.5	22.5	22.5	22.5	22.5	22.5	22.5	22.5
Total With Project Benefits	-	-	23.7	23.7	23.8	23.8	23.8	23.9	23.9	24.0
Incremental Benefits	-	-	23.7	23.7	23.8	23.8	23.8	23.9	23.9	24.0

Source:

SWC = Soil and Water Conservation.
Participating households per village: Borwa

Cost Benefit Analysis (CBA) Study Estimate Jan 2005.

Table AN12.5.7

GVT - M Pradesh - Jhabua: Village Borwa: Household Crop Net Margin Assumptions.

Without \ With Project Crop Technology, SWC and WRD	Units	Assumptions			Benefits		
					Year 1 (Rs/HH)	Year 2 (Rs/HH)	Year 3 (Rs/HH)
Development Activity: Crop Technology, SWC and WRD							
Before / Without Project Situation: Assumptions							
Households (HHs)	No	36					
Crop Adoption Assumptions		100%	100%	100%			
Kharif Crop Net Margin	Rs/HH				2,582.5	2,582.5	2,582.5
Rabi Crop Net Margin	Rs/HH				612.9	612.9	612.9
Total Without Project Benefits	Rs/HH				3,195.3	3,195.3	3,195.3
After / With Project Situation: Assumptions							
Households (HHs)	No	36					
Crop Adoption Assumptions		100%	100%	100%			
Kharif Crop Net Margin	Rs/HH				8,020.7	8,020.7	8,020.7
Rabi Crop Net Margin	Rs/HH				1,529.1	1,529.1	1,529.1
Total With Project Benefits	Rs/HH				9,549.8	9,549.8	9,549.8
Incremental Benefits	Rs/HH				6,354.5	6,354.5	6,354.5

Source:

Cost Benefit Analysis (CBA) Study Estimate Jan 2005.

Table AN12.5.7

GVT - M Pradesh - Jhabua: Village Borwa: Incremental Crop Benefit Stream (Rs'000).

Without \ With Project Crop Technology, SWC and WRD	Benefit Streams (Rs '000)									
	Year 1 1999/00	Year 2 2000/01	Year 3 2001/02	Year 4 2002/03	Year 5 2003/04	Year 6 2004/05	Year 7 2005/06	Year 8 2006/07	Year 9 2007/08	Year 10 2008/09
Development Activity: Crop Technology, SWC and WRD										
Before / Without Project Situation: Assumptions										
Households (HHs)										
Crop Adoption Assumptions										
Kharif Crop Net Margin	-	-	-	-	-	93.0	93.0	93.0	93.0	93.0
Rabi Crop Net Margin	-	-	-	-	-	22.1	22.1	22.1	22.1	22.1
Total Without Project Benefits	-	-	-	-	-	115.0	115.0	115.0	115.0	115.0
After / With Project Situation: Assumptions										
Households (HHs)										
Crop Adoption Assumptions										
Kharif Crop Net Margin	-	-	-	-	-	288.7	288.7	288.7	288.7	288.7
Rabi Crop Net Margin	-	-	-	-	-	55.0	55.0	55.0	55.0	55.0
Total With Project Benefits	-	-	-	-	-	343.8	343.8	343.8	343.8	343.8
Incremental Benefits	-	-	-	-	-	228.8	228.8	228.8	228.8	228.8

Source:

Cost Benefit Analysis (CBA) Study Estimate Jan 2005.

Table AN12.5.8

GVT - M Pradesh - Jhabua: Village Borwa: Household Livestock Net Margin Assumptions.

Without \ With Project Kharif \ Rabi Livestock	Units	Assumptions			Benefits		
					Year 1 (Rs)	Year 2 (Rs)	Year 3 (Rs)
Development Activity: Livestock							
Before / Without Project Situation: Assumptions							
Households (HHS)	No	36					
Annual Livestock Net Margin	Rs/HH						
Total Without Project Benefits					1,148.0	1,148.0	1,148.0
After / With Project Situation:							
Development Activity: Assumptions							
Households (HHS)	No	36					
Adoption Assumptions	Percent	55%	78%	100%			
Annual Livestock Net Margin	Rs/HH						
Total With Project Benefits					1,852.1	2,609.8	3,367.5
Incremental Benefits	Rs/HH				704.1	1,461.8	2,219.5

Source:

Cost Benefit Analysis (CBA) Study Estimate Jan 2005.

Table AN12.5.8

GVT - M Pradesh - Jhabua: Village Borwa: Incremental Livestock Benefit Stream (Rs'000).

Without \ With Project Kharif \ Rabi Livestock	Benefit Streams (Rs '000)									
	Year 1 1999/00	Year 2 2000/01	Year 3 2001/02	Year 4 2002/03	Year 5 2003/04	Year 6 2004/05	Year 7 2005/06	Year 8 2006/07	Year 9 2007/08	Year 10 2008/09
Development Activity: Livestock										
Before / Without Project Situation: Assumptions										
Households (HHs)										
Annual Livestock Net Margin										
Total Without Project Benefits	-	-	-	-	-	41.3	41.3	41.3	41.3	41.3
After / With Project Situation:										
Development Activity: Assumptions										
Households (HHs)										
Adoption Assumptions										
Annual Livestock Net Margin										
Total With Project Benefits	-	-	-	-	-	66.7	94.0	121.2	121.2	121.2
Incremental Benefits	-	-	-	-	-	25.3	52.6	79.9	79.9	79.9

Source:

Cost Benefit Analysis (CBA) Study Estimate Jan 2005.

Table AN12.5.9

GVT - M Pradesh - Jhabua: Village Borwa: Forestry Benefit Assumptions.

Without \ With Project Kharif \ Rabi Forestry	Units	Assumptions			Benefits		
					Year 1 (Rs)	Year 2 (Rs)	Year 3 (Rs)
Development Activity: Forestry							
Before / Without Project Situation: Assumptions							
Households (HHs)	No	36					
Annual Forestry Net Margin	Rs/HH				-	-	-
Total Without Project Benefits							
After / With Project Situation: Assumptions							
Households (HHs)	No	36					
Adoption Assumptions	Percent	55%	78%	100%			
Annual Forestry Net Margin	Rs/HH				165.0	234.0	300.0
Total With Project Benefits							
Incremental Benefits	Rs/HH				165.0	234.0	300.0

Source:

Cost Benefit Analysis (CBA) Study Estimate Jan 2005.

Table AN12.5.9

GVT - M Pradesh - Jhabua: Village Borwa: Incremental Forestry Benefit Stream (Rs'000).

Without \ With Project Kharif \ Rabi Forestry	Benefit Streams (Rs '000)									
	Year 1 1999/00	Year 2 2000/01	Year 3 2001/02	Year 4 2002/03	Year 5 2003/04	Year 6 2004/05	Year 7 2005/06	Year 8 2006/07	Year 9 2007/08	Year 10 2008/09
Development Activity: Forestry										
Before / Without Project Situation: Assumptions										
Households (HHs)										
Annual Forestry Net Margin										
Total Without Project Benefits	-	-	-	-	-	-	-	-	-	-
After / With Project Situation: Assumptions										
Households (HHs)										
Adoption Assumptions										
Annual Forestry Net Margin										
Total With Project Benefits	-	-	-	-	5.9	8.4	10.8	10.8	10.8	10.8
Incremental Benefits	-	-	-	5.9	8.4	10.8	10.8	10.8	10.8	10.8

Source:

Cost Benefit Analysis (CBA) Study Estimate Jan 2005.

Table AN12.5.10

GVT - M Pradesh - Jhabua: Village Borwa: Migration Support Benefit Assumptions.

Without \ With Project	Assumptions				Benefits		
					Year 1 (Rs)	Year 2 (Rs)	Year 3 (Rs)
Development Activity: Migration Support							
Before / Without Project Situation: Assumptions							
Economic Value per Day	Rs/day	16.0					
Days / Month / Household	No	18					
Economic Value per Month	Rs/month	288.0					
Months Migration / Year	Months	4.0					
Economic Value per Household	Rs/HH	1,152.0					
Households per Village	No	36					
Households per Village Migrating	Percent	20%					
Total Without Project Benefits	Rs/Village				8.3	8.3	8.3
After / With Project Situation: Assumptions							
Economic Value per Day \1	Rs/day	16.0	40%	22.4			
Days / Month / Household	No	18	20%	22.0			
Economic Value per Month	Rs/month	288.0		492.8			
Months Migration / Year	Months	4.0	-20%	3.2			
Economic Value per Household	Rs/HH	1,152.0		1,577.0			
Households per Village	No	36		80.0			
Households per Village Migrating	Percent	20%	-20%	16%			
Subtotal Migration Income	Rs/Village				20.2	20.2	20.2
Other Income	Sum (Rs)	-	-	-	-	-	-
Total With Project Benefits	Rs/Village				20.2	20.2	20.2
Incremental Benefits	Rs/Village				11.9	11.9	11.9

Source:

Cost Benefit Analysis (CBA) Study Estimate Jan 2005.

- 1\ Financial Wages (Rs/day):
Skill Labour - Rs 160
Casual Labour :
Male - Rs 40
Female - Rs 30

Table AN12.5.10

GVT - M Pradesh - Jhabua: Village Borwa: Incremental Migration Support Benefit Stream (Rs'000).

Without \ With Project	Benefit Streams (Rs '000)										
	Year 1 1999/00	Year 2 2000/01	Year 3 2001/02	Year 4 2002/03	Year 5 2003/04	Year 6 2004/05	Year 7 2005/06	Year 8 2006/07	Year 9 2007/08	Year 10 2008/09	
Development Activity: Migration Support Before / Without Project Situation: Assumptions Economic Value per Day Days / Month / Household Economic Value per Month Months Migration / Year Economic Value per Household Households per Village Households per Village Migrating Total Without Project Benefits	-	-	-	-	-	-	-	-	8.3	8.3	8.3
After / With Project Situation: Assumptions Economic Value per Day \1 Days / Month / Household Economic Value per Month Months Migration / Year Economic Value per Household Households per Village Households per Village Migrating Subtotal Migration Income Other Income Total With Project Benefits Incremental Benefits	-	-	-	-	-	-	-	-	20.2	20.2	20.2
	-	-	-	-	-	-	-	-	-	-	-
	-	-	-	-	-	-	-	-	20.2	20.2	20.2
	-	-	-	-	-	-	-	-	11.9	11.9	11.9

Source:

Cost Benefit Analysis (CBA) Study Estimate Jan 2005.

- 1\ Financial Wages (Rs/day):
 Skill Labour - Rs 160
 Casual Labour :
 Male - Rs 40
 Female - Rs 30

Table AN12.5.11 GVT - M Pradesh - Jhabua: Village Borwa: Weighted Household Crop Net Margin Summary (Rs/Household).

Item	WBR (%)	Before / Without Project			After / With Project			Increment		
		Khalif	Rabi	Total	Khalif	Rabi	Total	Khalif	Rabi	Total
Phase II										
Well Being Ranking - Very Poor Household Net Margin (Rs)	8.0%	834.6	102.5	937.1	1,849.8	1,067.8	2,917.6	1,015.2	965.3	1,980.5
Well Being Ranking - Poor Household Net Margin (Rs)	31.0%	637.7	-	637.7	4,803.0	220.7	5,023.7	4,165.3	220.7	4,386.0
Well Being Ranking - Moderate Household Net Margin (Rs)	28.0%	994.0	89.3	1,083.3	3,711.4	2,508.3	6,219.6	2,717.4	2,419.0	5,136.4
Well Being Ranking - Better Off Household Net Margin (Rs)	33.0%	6,180.9	1,756.7	7,937.5	16,195.9	2,039.3	18,235.2	10,015.0	282.7	10,297.7
Well Being Ranking - Weighted Household Net Margin (Rs)	100.0%	2,582.5	612.9	3,195.3	8,020.7	1,529.1	9,549.8	5,438.3	916.2	6,354.5
Phase I \1										
Well Being Ranking - Very Poor Household Net Margin (Rs)	8.0%	436.3	267.5	703.8	3,866.5	1,668.8	5,535.3	3,430.3	1,401.3	4,831.5
Well Being Ranking - Poor Household Net Margin (Rs)	31.0%	485.8	657.5	1,143.3	10,136.0	5,690.3	15,826.3	9,650.3	5,032.8	14,683.0
Well Being Ranking - Moderate Household Net Margin (Rs)	28.0%	986.3	3,385.0	4,371.3	9,457.5	5,195.0	14,652.5	8,471.3	1,810.0	10,281.3
Well Being Ranking - Better Off Household Net Margin (Rs)	33.0%	2,778.0	937.0	3,715.0	4,915.0	9,560.0	14,475.0	2,137.0	8,623.0	10,760.0
Well Being Ranking - Weighted Household Net Margin (Rs)	100.0%	1,378.4	1,482.2	2,860.6	7,721.5	6,506.9	14,228.4	6,343.2	5,024.6	11,367.8

Source: Study of Impact of WIRFP on Net Incomes of Target Households, Jan 2004.

WBR = GVT Household Well Being Ranking. Survey figures adjusted to Village Profile WBR.

\1 GVT - Madhya Pradesh - Phase I: Village Naganwat Choti: Weighted Household Livestock Net Margin Summary.

Table AN12.5.12 GVT - M Pradesh - Jhabua: Village Borwa: Weighted Household Crop Net Margin Sensitivity Analysis (Rs/Household).

Item	EIRR	Before / Without Project			After / With Project			Increment		
		Khalif	Rabi	Total	Khalif	Rabi	Total	Khalif	Rabi	Total
Development Activity: Crop Technology, SWC and WRD										
Weighted Net Margin (Phase II)										
Household Net Margin (Rs)		2,582.5	612.9	3,195.3	8,020.7	1,529.1	9,549.8	5,438.3	916.2	6,354.5
Incremental Benefit (Phase II / Phase I)										56%
Base Case Assumptions										
Household Net Margin (Rs)		2,582.5	612.9	3,195.3	8,020.7	1,529.1	9,549.8	5,438.3	916.2	6,354.5
Incremental Benefit (Phase II / Phase I)										56%
Sensitivity Increase (%)	0%									
Development Activity	34%									
Overall Village	5%									
Sensitivity Assumptions										
Household Net Margin (Rs)		2,582.5	612.9	3,195.3	11,229.0	2,140.8	13,369.8	8,646.6	1,527.9	10,174.4
Incremental Benefit (Phase II / Phase I)										90%
Sensitivity Increase (%)	0%									
Development Activity	63%									
Overall Village	12%									
Weighted Net Margin (Phase I)										
Household Net Margin (Rs)		1,378.4	1,482.2	2,860.6	7,721.5	6,506.9	14,228.4	6,343.2	5,024.6	11,367.8

Source: Study of Impact of WIRFP on Net Incomes of Target Households, Jan 2004.
EIRR = Economic Internal Rate of Return (rate at which NPV equal to zero).

Table AN12.5.13 GVT - M Pradesh - Jhabua: Village Borwa: Weighted Household Livestock Net Margin Summary (Rs/Household).

Well Being Ranking	Weight (%)	Before / Without Project		After / With Project		Increment \1	
		Herd Value	Net Margin	Herd Value	Net Margin	Herd Value	Net Margin
Phase I - Well Being Ranking (WBR) \1							
Madhya Pradesh - WBR Weighted Data							
Very Poor	8.0%						
Average		580	(185.0)	5,650	412.5	474	597.5
Poor	31.0%						
Average		2,350	982.5	8,250	2,141.0	1,180	1,158.5
Moderate	28.0%						
Average		14,700	6,730.0	1,900	2,820.0	1,900	(3,910.0)
Better Off	33.0%						
Average		15,580	3,000.0	14,600	10,790.0	(196)	7,790.0
Phase I - WBR Weighted Data	100.0%	10,032	3,164.2	8,360	5,047.0	871	1,882.8
Phase II - Well Being Ranking (WBR)							
Very Poor	8.0%						
Average		5,756	149.2	10,970	1,446.4	1,043	1,297.2
Poor	31.0%						
Average		13,128	852.2	25,979	3,008.8	2,570	2,156.8
Moderate	28.0%						
Average		13,525	4,035.1	27,020	5,249.5	2,699	1,214.4
Better Off	33.0%						
Average		12,700	(781.7)	41,873	2,573.3	5,835	3,355.0
Phase II - WBR Weighted Data	100.0%	12,508	1,148.0	30,315	3,367.5	3,561	2,219.6

Source: Study of Impact of WIRFP on Net Incomes of Target Households, Jan 2004.

WBR = GVT Household Well Being Ranking.

Survey figures adjusted to Village Profile WBR.

\1 GVT - Madhya Pradesh - Phase I: Village Naganwat Choti: Weighted Household Livestock Net Margin Summary.

WIRFP - Phase II - Cost Benefit Analysis Study

Tables AN12.0 Individual Village Cost Benefit Analysis

Tables AN12.6 GVT - Madhya Pradesh - Jhabua: Village Chamjhar: Village Profile.

- Table AN12.6.1 GVT - M Pradesh - Jhabua: Village Chamjhar: Village Profile.
- Table AN12.6.2 GVT - M Pradesh - Jhabua: Village Chamjhar: Cost Benefit Analysis Summary (Rs'000).
- Table AN12.6.3 GVT - M Pradesh - Jhabua: Village Chamjhar: Cost Benefit Analysis Development Activity Summary A (Rs'000).
- Table AN12.6.4 GVT - M Pradesh - Jhabua: Village Chamjhar: Cost Benefit Analysis Development Activity Summary B (Rs'000).
- Table AN12.6.5 GVT - M Pradesh - Jhabua: Village Chemjhar - Costs - Financial (Rs'000).
GVT - M Pradesh - Jhabua: Village Chemjhar - Costs - Economic (Rs'000).
- Table AN12.6.6 GVT - M Pradesh - Jhabua: Village Chamjhar: VOD Household Assumptions.
GVT - M Pradesh - Jhabua: Village Chamjhar: Incremental VOD Benefit Stream (Rs'000).
- Table AN12.6.7 GVT - M Pradesh - Jhabua: Village Chamjhar: Household Crop Net Margin Assumptions.
GVT - M Pradesh - Jhabua: Village Chamjhar: Incremental Crop Benefit Stream (Rs'000).
- Table AN12.6.8 GVT - M Pradesh - Jhabua: Village Chamjhar: Household Livestock Net Margin Assumptions.
GVT - M Pradesh - Jhabua: Village Chamjhar: Incremental Livestock Benefit Stream (Rs'000).
- Table AN12.6.9 GVT - M Pradesh - Jhabua: Village Chamjhar: Forestry Benefit Assumptions.
GVT - M Pradesh - Jhabua: Village Chamjhar: Incremental Forestry Benefit Stream (Rs'000).
- Table AN12.6.10 GVT - M Pradesh - Jhabua: Village Chamjhar: Migration Support Benefit Assumptions.
GVT - M Pradesh - Jhabua: Village Chamjhar: Incremental Migration Support Benefit Stream (Rs'000).
- Table AN12.6.11 GVT - M Pradesh - Jhabua: Village Chamjhar: Weighted Household Crop Net Margin Summary (Rs/Household).
- Table AN12.6.12 GVT - M Pradesh - Jhabua: Village Chamjhar: Weighted Household Crop Net Margin Sensitivity Analysis (Rs/Household).
- Table AN12.6.13 GVT - M Pradesh - Jhabua: Village Chamjhar: Weighted Household Livestock Net Margin Summary (Rs/Household).

Table AN12.6.1 GVT - M Pradesh - Jhabua: Village Chamjhar: Village Profile.

Village Profile \1			
A. Background			
Village Name	Chamjhar		
District	Jhabua		
State	M P		
B. Participatory Planning Process (PPP)			
Village entry	Apr-00		
PRA	Nov-00		
CPA	Dec-00		
C. Infrastructure			
Hand Pumps (no)	8		
Wells (no)	7		
Linked by Road	5 km		
Electrification	Yes		
School	Primary		
D. Demographic Data			
Households (no)	94		
Participating Households	49		
Population (Adults)	623		
Adults:			
Male	322		
Female	301		
Children:			
Boys	N/A		
Girls	N/A		
E. Well Being Ranking (No Households)			
Very Poor	13	25.0%	
Poor	13	25.0%	
Moderate	16	30.8%	
Better Off	10	19.2%	
Total	52	100%	
F. Land Resource (ha)			
Total Area	291		
Revenue Land	159		
Forest Area - F	61		
Pasture Land	8		
Arable Land	63		
	291		
G. Livestock			
H. Self Help Groups (No Households)			
1. Group 1	22		
2. Group 2	16		
3. Group 3	11		
4. Group 4	20		
5. Group 5	10		
6. Group 6	-		
	79		

Source: GVT Jhabua Coordination Office - Madhya Pradesh.

\1 Subject to final adjustment following consolidation exercise prior to Annual Review Meeting (ARM) in Feb 2005.

Table AN12.6.2 GVT - M Pradesh - Jhabua: Village Chamjhar: Cost Benefit Analysis Summary (Rs'000).

Administration Costs / Development Activity	EIRR ¹	NPV ²		Year 1 1999/00	Year 2 2000/01	Year 3 2001/02	Year 4 2002/03	Year 5 2003/04	Year 6 2004/05	Year 7 2005/06	Year 8 2006/07	Year 9 2007/08	Year 10 2008/09
		(10%)	(%)										
A. Administration Costs													
Total A	N/A	(985)	52%	35.9	227.2	236.8	235.6	317.7	236.8	206.7	20.7	20.7	20.7
B. Development Intervention Component A													
1. PPGF													
Net Incremental Benefits	N/A	(40)	2%	-	(13.5)	(12.5)	(11.4)	(2.5)	(4.1)	(11.8)	(1.3)	(1.3)	(1.3)
2. VOD													
Net Incremental Benefits	19%	49	-3%	-	(14.6)	(28.7)	(73.7)	2.0	25.7	16.5	36.6	36.6	36.6
3/5. Crop Technology, SWC and WRD													
Net Incremental Benefits	N/A	(1,348)	71%	-	(108.8)	(713.0)	(303.1)	(21.8)	(732.8)	(98.9)	(45.9)	(45.9)	(45.9)
6. Livestock													
Net Incremental Benefits	61%	408	-22%	-	-	(27.2)	(28.0)	(18.1)	30.5	68.4	140.6	140.6	140.6
7. Forestry													
Net Incremental Benefits	37%	30	-2%	-	-	(2.8)	(21.5)	7.9	12.4	3.1	11.5	11.5	11.5
8. Migration Support													
Net Incremental Benefits	N/A	(2)	0%	-	-	-	-	-	(1.9)	(0.2)	(0.2)	(0.2)	(0.2)
Summary													
Net Incremental Benefits	N/A	(1,888)	100%	(35.9)	(364.1)	(1,021.0)	(673.4)	(350.1)	(907.0)	(229.6)	120.6	120.7	120.7
Sensitivity Analysis													
Analysis Period													
12 Years	N/A	(2,042)											
20 Years (Base Case)	N/A	(1,888)											
25 Years	-4%	(1,843)											
30 Years	-2%	(1,818)											
Costs - Administration													
Investment Costs Decreased by 20 percent	N/A	(1,691)											
Costs - Administration and Development													
Recurrent Costs Decreased by 20 percent	N/A	(2,167)											
Benefits Crop, SWC and WRD													
Crop Benefits Increased by 20 percent	-2%	(1,478)											
Livestock Benefits Increased by 20 percent	-5%	(1,732)											

Source: Cost Benefit Analysis (CBA) Study Estimate Jan 2005.

¹ EIRR = Economic Internal Rate of Return (rate at which NPV equal to zero).

² NPV = Net Present Value of net incremental benefits at 12% (indicative opportunity cost of capital for rural development projects in India).

N/A = Not analysed as EIRR negative.

Table AN12.6.3 GVT - M Pradesh - Jhabua: Village Chamjhar: Cost Benefit Analysis Development Activity Summary A (Rs'000).

Administration Costs / Development Activity	EIRR ¹	NPV ²		Year 1 1999/00	Year 2 2000/01	Year 3 2001/02	Year 4 2002/03	Year 5 2003/04	Year 6 2004/05	Year 7 2005/06	Year 8 2006/07	Year 9 2007/08	Year 10 2008/09
		(10%)	(%)										
A. Administration Costs													
Investment				35.9	227.2	236.8	235.6	317.7	236.8	206.7	-	-	-
Recurrent				-	-	-	-	-	-	-	20.7	20.7	20.7
Total (A)	N/A	(985)	52%	35.9	227.2	236.8	235.6	317.7	236.8	206.7	20.7	20.7	20.7
B. Development Intervention Component A													
1. PPGF													
Cost Stream													
Investment				-	13.5	12.2	10.8	1.6	3.2	10.8	-	-	-
Recurrent				-	-	0.3	0.6	0.9	1.0	1.0	1.3	1.3	1.3
Total Costs				-	13.5	12.5	11.4	2.5	4.1	11.8	1.3	1.3	1.3
Benefit Stream													
Before / Without Project				-	-	-	-	-	-	-	-	-	-
After / With Project				-	-	-	-	-	-	-	-	-	-
Incremental Benefits				-	-	-	-	-	-	-	-	-	-
Net Incremental Benefits	N/A	(40)	2%	-	(13.5)	(12.5)	(11.4)	(2.5)	(4.1)	(11.8)	(1.3)	(1.3)	(1.3)
2. VOD													
Cost Stream													
Investment				-	14.6	78.5	119.7	38.0	12.4	21.1	-	-	-
Recurrent				-	-	0.7	4.7	10.6	12.5	13.2	14.2	14.2	14.2
Total Costs				-	14.6	79.2	124.3	48.6	24.9	34.2	14.2	14.2	14.2
Benefit Stream													
Before / Without Project				-	-	-	-	-	-	-	-	-	-
After / With Project				-	-	50.6	50.6	50.6	50.7	50.7	50.8	50.8	50.9
Incremental Benefits				-	-	50.6	50.6	50.6	50.7	50.7	50.8	50.8	50.9
Net Incremental Benefits	19%	49	-3%	-	(14.6)	(28.7)	(73.7)	2.0	25.7	16.5	36.6	36.6	36.6
3/5. Crop Technology, SWC and WRD													
Cost Stream													
Investment													
Crop Technology				-	-	29.6	53.4	27.3	8.2	9.4	-	-	-
Soil Water Conservation				-	108.8	432.8	296.9	-	68.9	41.8	-	-	-
Water Resource Development				-	-	237.1	100.4	88.5	735.8	8.6	-	-	-
Recurrent													
Crop Technology				-	-	-	0.7	2.1	2.8	3.0	3.2	3.2	3.2
Soil Water Conservation				-	-	13.6	67.7	104.8	104.8	113.4	118.6	118.6	118.6
Water Resource Development				-	-	-	35.6	50.6	63.9	174.3	175.5	175.5	175.5
Total Costs				-	108.8	713.0	554.7	273.3	984.3	350.4	297.4	297.4	297.4
Benefit Stream													
Before / Without Project				-	-	-	243.2	243.2	243.2	243.2	243.2	243.2	243.2
After / With Project				-	-	-	494.7	494.7	494.7	494.7	494.7	494.7	494.7
Incremental Benefits				-	-	-	251.5	251.5	251.5	251.5	251.5	251.5	251.5
Net Incremental Benefits	N/A	(1,348)	71%	-	(108.8)	(713.0)	(303.1)	(21.8)	(732.8)	(98.9)	(45.9)	(45.9)	(45.9)

Source: Cost Benefit Analysis (CBA) Study Estimate Jan 2005.

¹ EIRR = Economic Internal Rate of Return (rate at which NPV equal to zero).

² NPV = Net Present Value of net incremental benefits at 12% (indicative opportunity cost of capital for rural development projects in India).

N/A = Not analysed as EIRR negative.

Table AN12.6.4 GVT - M Pradesh - Jhabua: Village Chamjhar: Cost Benefit Analysis Development Activity Summary B (Rs'000).

Administration Costs / Development Activity	EIRR \1	NPV \2		Year 1 1999/00	Year 2 2000/01	Year 3 2001/02	Year 4 2002/03	Year 5 2003/04	Year 6 2004/05	Year 7 2005/06	Year 8 2006/07	Year 9 2007/08	Year 10 2008/09
		(10%)	(%)										
6. Livestock													
Cost Stream													
Investment				-	-	27.2	25.3	12.9	-	18.0	-	-	-
Recurrent				-	-	-	2.7	5.2	6.5	6.5	8.3	8.3	8.3
Total Costs				-	-	27.2	28.0	18.1	6.5	24.5	8.3	8.3	8.3
Benefit Stream													
Before / Without Project				-	-	-	-	-	99.8	99.8	99.8	99.8	99.8
After / With Project				-	-	-	-	-	136.8	192.8	248.8	248.8	248.8
Incremental Benefits				-	-	-	-	-	37.0	93.0	149.0	149.0	149.0
Net Incremental Benefits	61%	408	-22%	-	-	(27.2)	(28.0)	(18.1)	30.5	68.4	140.6	140.6	140.6
7. Forestry													
Cost Stream													
Investment				-	-	2.8	29.9	1.1	-	9.3	-	-	-
Recurrent				-	-	-	0.3	3.3	3.4	4.3	4.3	4.3	4.3
Total Costs				-	-	2.8	30.1	4.4	3.4	12.7	4.3	4.3	4.3
Benefit Stream													
Before / Without Project				-	-	-	-	-	-	-	-	-	-
After / With Project				-	-	-	8.7	12.3	15.8	15.8	15.8	15.8	15.8
Incremental Benefits				-	-	-	8.7	12.3	15.8	15.8	15.8	15.8	15.8
Net Incremental Benefits	37%	30	-2%	-	-	(2.8)	(21.5)	7.9	12.4	3.1	11.5	11.5	11.5
8. Migration Support													
Cost Stream													
Investment				-	-	-	-	-	1.9	-	-	-	-
Recurrent				-	-	-	-	-	-	0.2	0.2	0.2	0.2
Total Costs				-	-	-	-	-	1.9	0.2	0.2	0.2	0.2
Benefit Stream													
Before / Without Project				-	-	-	-	-	-	-	-	-	-
After / With Project				-	-	-	-	-	-	-	-	-	-
Incremental Benefits				-	-	-	-	-	-	-	-	-	-
Net Incremental Benefits	N/A	(2)	0%	-	-	-	-	-	(1.9)	(0.2)	(0.2)	(0.2)	(0.2)
Summary													
Cost Stream													
Investment				35.9	364.1	1,056.9	871.9	487.0	1,067.1	325.7	-	-	-
Recurrent				-	-	14.7	112.3	177.6	194.9	314.9	346.4	346.4	346.4
Total Costs				35.9	364.1	1,071.6	984.2	664.6	1,262.0	640.6	346.4	346.4	346.4
Benefit Stream													
Before / Without Project				-	-	-	243.2	243.2	343.0	343.0	343.0	343.0	343.0
After / With Project				-	-	50.6	554.0	557.7	698.0	754.0	810.1	810.1	810.1
Incremental Benefits				-	-	50.6	310.8	314.5	355.0	411.0	467.0	467.1	467.1
Net Incremental Benefits	N/A	(1,888)	100%	(35.9)	(364.1)	(1,021.0)	(673.4)	(350.1)	(907.0)	(229.6)	120.6	120.7	120.7

Source: Cost Benefit Analysis (CBA) Study Estimate Jan 2005.

Table AN12.6.5

GVT - M Pradesh - Jhabua: Village Chemjhar - Costs - Financial (Rs'000).

Cost Head / Subhead	1999/00	2000/01	2001/02	2002/03	2003/04	2004/05	2005/06	Totals	
	Actual	Actual	Actual	Actual	Actual	Budget	Budget	(Rs'000)	(%)
A. Administration Costs									
GVT Bhopal (PHQ)	-	60.3	75.4	67.3	52.8	66.8	61.1	383.7	7%
DFIDI Consultancy	35.9	71.4	26.9	63.2	47.4	54.7	39.2	338.6	6%
Jhabua Coordination Office	-	112.9	157.8	124.3	247.5	135.5	125.0	903.0	17%
Total A	35.9	244.5	260.2	254.8	347.7	257.0	225.3	1,625.4	30%
B. Development Costs									
Component A									
1. PPGF	-	15.0	13.5	12.0	1.8	3.5	12.0	57.8	1%
2. VOD	-	16.3	87.2	133.0	42.2	13.8	23.4	315.9	6%
3. Crop Technology	-	-	32.8	59.3	30.4	9.1	10.4	142.1	3%
4. SWC	-	161.2	641.2	439.9	-	102.0	62.0	1,406.2	26%
5. WRD	-	-	351.3	148.7	131.1	1,090.1	12.7	1,733.8	32%
6. Livestock	-	-	30.2	28.1	14.3	-	20.0	92.6	2%
7. Forestry	-	-	3.1	33.2	1.2	-	10.3	47.9	1%
8. Migration Support	-	-	-	-	-	2.1	-	2.1	0%
Subtotal	-	192.4	1,159.3	854.1	221.0	1,220.6	150.9	3,798.3	70%
Other Development Costs									
Subtotal	-	-	-	-	-	-	-	-	-
Total B	-	192.4	1,159.3	854.1	221.0	1,220.6	150.9	3,798.3	70%
Total A + B	35.9	437.0	1,419.5	1,108.9	568.6	1,477.6	376.2	5,423.7	100%
GVT	-	314.2	1,058.8	838.0	521.0	1,316.2	312.7	4,360.9	80%
DFIDI	35.9	71.4	26.9	63.2	47.4	54.7	39.2	338.6	6%
Community	-	80.8	361.9	225.5	15.2	123.9	26.5	833.7	15%
Government	-	0.6	1.9	6.2	3.0	0.8	0.9	13.4	0%

Source:

GVT Jhabua Coordination Office - Madhya Pradesh.

DFIDI = Department for International Development (India).

PPGF = Participatory Planning and Group Formation.

VOD = Village Organisation and Development.

SWC = Soil and Water Conservation.

WRD = Water Resource Development.

Table AN12.6.5

GVT - M Pradesh - Jhabua: Village Chemjhar - Costs - Economic (Rs'000).

Cost Head / Subhead	Conversion Factors		1999/00 Actual	2000/01 Actual	2001/02 Actual	2002/03 Actual	2003/04 Actual	2004/05 Budget	2005/06 Budget	Totals	
	CF	SCF								(Rs'000)	(%)
A. Administration Costs											
GVT Bhopal (PHQ)	0.90	1.00	-	54.2	67.9	60.6	47.5	60.1	55.0	345.4	8%
DFIDI Consultancy	1.00	1.00	35.9	71.4	26.9	63.2	47.4	54.7	39.2	338.6	8%
Jhabua Coordination Office	0.90	1.00	-	101.6	142.0	111.9	222.7	122.0	112.5	812.7	19%
Total A			35.9	227.2	236.8	235.6	317.7	236.8	206.7	1,496.7	36%
B. Development Costs											
Component A											
1. PPGF	0.90	1.00	-	13.5	12.2	10.8	1.6	3.2	10.8	52.0	1%
2. VOD	0.90	1.00	-	14.6	78.5	119.7	38.0	12.4	21.1	284.3	7%
3. Crop Technology	0.90	1.00	-	-	29.6	53.4	27.3	8.2	9.4	127.9	3%
4. SWC	0.90	0.75	-	108.8	432.8	296.9	-	68.9	41.8	949.2	23%
5. WRD	0.90	0.75	-	-	237.1	100.4	88.5	735.8	8.6	1,170.3	28%
6. Livestock	0.90	1.00	-	-	27.2	25.3	12.9	-	18.0	83.4	2%
7. Forestry	0.90	1.00	-	-	2.8	29.9	1.1	-	9.3	43.1	1%
8. Migration Support	0.90	1.00	-	-	-	-	-	1.9	-	1.9	0%
Subtotal			-	136.9	820.1	636.3	169.4	830.3	119.0	2,712.0	64%
Other Development Costs											
Subtotal	0.90	1.00	-	-	-	-	-	-	-	-	0%
Total B			-	136.9	820.1	636.3	169.4	830.3	119.0	2,712.0	64%
Total A + B			35.9	364.1	1,056.9	871.9	487.0	1,067.1	325.7	4,208.7	100%
GVT			-	-	-	-	-	-	-	N/A	
DFIDI			-	-	-	-	-	-	-	N/A	
Community			-	-	-	-	-	-	-	N/A	
Government			-	-	-	-	-	-	-	N/A	

Source:

Cost Benefit Analysis (CBA) Study Estimate Jan 2005.

DFIDI = Department for International Development (India).

PPGF = Participatory Planning and Group Formation.

VOD = Village Organisation and Development.

SWC = Soil and Water Conservation.

WRD = Water Resource Development.

Table AN12.6.6

GVT - M Pradesh - Jhabua: Village Chamjhar: VOD Household Assumptions.

Without \ With Project Village Organisation and Development	Units	Assumptions			Benefits		
					Year 1 (Rs)	Year 2 (Rs)	Year 3 (Rs)
Development Activity: Village Organisation and Development							
Before / Without Project Situation:							
A. Self Help Groups (SHGs)							
Assumption	Sum	Zero	Zero	Zero	-	-	-
B. Drudgery Reduction							
Assumption	Sum	Zero	Zero	Zero			
Total Without Project Benefits					-	-	-
After / With Project Situation:							
A. Self Help Groups (SHGs)							
Assumptions							
Average Saving / Household	Rs	506					
Households / Village	No	79					
Present Group Deposits	Rs'000	40.0			40.0	41.2	42.4
Annual Savings Increase	%	3%					
Deposits on Loan to Members	%	20%					
SHG Interest Income	% / Year	15%					
Assumed Benefit	Rs'000				1.2	1.2	1.3
B. Drudgery Reduction							
Assumptions							
Hours Saved / Day / Household	No	1.0					
Number of Days / Year / Household	No	200					
Days / Year / Household (8hrs/day)	No	25.0					
Households / Village	No	79					
Day Equivalent / Village	No	1,975					
Economic Value per Day	(Rs/day)	25					
Assumed Benefit	Rs'000				49.4	49.4	49.4
Total With Project Benefits	Rs'000				50.6	50.6	50.6
Incremental Benefits	Rs'000				50.6	50.6	50.6

Source:

VOD = Village Organisation and Development.
Households per village: Chamjhar

Cost Benefit Analysis (CBA) Study Estimate Jan 2005.

Table AN12.6.6

GVT - M Pradesh - Jhabua: Village Chamjhar: Incremental VOD Benefit Stream (Rs'000).

Without \ With Project Village Organisation and Development	Benefit Streams (Rs '000)									
	Year 1 1999/00	Year 2 2000/01	Year 3 2001/02	Year 4 2002/03	Year 5 2003/04	Year 6 2004/05	Year 7 2005/06	Year 8 2006/07	Year 9 2007/08	Year 10 2008/09
Development Activity: Village Organisation and Development										
Before / Without Project Situation:										
A. Self Help Groups (SHGs) Assumption										
B. Drudgery Reduction Assumption										
Total Without Project Benefits	-	-	-	-	-	-	-	-	-	-
After / With Project Situation:										
A. Self Help Groups (SHGs) Assumptions Average Saving / Household Households / Village Present Group Deposits	-	-	40.0	41.2	42.4	43.7	45.0	46.4	47.8	49.2
Annual Savings Increase Deposits on Loan to Members SHG Interest Income										
Assumed Benefit	-	-	1.2	1.2	1.3	1.3	1.4	1.4	1.4	1.5
B. Drudgery Reduction Assumptions Hours Saved / Day / Household Number of Days / Year / Household Days / Year / Household (8hrs/day) Households / Village Day Equivalent / Village Economic Value per Day										
Assumed Benefit	-	-	49.4	49.4	49.4	49.4	49.4	49.4	49.4	49.4
Total With Project Benefits	-	-	50.6	50.6	50.6	50.7	50.7	50.8	50.8	50.9
Incremental Benefits	-	-	50.6	50.6	50.6	50.7	50.7	50.8	50.8	50.9

Source:

VOD = Village Organisation and Development.
Households per village: Chamjhar

Cost Benefit Analysis (CBA) Study Estimate Jan 2005.

Table AN12.6.7

GVT - M Pradesh - Jhabua: Village Chamjhar: Household Crop Net Margin Assumptions.

Without \ With Project Crop Technology, SWC and WRD	Units	Assumptions			Benefits		
					Year 1 (Rs/HH)	Year 2 (Rs/HH)	Year 3 (Rs/HH)
Development Activity: Crop Technology, SWC and WRD							
Before / Without Project Situation: Assumptions							
Households (HHs)	No	79					
Crop Adoption Assumptions		100%	100%	100%			
Kharif Crop Net Margin	Rs/HH				1,850.6	1,850.6	1,850.6
Rabi Crop Net Margin	Rs/HH				1,228	1,227.7	1,227.7
Total Without Project Benefits	Rs/HH				3,078.2	3,078.2	3,078.2
After / With Project Situation: Assumptions							
Households (HHs)	No	79					
Crop Adoption Assumptions		100%	100%	100%			
Kharif Crop Net Margin	Rs/HH				3,988.1	3,988.1	3,988.1
Rabi Crop Net Margin	Rs/HH				2,274.0	2,274.0	2,274.0
Total With Project Benefits	Rs/HH				6,262.1	6,262.1	6,262.1
Incremental Benefits	Rs/HH				3,183.9	3,183.9	3,183.9

Source:

Cost Benefit Analysis (CBA) Study Estimate Jan 2005.

Table AN12.6.7

GVT - M Pradesh - Jhabua: Village Chamjhar: Incremental Crop Benefit Stream (Rs'000).

Without \ With Project Crop Technology, SWC and WRD	Benefit Streams (Rs '000)									
	Year 1 1999/00	Year 2 2000/01	Year 3 2001/02	Year 4 2002/03	Year 5 2003/04	Year 6 2004/05	Year 7 2005/06	Year 8 2006/07	Year 9 2007/08	Year 10 2008/09
Development Activity: Crop Technology, SWC and WRD										
Before / Without Project Situation: Assumptions										
Households (HHs)										
Crop Adoption Assumptions										
Kharif Crop Net Margin	-	-	-	146.2	146.2	146.2	146.2	146.2	146.2	146.2
Rabi Crop Net Margin	-	-	-	97.0	97.0	97.0	97.0	97.0	97.0	97.0
Total Without Project Benefits	-	-	-	243.2	243.2	243.2	243.2	243.2	243.2	243.2
After / With Project Situation: Assumptions										
Households (HHs)										
Crop Adoption Assumptions										
Kharif Crop Net Margin	-	-	-	315.1	315.1	315.1	315.1	315.1	315.1	315.1
Rabi Crop Net Margin	-	-	-	179.6	179.6	179.6	179.6	179.6	179.6	179.6
Total With Project Benefits	-	-	-	494.7	494.7	494.7	494.7	494.7	494.7	494.7
Incremental Benefits	-	-	-	251.5	251.5	251.5	251.5	251.5	251.5	251.5

Source:

Cost Benefit Analysis (CBA) Study Estimate Jan 2005.

Table AN12.6.8

GVT - M Pradesh - Jhabua: Village Chamjhar: Household Livestock Net Margin Assumptions.

Without \ With Project Livestock	Units	Assumptions			Benefits		
					Year 1 (Rs)	Year 2 (Rs)	Year 3 (Rs)
Development Activity: Livestock							
Before / Without Project Situation: Assumptions							
Households (HHs)	No	79					
Annual Livestock Net Margin	Rs/HH						
Total Without Project Benefits					1,263.6	1,263.6	1,263.6
After / With Project Situation:							
Development Activity: Assumptions							
Households (HHs)	No	79					
Adoption Assumptions	Percent	55%	78%	100%			
Annual Livestock Net Margin	Rs/HH						
Total With Project Benefits					1,732.0	2,440.5	3,149.1
Incremental Benefits	Rs/HH				468.4	1,176.9	1,885.4

Source:

Cost Benefit Analysis (CBA) Study Estimate Jan 2005.

Table AN12.6.8

GVT - M Pradesh - Jhabua: Village Chamjhar: Incremental Livestock Benefit Stream (Rs'000).

Without \ With Project Livestock	Benefit Streams (Rs '000)									
	Year 1 1999/00	Year 2 2000/01	Year 3 2001/02	Year 4 2002/03	Year 5 2003/04	Year 6 2004/05	Year 7 2005/06	Year 8 2006/07	Year 9 2007/08	Year 10 2008/09
Development Activity: Livestock										
Before / Without Project Situation:										
Assumptions										
Households (HHs)										
Annual Livestock Net Margin										
Total Without Project Benefits	-	-	-	-	-	99.8	99.8	99.8	99.8	99.8
After / With Project Situation:										
Development Activity:										
Assumptions										
Households (HHs)										
Adoption Assumptions										
Annual Livestock Net Margin										
Total With Project Benefits	-	-	-	-	-	136.8	192.8	248.8	248.8	248.8
Incremental Benefits	-	-	-	-	-	37.0	93.0	149.0	149.0	149.0

Source:

Cost Benefit Analysis (CBA) Study Estimate Jan 2005.

Table AN12.6.9

GVT - M Pradesh - Jhabua: Village Chamjhar: Forestry Benefit Assumptions.

Without \ With Project Forestry	Units	Assumptions			Benefits		
					Year 1 (Rs)	Year 2 (Rs)	Year 3 (Rs)
Development Activity: Forestry							
Before / Without Project Situation: Assumptions							
Households (HHs)	No	79					
Annual Forestry Net Margin	Rs/HH				-	-	-
Total Without Project Benefits							
After / With Project Situation: Assumptions							
Households (HHs)	No	79					
Adoption Assumptions	Percent	55%	78%	100%			
Annual Forestry Net Margin	Rs/HH				110.0	156.0	200.0
Total With Project Benefits							
Incremental Benefits	Rs/HH				110.0	156.0	200.0

Source:

Cost Benefit Analysis (CBA) Study Estimate Jan 2005.

Table AN12.6.9

GVT - M Pradesh - Jhabua: Village Chamjhar: Incremental Forestry Benefit Stream (Rs'000).

Without \ With Project Forestry	Benefit Streams (Rs '000)									
	Year 1 1999/00	Year 2 2000/01	Year 3 2001/02	Year 4 2002/03	Year 5 2003/04	Year 6 2004/05	Year 7 2005/06	Year 8 2006/07	Year 9 2007/08	Year 10 2008/09
Development Activity: Forestry										
Before / Without Project Situation: Assumptions										
Households (HHs)										
Annual Forestry Net Margin										
Total Without Project Benefits	-	-	-	-	-	-	-	-	-	-
After / With Project Situation: Assumptions										
Households (HHs)										
Adoption Assumptions										
Annual Forestry Net Margin										
Total With Project Benefits	-	-	-	8.7	12.3	15.8	15.8	15.8	15.8	15.8
Incremental Benefits	-	-	-	8.7	12.3	15.8	15.8	15.8	15.8	15.8

Source:

Cost Benefit Analysis (CBA) Study Estimate Jan 2005.

Table AN12.6.10

GVT - M Pradesh - Jhabua: Village Chamjhar: Migration Support Benefit Assumptions.

Without \ With Project	Assumptions			Benefits		
				Year 1 (Rs)	Year 2 (Rs)	Year 3 (Rs)
Development Activity: Migration Support						
Before / Without Project Situation:						
Assumptions						
Economic Value per Day	Rs/day	-				
Days / Month / Household	No	-				
Economic Value per Month	Rs/month	-				
Months Migration / Year	Months	-				
Economic Value per Household	Rs/HH	-				
Households per Village	No	79				
Households per Village Migrating	Percent	0%				
Total Without Project Benefits	Rs/Village			-	-	-
After / With Project Situation:						
Assumptions						
Economic Value per Day \1	Rs/day	-	60%	-		
Days / Month / Household	No	-	30%	-		
Economic Value per Month	Rs/month	-		-		
Months Migration / Year	Months	-	-20%	-		
Economic Value per Household	Rs/HH	-		-		
Households per Village	No	79		80.0		
Households per Village Migrating	Percent	0%	-20%	0%		
Subtotal Migration Income	Rs/Village				-	-
Other Income	Sum (Rs)	-	-	-	-	-
Total With Project Benefits	Rs/Village				-	-
Incremental Benefits	Rs/Village				-	-

Source:

Cost Benefit Analysis (CBA) Study Estimate Jan 2005.

- 1\ Financial Wages (Rs/day):
Skill Labour - Rs 160
Casual Labour :
Male - Rs 40
Female - Rs 30

Table AN12.6.10

GVT - M Pradesh - Jhabua: Village Chamjhar: Incremental Migration Support Benefit Stream (Rs'000).

Without \ With Project	Benefit Streams (Rs '000)									
	Year 1 1999/00	Year 2 2000/01	Year 3 2001/02	Year 4 2002/03	Year 5 2003/04	Year 6 2004/05	Year 7 2005/06	Year 8 2006/07	Year 9 2007/08	Year 10 2008/09
Development Activity: Migration Support Before / Without Project Situation: Assumptions Economic Value per Day Days / Month / Household Economic Value per Month Months Migration / Year Economic Value per Household Households per Village Households per Village Migrating Total Without Project Benefits	-	-	-	-	-	-	-	-	-	-
After / With Project Situation: Assumptions Economic Value per Day \1 Days / Month / Household Economic Value per Month Months Migration / Year Economic Value per Household Households per Village Households per Village Migrating Subtotal Migration Income Other Income Total With Project Benefits Incremental Benefits	-	-	-	-	-	-	-	-	-	-

Source:

Cost Benefit Analysis (CBA) Study Estimate Jan 2005.

- 1\ Financial Wages (Rs/day):
 Skill Labour - Rs 160
 Casual Labour :
 Male - Rs 40
 Female - Rs 30

Table AN12.6.11 GVT - M Pradesh - Jhabua: Village Chamjhar: Weighted Household Crop Net Margin Summary (Rs/Household).

Item	WBR (%)	Before / Without Project			After / With Project			Increment		
		Khalif	Rabi	Total	Khalif	Rabi	Total	Khalif	Rabi	Total
Phase II										
Well Being Ranking - Very Poor Household Net Margin (Rs)	25.0%	834.6	102.5	937.1	1,849.8	1,067.8	2,917.6	1,015.2	965.3	1,980.5
Well Being Ranking - Poor Household Net Margin (Rs)	25.0%	637.7	-	637.7	4,803.0	220.7	5,023.7	4,165.3	220.7	4,386.0
Well Being Ranking - Moderate Household Net Margin (Rs)	31.0%	994.0	89.3	1,083.3	3,711.4	2,508.3	6,219.6	2,717.4	2,419.0	5,136.4
Well Being Ranking - Better Off Household Net Margin (Rs)	19.0%	6,180.9	6,180.9	6,180.9	6,180.9	6,180.9	6,180.9	6,180.9	6,180.9	6,180.9
Well Being Ranking - Weighted Household Net Margin (Rs)	100.0%	1,850.6	1,227.7	3,078.2	3,988.1	2,274.0	6,262.1	2,137.5	1,046.4	3,183.9
Phase I \1										
Well Being Ranking - Very Poor Household Net Margin (Rs)	25.0%	436.3	267.5	703.8	3,866.5	1,668.8	5,535.3	3,430.3	1,401.3	4,831.5
Well Being Ranking - Poor Household Net Margin (Rs)	25.0%	485.8	657.5	1,143.3	10,136.0	5,690.3	15,826.3	9,650.3	5,032.8	14,683.0
Well Being Ranking - Moderate Household Net Margin (Rs)	31.0%	986.3	986.3	986.3	986.3	986.3	986.3	986.3	986.3	986.3
Well Being Ranking - Better Off Household Net Margin (Rs)	19.0%	2,778.0	937.0	3,715.0	4,915.0	9,560.0	14,475.0	2,137.0	8,623.0	10,760.0
Well Being Ranking - Weighted Household Net Margin (Rs)	100.0%	1,064.1	715.0	1,473.3	4,740.2	3,961.9	8,396.4	3,981.9	3,552.6	7,228.8

Source: Study of Impact of WIRFP on Net Incomes of Target Households, Jan 2004.

WBR = GVT Household Well Being Ranking. Survey figures adjusted to Village Profile WBR.

\1 GVT - Madhya Pradesh - Phase I: Village Naganwat Choti: Weighted Household Crop Net Margin Summary.

Table A12.6.12 GVT - M Pradesh - Jhabua: Village Chamjhar: Weighted Household Crop Net Margin Sensitivity Analysis (Rs/Household).

Item	EIRR \1	Before / Without Project			After / With Project			Increment		
		Khalif	Rabi	Total	Khalif	Rabi	Total	Khalif	Rabi	Total
Development Activity: Crop Technology, SWC and WRD										
Weighted Net Margin (Phase II)										
Household Net Margin (Rs)		1,850.6	1,227.7	3,078.2	3,988.1	2,274.0	6,262.1	2,137.5	1,046.4	3,183.9
Incremental Benefit (Phase II / Phase I)										44%
Base Case Assumptions										
Household Net Margin (Rs)		1,850.6	1,227.7	3,078.2	3,988.1	2,274.0	6,262.1	2,137.5	1,046.4	3,183.9
Incremental Benefit (Phase II / Phase I)										44%
Sensitivity Increase (%)	0%									
Development Activity										
Overall Village										
Sensitivity Assumptions										
Household Net Margin (Rs)		1,850.6	1,227.7	3,078.2	7,577.4	4,320.7	11,898.0	5,726.8	3,093.0	8,819.8
Incremental Benefit (Phase II / Phase I)										122%
Sensitivity Increase (%)	0%									
Development Activity										
Overall Village										
Weighted Net Margin (Phase I)										
Household Net Margin (Rs)		1,064.1	715.0	1,473.3	4,740.2	3,961.9	8,396.4	3,981.9	3,552.6	7,228.8

Source: Study of Impact of WIRFP on Net Incomes of Target Households, Jan 2004.

\1 EIRR = Economic Internal Rate of Return (rate at which NPV equal to zero).

N/A = Not analysed as EIRR negative.

Table AN12.6.13 GVT - M Pradesh - Jhabua: Village Chamjhar: Weighted Household Livestock Net Margin Summary (Rs/Household).

Well Being Ranking	Weight (%)	Before / Without Project		After / With Project		Increment \1	
		Herd Value	Net Margin	Herd Value	Net Margin	Herd Value	Net Margin
Phase I - Well Being Ranking (WBR) \1							
Madhya Pradesh - WBR Weighted Data							
Very Poor	16.0%						
Average		580	(185.0)	5,650	412.5	474	597.5
Poor	63.0%						
Average		2,350	982.5	8,250	2,141.0	1,180	1,158.5
Moderate	18.0%						
Average		14,700	6,730.0	1,900	2,820.0	1,900	(3,910.0)
Better Off	3.0%						
Average		15,580	3,000.0	14,600	10,790.0	(196)	7,790.0
Phase I - WBR Weighted Data	100.0%	4,687	1,890.8	6,882	2,246.1	1,155	355.4
Phase II - Well Being Ranking (WBR)							
Very Poor	16.0%						
Average		5,756	149.2	10,970	1,446.4	1,043	1,297.2
Poor	63.0%						
Average		13,128	852.2	25,979	3,008.8	2,570	2,156.8
Moderate	18.0%						
Average		13,525	4,035.1	27,020	5,249.5	2,699	1,214.4
Better Off	3.0%						
Average		12,700	(781.7)	41,873	2,573.3	5,835	3,355.0
Phase II - WBR Weighted Data	100.0%	12,007	1,263.6	24,242	3,149.1	2,447	1,885.6

Source: Study of Impact of WIRFP on Net Incomes of Target Households, Jan 2004.

WBR = GVT Household Well Being Ranking.

Survey figures adjusted to Village Profile WBR.

\1 GVT - Madhya Pradesh - Phase I: Village Naganwat Choti: Weighted Household Livestock Net Margin Summary.

WIRFP - Phase II - Cost Benefit Analysis Study

Tables AN12.0 Individual Village Cost Benefit Analysis

Tables AN12.7 GVT - Madhya Pradesh - Jhabua: Village Chenpura.

- Table AN12.7.1 GVT - M Pradesh - Jhabua: Village Chenpura: Village Profile.
- Table AN12.7.2 GVT - M Pradesh - Jhabua: Village Chenpura: Cost Benefit Analysis Summary (Rs'000).
- Table AN12.7.3 GVT - M Pradesh - Jhabua: Village Chenpura: Cost Benefit Analysis Development Activity Summary A (Rs'000).
- Table AN12.7.4 GVT - M Pradesh - Jhabua: Village Chenpura: Cost Benefit Analysis Development Activity Summary B (Rs'000).
- Table AN12.7.5 GVT - M Pradesh - Jhabua: Village Chenpura: Costs - Financial (Rs'000).
GVT - M Pradesh - Jhabua: Village Chenpura: Costs - Economic (Rs'000).
- Table AN12.7.6 GVT - M Pradesh - Jhabua: Village Chenpura: VOD Household Assumptions.
GVT - M Pradesh - Jhabua: Village Chenpura: Incremental VOD Benefit Stream (Rs'000).
- Table AN12.7.7 GVT - M Pradesh - Jhabua: Village Chenpura: Household Crop Net Margin Assumptions.
GVT - M Pradesh - Jhabua: Village Chenpura: Incremental Crop Benefit Stream (Rs'000).
- Table AN12.7.8 GVT - M Pradesh - Jhabua: Village Chenpura: Household Livestock Net Margin Assumptions.
GVT - M Pradesh - Jhabua: Village Chenpura: Incremental Livestock Benefit Stream (Rs'000).
- Table AN12.7.9 GVT - M Pradesh - Jhabua: Village Chenpura: Forestry Benefit Assumptions.
GVT - M Pradesh - Jhabua: Village Chenpura: Incremental Forestry Benefit Stream (Rs'000).
- Table AN12.7.10 GVT - M Pradesh - Jhabua: Village Chenpura: Migration Support Benefit Assumptions.
GVT - M Pradesh - Jhabua: Village Chenpura: Incremental Migration Support Benefit Stream (Rs'000).
- Table AN12.7.11 GVT - M Pradesh - Jhabua: Village Chenpura: Weighted Household Crop Net Margin Summary (Rs/Household).
- Table AN12.7.12 GVT - M Pradesh - Jhabua: Village Chenpura: Weighted Household Crop Net Margin Sensitivity Analysis (Rs/Household).
- Table AN12.7.13 GVT - M Pradesh - Jhabua: Village Chenpura: Weighted Household Livestock Net Margin Summary (Rs/Household).

Table AN12.7.1 GVT - M Pradesh - Jhabua: Village Chenpura: Village Profile.

Village Profile \1			
A. Background			
Village Name	Chenpura		
District	Jhabua		
State	M Pradesh		
B. Participatory Planning Process (PPP)			
Village entry	Jan-00		
PRA	Aug-00		
CPA	Sep-00		
C. Infrastructure			
Hand Pumps (no)	7		
Wells (no)	6		
Linked by Road	No		
Electrification	Yes		
School	Primary		
D. Demographic Data			
Households (no)	265		
Participating Households	160		
Population (Adults)	1,500		
Adults:			
Male	700		
Female	800		
Children:			
Boys	N/A		
Girls	N/A		
E. Well Being Ranking (No Households)			
Very Poor	21	28.4%	
Poor	37	50.0%	
Moderate	11	14.9%	
Better Off	5	6.8%	
Total	74	100%	
F. Land Resource (ha)			
Total Area	-		
Revenue Land (unused)	-		
Forest Area - Revenue	-		
Pasture Land	-		
Arable Land	-		
G. Livestock			
Oxen			
Cows			
Buffalo			
Goats			
Poultry			
H. Self Help Groups (No Households)			
1	Group 1	11	
2	Group 2	17	
3	Group 3	10	
4	Group 4	14	
5	Group 5	15	
6	Group 6	10	
7	Group 7	12	
8	Group 8	10	
9	Group 9	11	
10	Group 10	10	
11	Group 11	15	
12	Group 12	16	
13	Group 13	10	
14	Group 14	12	
15	Group 15	10	
16	Group 16	10	
	Total Memberhip	193	

Source: GVT Jhabua Coordination Office - Madhya Pradesh.

\1 Subject to final adjustment following consolidation exercise prior to Annual Review Meeting (ARM) in Feb 2005.

Table AN12.7.2 GVT - M Pradesh - Jhabua: Village Chenpura: Cost Benefit Analysis Summary (Rs'000).

Administration Costs / Development Activity	EIRR ¹	NPV ²		Year 1 1999/00	Year 2 2000/01	Year 3 2001/02	Year 4 2002/03	Year 5 2003/04	Year 6 2004/05	Year 7 2005/06	Year 8 2006/07	Year 9 2007/08	Year 10 2008/09
		(10%)	(%)										
A. Administration Costs													
Total A	N/A	(985)	-103%	35.9	227.2	236.8	235.6	317.7	236.8	206.7	20.7	20.7	20.7
B. Development Activities Component A													
1. PPGF													
Net Incremental Benefits	N/A	(63)	-7%	-	(15.8)	(16.3)	(27.9)	(11.1)	(9.1)	(10.0)	(2.1)	(2.1)	(2.1)
2. VOD													
Net Incremental Benefits	33%	207	22%	-	(19.5)	(2.8)	(95.7)	(55.8)	69.4	71.3	85.3	85.7	86.0
3/5. Crop Technology, SWC and WRD													
Net Incremental Benefits	23%	748	78%	-	-	(210.6)	(616.9)	(739.0)	247.8	460.7	473.3	473.3	473.3
6. Livestock													
Net Incremental Benefits	108%	1,020	107%	-	-	(31.5)	(68.5)	63.8	182.4	281.7	285.6	285.6	285.6
7. Forestry													
Net Incremental Benefits	14%	26	3%	-	-	(195.4)	(123.0)	3.9	64.2	54.6	63.3	63.3	63.3
8. Migration Support													
Net Incremental Benefits	26%	4	0%	-	-	-	(1.8)	(4.7)	0.3	2.3	2.3	2.3	2.3
Summary													
Net Incremental Benefits	18%	956	100%	(35.9)	(262.5)	(693.4)	(1,169.4)	(1,060.4)	318.2	654.0	887.0	887.3	887.7
Sensitivity Analysis													
Analysis Period													
12 Years	10%	(176)											
20 Years (Base Case)	18%	956											
25 Years	19%	1,288											
30 Years	19%	1,476											
Costs - Administration													
Investment Costs Decreased by 20 percent	19%	1,116											
Costs - Administration and Development													
Recurrent Costs Increased by 20 percent	16%	677											
Benefits - Crop, SWC and WRD													
Crop Benefits Increased by 20 percent	20%	1,474											
Livestock Benefits Increased by 20 percent	19%	1,251											

Source: Cost Benefit Analysis (CBA) Study Estimate Jan 2005.

¹ EIRR = Economic Internal Rate of Return (rate at which NPV equal to zero).

² NPV = Net Present Value of net incremental benefits at 12% (indicative opportunity cost of capital for rural development projects in India).

N/A = Not analysed as EIRR negative.

Table AN12.7.3 GVT - M Pradesh - Jhabua: Village Chenpura: Cost Benefit Analysis Development Activity Summary A (Rs'000).

Administration Costs / Development Activity	EIRR 11	NPV 12		Year 1 1999/00	Year 2 2000/01	Year 3 2001/02	Year 4 2002/03	Year 5 2003/04	Year 6 2004/05	Year 7 2005/06	Year 8 2006/07	Year 9 2007/08	Year 10 2008/09
		(10%)	(%)										
A. Administration Costs													
Investment				35.9	227.2	236.8	235.6	317.7	236.8	206.7	-	-	-
Projected				-	-	-	-	-	-	-	20.7	20.7	20.7
Total A	N/A	(985)	-103%	35.9	227.2	236.8	235.6	317.7	236.8	206.7	20.7	20.7	20.7
B. Development Intervention Component A													
1. PPGF													
Cost Stream													
Investment				-	15.8	15.9	27.1	9.6	7.4	8.1	-	-	-
Recurrent				-	-	0.4	0.8	1.5	1.7	1.9	2.1	2.1	2.1
Total Costs				-	15.8	16.3	27.9	11.1	9.1	10.0	2.1	2.1	2.1
Benefit Stream													
Before / Without Project				-	-	-	-	-	-	-	-	-	-
After / With Project				-	-	-	-	-	-	-	-	-	-
Incremental Benefits				-	-	-	-	-	-	-	-	-	-
Net Incremental Benefits	N/A	(63)	-7%	-	(15.8)	(16.3)	(27.9)	(11.1)	(9.1)	(10.0)	(2.1)	(2.1)	(2.1)
2. VOD													
Cost Stream													
Investment				-	19.5	111.2	198.9	149.2	16.9	14.4	-	-	-
Recurrent				-	-	1.0	6.5	16.5	23.9	24.8	25.5	25.5	25.5
Total Costs				-	19.5	112.2	205.4	165.7	40.8	39.2	25.5	25.5	25.5
Benefit Stream													
Before / Without Project				-	-	-	-	-	-	-	-	-	-
After / With Project				-	-	109.4	109.6	109.9	110.2	110.5	110.9	111.2	111.5
Incremental Benefits				-	-	109.4	109.6	109.9	110.2	110.5	110.9	111.2	111.5
Net Incremental Benefits	33%	207	22%	-	(19.5)	(2.8)	(95.7)	(55.8)	69.4	71.3	85.3	85.7	86.0
3/5.Crop Technology, SWC and WRD													
Cost Stream													
Investment													
Crop Technology				-	-	141.9	80.5	85.8	7.5	7.0	-	-	-
Soil Water Conservation				-	-	6.5	100.2	230.3	250.8	-	-	-	-
Water Resource Development				-	-	62.2	422.5	331.3	-	6.8	-	-	-
Recurrent													
Crop Technology				-	-	-	3.5	5.6	7.7	7.9	8.1	8.1	8.1
Soil Water Conservation				-	-	-	0.8	13.3	42.1	73.5	73.5	73.5	73.5
Water Resource Development				-	-	-	9.3	72.7	122.4	122.4	123.4	123.4	123.4
Total Costs				-	-	210.6	616.9	739.0	430.4	217.5	204.9	204.9	204.9
Benefit Stream													
Before / Without Project				-	-	-	-	-	207.9	207.9	207.9	207.9	207.9
After / With Project				-	-	-	-	-	886.1	886.1	886.1	886.1	886.1
Incremental Benefits				-	-	-	-	-	678.2	678.2	678.2	678.2	678.2
Net Incremental Benefits	23%	748	78%	-	-	(210.6)	(616.9)	(739.0)	247.8	460.7	473.3	473.3	473.3

Source: Cost Benefit Analysis (CBA) Study Estimate Jan 2005.

11 EIRR = Economic Internal Rate of Return (rate at which NPV equal to zero).

12 NPV = Net Present Value of net incremental benefits at 12% (indicative opportunity cost of capital for rural development projects in India).

N/A = Not analysed as EIRR negative.

Table AN12.7.4 GVT - M Pradesh - Jhabua: Village Chenpura: Cost Benefit Analysis Development Activity Summary B (Rs'000).

Administration Costs / Development Activity	EIRR 11	NPV 12		Year 1 1999/00	Year 2 2000/01	Year 3 2001/02	Year 4 2002/03	Year 5 2003/04	Year 6 2004/05	Year 7 2005/06	Year 8 2006/07	Year 9 2007/08	Year 10 2008/09
		(10%)	(%)										
6. Livestock													
Cost Stream													
Investment				-	-	31.5	65.3	16.7	-	4.3	-	-	-
Recurrent				-	-	-	3.2	9.7	11.4	11.4	11.8	11.8	11.8
Total Costs				-	-	31.5	68.5	26.4	11.4	15.7	11.8	11.8	11.8
Benefit Stream													
Before / Without Project				-	-	-	-	162.9	162.9	162.9	162.9	162.9	162.9
After / With Project				-	-	-	-	253.2	356.7	460.3	460.3	460.3	460.3
Incremental Benefits				-	-	-	-	90.2	193.8	297.4	297.4	297.4	297.4
Net Incremental Benefits	108%	1,020	107%	-	-	(31.5)	(68.5)	63.8	182.4	281.7	285.6	285.6	285.6
7. Forestry													
Cost Stream													
Investment				-	-	195.4	160.7	41.6	-	9.6	-	-	-
Recurrent				-	-	-	19.5	35.6	39.8	39.8	40.7	40.7	40.7
Total Costs				-	-	195.4	180.2	77.2	39.8	49.4	40.7	40.7	40.7
Benefit Stream													
Before / Without Project				-	-	-	-	-	-	-	-	-	-
After / With Project				-	-	-	57.2	81.1	104.0	104.0	104.0	104.0	104.0
Incremental Benefits				-	-	-	57.2	81.1	104.0	104.0	104.0	104.0	104.0
Net Incremental Benefits	14%	26	3%	-	-	(195.4)	(123.0)	3.9	64.2	54.6	63.3	63.3	63.3
8. Migration Support													
Cost Stream													
Investment				-	-	-	1.8	4.5	2.3	-	-	-	-
Recurrent				-	-	-	-	0.2	0.6	0.9	0.9	0.9	0.9
Total Costs				-	-	-	1.8	4.7	2.9	0.9	0.9	0.9	0.9
Benefit Stream													
Before / Without Project				-	-	-	-	-	28.8	28.8	28.8	28.8	28.8
After / With Project				-	-	-	-	-	31.9	31.9	31.9	31.9	31.9
Incremental Benefits				-	-	-	-	-	3.1	3.1	3.1	3.1	3.1
Net Incremental Benefits	26%	4	0%	-	-	-	(1.8)	(4.7)	0.3	2.3	2.3	2.3	2.3
Summary													
Cost Stream													
Investment				35.9	262.5	801.4	1,292.5	1,186.7	521.5	256.9	-	-	-
Recurrent				-	-	1.4	43.7	155.0	249.6	282.4	306.6	306.6	306.6
Total Costs				35.9	262.5	802.8	1,336.2	1,341.7	771.2	539.3	306.6	306.6	306.6
Benefit Stream													
Before / Without Project				-	-	-	-	162.9	399.6	399.6	399.6	399.6	399.6
After / With Project				-	-	109.4	166.8	444.2	1,489.0	1,592.9	1,593.2	1,593.5	1,593.9
Incremental Benefits				-	-	109.4	166.8	281.3	1,089.4	1,193.3	1,193.6	1,193.9	1,194.2
Net Incremental Benefits	18%	956	100%	(35.9)	(262.5)	(693.4)	(1,169.4)	(1,060.4)	318.2	654.0	887.0	887.3	887.7

Source: Cost Benefit Analysis (CBA) Study Estimate Jan 2005.

Table AN12.7.5

GVT - M Pradesh - Jhabua: Village Chenpura: Costs - Financial (Rs'000).

Cost Head / Subhead	1999/00	2000/01	2001/02	2002/03	2003/04	2004/05	2005/06	Totals	
	Actual	Actual	Actual	Actual	Actual	Budget	Budget	(Rs'000)	(%)
A. Administration Costs									
GVT Bhopal (PHQ)	-	60.3	75.4	67.3	52.8	66.8	61.1	383.7	7%
DFIDI Consultancy	35.9	71.4	26.9	63.2	47.4	54.7	39.2	338.6	6%
Jhabua Coordination Office	-	112.9	157.8	124.3	247.5	135.5	125.0	903.0	17%
Total A	35.9	244.5	260.2	254.8	347.7	257.0	225.3	1,625.4	31%
B. Development Costs									
Component A									
1. PPGF	-	17.5	17.7	30.1	10.7	8.2	9.0	93.2	2%
2. VOD	-	21.7	123.5	221.0	165.8	18.8	16.0	566.8	11%
3. Crop Technology	-	-	157.6	89.4	95.3	8.3	7.7	358.4	7%
4. SWC	-	-	9.6	148.5	341.2	371.5	-	870.8	16%
5. WRD	-	-	92.2	625.9	490.8	-	10.0	1,218.9	23%
6. Livestock	-	-	35.0	72.6	18.6	-	4.8	130.9	2%
7. Forestry	-	-	217.1	178.5	46.2	-	10.7	452.5	8%
8. Migration Support	-	-	-	2.0	5.0	2.5	-	9.5	0%
Subtotal	-	39.2	652.8	1,367.9	1,173.6	409.3	58.2	3,700.9	69%
Other Development Costs									
Subtotal	-	-	-	-	-	-	-	-	0%
Total B	-	39.2	652.8	1,367.9	1,173.6	409.3	58.2	3,700.9	69%
Total A + B	35.9	283.7	912.9	1,622.7	1,521.3	666.3	283.5	5,326.3	100%
GVT	-	212.1	791.4	1,382.1	1,284.4	553.3	239.2	4,462.5	84%
DFIDI	35.9	71.4	26.9	63.2	47.4	54.7	39.2	338.6	6%
Community	-	-	78.8	172.2	178.3	57.7	3.1	490.2	9%
Government	-	0.2	15.8	5.1	11.1	0.6	2.1	35.0	1%

Source:

GVT Jhabua Coordination Office - Madhya Pradesh.

DFIDI = Department for International Development (India).
PPGF = Participatory Planning and Group Formation.
VOD = Village Organisation and Development.
SWC = Soil and Water Conservation.
WRD = Water Resource Development.

Table AN12.7.5

GVT - M Pradesh - Jhabua: Village Chenpura: Costs - Economic (Rs'000).

Cost Head / Subhead	Conversion Factors		1999/00 Actual	2000/01 Actual	2001/02 Actual	2002/03 Actual	2003/04 Actual	2004/05 Budget	2005/06 Budget	Totals	
	CF	SCF								(Rs'000)	(%)
A. Administration Costs											
GVT Bhopal (PHQ)	0.90	1.00	-	54.2	67.9	60.6	47.5	60.1	55.0	345.4	8%
DFIDI Consultancy	1.00	1.00	35.9	71.4	26.9	63.2	47.4	54.7	39.2	338.6	8%
Jhabua Coordination Office	0.90	1.00	-	101.6	142.0	111.9	222.7	122.0	112.5	812.7	19%
Total A			35.9	227.2	236.8	235.6	317.7	236.8	206.7	1,496.7	34%
B. Development Costs											
Component A											
1. PPGF	0.90	1.00	-	15.8	15.9	27.1	9.6	7.4	8.1	83.9	2%
2. VOD	0.90	1.00	-	19.5	111.2	198.9	149.2	16.9	14.4	510.1	12%
3. Crop Technology	0.90	1.00	-	-	141.9	80.5	85.8	7.5	7.0	322.6	7%
4. SWC	0.90	0.75	-	-	6.5	100.2	230.3	250.8	-	587.8	13%
5. WRD	0.90	0.75	-	-	62.2	422.5	331.3	-	6.8	822.7	19%
6. Livestock	0.90	1.00	-	-	31.5	65.3	16.7	-	4.3	117.8	3%
7. Forestry	0.90	1.00	-	-	195.4	160.7	41.6	-	9.6	407.2	9%
8. Migration Support	0.90	1.00	-	-	-	1.8	4.5	2.3	-	8.6	0%
Subtotal			-	35.3	564.6	1,056.9	869.0	284.7	50.1	2,860.7	66%
Other Development Costs											
Subtotal	0.90	1.00	-	-	-	-	-	-	-	-	0%
Total B			-	35.3	564.6	1,056.9	869.0	284.7	50.1	2,860.7	66%
Total A + B			35.9	262.5	801.4	1,292.5	1,186.7	521.5	256.9	4,357.4	100%
GVT			-	-	-	-	-	-	-	N/A	
DFIDI			-	-	-	-	-	-	-	N/A	
Community			-	-	-	-	-	-	-	N/A	
Government			-	-	-	-	-	-	-	N/A	

Source:

Cost Benefit Analysis (CBA) Study Estimate Jan 2005.

DFIDI = Department for International Development (India).
PPGF = Participatory Planning and Group Formation.
VOD = Village Organisation and Development.
SWC = Soil and Water Conservation.
WRD = Water Resource Development.

Table AN12.7.6

GVT - M Pradesh - Jhabua: Village Chenpura: VOD Household Assumptions.

Without \ With Project Village Organisation and Development	Units	Assumptions			Benefits		
					Year 1 (Rs)	Year 2 (Rs)	Year 3 (Rs)
Development Activity: Village Organisation and Development							
Before / Without Project Situation:							
A. Self Help Groups (SHGs)							
Assumption	Sum	Zero	Zero	Zero	-	-	-
B. Drudgery Reduction							
Assumption	Sum	Zero	Zero	Zero			
Total Without Project Benefits					-	-	-
After / With Project Situation:							
A. Self Help Groups (SHGs)							
Assumptions							
Average Saving / Household	Rs	1,951					
Households / Village	No	160					
Present Group Deposits	Rs'000	312.1			312.1	321.5	331.1
Annual Savings Increase	%	3%					
Deposits on Loan to Members	%	20%					
SHG Interest Income	% / Year	15%					
Assumed Benefit	Rs'000				9.4	9.6	9.9
B. Drudgery Reduction							
Assumptions							
Hours Saved / Day / Household	No	1.0					
Number of Days / Year / Household	No	200					
Days / Year / Household (8hrs/day)	No	25.0					
Households / Village	No	160					
Day Equivalent / Village	No	4,000					
Economic Value per Day	(Rs/day)	25					
Assumed Benefit	Rs'000				100.0	100.0	100.0
Total With Project Benefits	Rs'000				109.4	109.6	109.9
Incremental Benefits	Rs'000				109.4	109.6	109.9

Source:

SWC = Soil and Water Conservation.
Participating households per village: Chenpura

Cost Benefit Analysis (CBA) Study Estimate Jan 2005.

Table AN12.7.6

GVT - M Pradesh - Jhabua: Village Chenpura: Incremental VOD Benefit Stream (Rs'000).

Without \ With Project Village Organisation and Development	Benefit Streams (Rs '000)									
	Year 1 1999/00	Year 2 2000/01	Year 3 2001/02	Year 4 2002/03	Year 5 2003/04	Year 6 2004/05	Year 7 2005/06	Year 8 2006/07	Year 9 2007/08	Year 10 2008/09
Development Activity: Village Organisation and Development										
Before / Without Project Situation:										
A. Self Help Groups (SHGs) Assumption										
B. Drudgery Reduction Assumption										
Total Without Project Benefits	-	-	-	-	-	-	-	-	-	-
After / With Project Situation:										
A. Self Help Groups (SHGs) Assumptions										
Average Saving / Household										
Households / Village										
Present Group Deposits	-	-	312.1	321.5	331.1	341.0	351.3	361.8	372.7	383.8
Annual Savings Increase										
Deposits on Loan to Members										
SHG Interest Income										
Assumed Benefit	-	-	9.4	9.6	9.9	10.2	10.5	10.9	11.2	11.5
B. Drudgery Reduction Assumptions										
Hours Saved / Day / Household										
Number of Days / Year / Household										
Days / Year / Household (8hrs/day)										
Households / Village										
Day Equivalent / Village										
Economic Value per Day										
Assumed Benefit	-	-	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0
Total With Project Benefits	-	-	109.4	109.6	109.9	110.2	110.5	110.9	111.2	111.5
Incremental Benefits	-	-	109.4	109.6	109.9	110.2	110.5	110.9	111.2	111.5

Source:

SWC = Soil and Water Conservation.
Participating households per village: Chenpura

Cost Benefit Analysis (CBA) Study Estimate Jan 2005.

Table AN12.7.7

GVT - M Pradesh - Jhabua: Village Chenpura: Household Crop Net Margin Assumptions.

Without \ With Project Crop Technology, SWC and WRD	Units	Assumptions			Benefits		
					Year 1 (Rs/HH)	Year 2 (Rs/HH)	Year 3 (Rs/HH)
Development Activity: Crop Technology, SWC and WRD							
Before / Without Project Situation:							
Assumptions							
Households (HHs)	No	160					
Crop Adoption Assumptions		100%	100%	100%			
Kharif Crop Net Margin	Rs/HH				1,134.3	1,134.3	1,134.3
Rabi Crop Net Margin	Rs/HH				165.1	165.1	165.1
Total Without Project Benefits	Rs/HH				1,299.3	1,299.3	1,299.3
After / With Project Situation:							
Assumptions							
Households (HHs)	No	160					
Crop Adoption Assumptions		100%	100%	100%			
Kharif Crop Net Margin	Rs/HH				4,609.9	4,609.9	4,609.9
Rabi Crop Net Margin	Rs/HH				928.3	928.3	928.3
Total With Project Benefits	Rs/HH				5,538.2	5,538.2	5,538.2
Incremental Benefits	Rs/HH				4,238.8	4,238.8	4,238.8

Source:

Cost Benefit Analysis (CBA) Study Estimate Jan 2005.

Table AN12.7.7

GVT - M Pradesh - Jhabua: Village Chenpura: Incremental Crop Benefit Stream (Rs'000).

Without \ With Project Crop Technology, SWC and WRD	Benefit Streams (Rs '000)									
	Year 1 1999/00	Year 2 2000/01	Year 3 2001/02	Year 4 2002/03	Year 5 2003/04	Year 6 2004/05	Year 7 2005/06	Year 8 2006/07	Year 9 2007/08	Year 10 2008/09
Development Activity: Crop Technology, SWC and WRD										
Before / Without Project Situation: Assumptions										
Households (HHs)										
Crop Adoption Assumptions										
Kharif Crop Net Margin	-	-	-	-	-	181.5	181.5	181.5	181.5	181.5
Rabi Crop Net Margin	-	-	-	-	-	26.4	26.4	26.4	26.4	26.4
Total Without Project Benefits	-	-	-	-	-	207.9	207.9	207.9	207.9	207.9
After / With Project Situation: Assumptions										
Households (HHs)										
Crop Adoption Assumptions										
Kharif Crop Net Margin	-	-	-	-	-	737.6	737.6	737.6	737.6	737.6
Rabi Crop Net Margin	-	-	-	-	-	148.5	148.5	148.5	148.5	148.5
Total With Project Benefits	-	-	-	-	-	886.1	886.1	886.1	886.1	886.1
Incremental Benefits	-	-	-	-	-	678.2	678.2	678.2	678.2	678.2

Source:

Cost Benefit Analysis (CBA) Study Estimate Jan 2005.

Table AN12.7.8

GVT - M Pradesh - Jhabua: Village Chenpura: Household Livestock Net Margin Assumptions.

Without \ With Project Livestock	Units	Assumptions			Benefits		
					Year 1 (Rs)	Year 2 (Rs)	Year 3 (Rs)
Development Activity: Livestock							
Before / Without Project Situation: Assumptions							
Households (HHs)	No	160					
Annual Livestock Net Margin	Rs/HH				1,018.4	1,018.4	1,018.4
Total Without Project Benefits							
After / With Project Situation:							
Development Activity: Assumptions							
Households (HHs)	No	160					
Adoption Assumptions	Percent	55%	78%	100%			
Annual Livestock Net Margin	Rs/HH				1,582.3	2,229.6	2,877.0
Total With Project Benefits							
Incremental Benefits	Rs/HH				563.9	1,211.2	1,858.5

Source:

Cost Benefit Analysis (CBA) Study Estimate Jan 2005.

Table AN12.7.8

GVT - M Pradesh - Jhabua: Village Chenpura: Incremental Livestock Benefit Stream (Rs'000).

Without \ With Project Livestock	Benefit Streams (Rs '000)									
	Year 1 1999/00	Year 2 2000/01	Year 3 2001/02	Year 4 2002/03	Year 5 2003/04	Year 6 2004/05	Year 7 2005/06	Year 8 2006/07	Year 9 2007/08	Year 10 2008/09
Development Activity: Livestock										
Before / Without Project Situation:										
Assumptions										
Households (HHs)										
Annual Livestock Net Margin										
Total Without Project Benefits	-	-	-	-	162.9	162.9	162.9	162.9	162.9	162.9
After / With Project Situation:										
Development Activity:										
Assumptions										
Households (HHs)										
Adoption Assumptions										
Annual Livestock Net Margin										
Total With Project Benefits	-	-	-	-	253.2	356.7	460.3	460.3	460.3	460.3
Incremental Benefits	-	-	-	-	90.2	193.8	297.4	297.4	297.4	297.4

Source:

Cost Benefit Analysis (CBA) Study Estimate Jan 2005.

Table AN12.7.9

GVT - M Pradesh - Jhabua: Village Chenpura: Forestry Benefit Assumptions.

Without \ With Project Forestry	Units	Assumptions			Benefits		
					Year 1 (Rs)	Year 2 (Rs)	Year 3 (Rs)
Development Activity: Forestry							
Before / Without Project Situation:							
Assumptions							
Households (HHs)	No	160					
Annual Forestry Net Margin	Rs/HH				-	-	-
Total Without Project Benefits							
After / With Project Situation:							
Assumptions							
Households (HHs)	No	160					
Adoption Assumptions	Percent	55%	78%	100%			
Annual Forestry Net Margin	Rs/HH						
Total With Project Benefits					357.5	507.0	650.0
Incremental Benefits	Rs/HH				357.5	507.0	650.0

Source:

Cost Benefit Analysis (CBA) Study Estimate Jan 2005.

Table AN12.7.9

GVT - M Pradesh - Jhabua: Village Chenpura: Incremental Forestry Benefit Stream (Rs'000).

Without \ With Project Forestry	Benefit Streams (Rs '000)									
	Year 1 1999/00	Year 2 2000/01	Year 3 2001/02	Year 4 2002/03	Year 5 2003/04	Year 6 2004/05	Year 7 2005/06	Year 8 2006/07	Year 9 2007/08	Year 10 2008/09
Development Activity: Forestry										
Before / Without Project Situation: Assumptions										
Households (HHs)										
Annual Forestry Net Margin										
Total Without Project Benefits	-	-	-	-	-	-	-	-	-	-
After / With Project Situation: Assumptions										
Households (HHs)										
Adoption Assumptions										
Annual Forestry Net Margin										
Total With Project Benefits	-	-	-	57.2	81.1	104.0	104.0	104.0	104.0	104.0
Incremental Benefits	-	-	-	57.2	81.1	104.0	104.0	104.0	104.0	104.0

Source:

Cost Benefit Analysis (CBA) Study Estimate Jan 2005.

Table AN12.7.10

GVT - M Pradesh - Jhabua: Village Chenpura: Migration Support Benefit Assumptions.

Without \ With Project Migration Support	Assumptions				Benefits		
					Year 1 (Rs)	Year 2 (Rs)	Year 3 (Rs)
Development Activity: Migration Support							
Before / Without Project Situation:							
Assumptions							
Economic Value per Day	Rs/day	25.0					
Days / Month / Household	No	18					
Economic Value per Month	Rs/month	450.0					
Months Migration / Year	Months	4.0					
Economic Value per Household	Rs/HH	1,800.0					
Households per Village	No	160					
Households per Village Migrating	Percent	10%					
Total Without Project Benefits	Rs/Village				28.8	28.8	28.8
After / With Project Situation:							
Assumptions							
Economic Value per Day \1	Rs/day	25.0	30%	32.5			
Days / Month / Household	No	18	30%	24.0			
Economic Value per Month	Rs/month	450.0		780.0			
Months Migration / Year	Months	4.0	-20%	3.2			
Economic Value per Household	Rs/HH	1,800.0		2,496.0			
Households per Village	No	160		160			
Households per Village Migrating	Percent	10%	-20%	8%			
Subtotal Migration Income	Rs/Village				31.9	31.9	31.9
Other Income	Sum (Rs)	-	-	-	-	-	-
Total With Project Benefits	Rs/Village				31.9	31.9	31.9
Incremental Benefits	Rs/Village				3.1	3.1	3.1

Source:

Cost Benefit Analysis (CBA) Study Estimate Jan 2005.

- 1\ Financial Wages (Rs/day):
Skill Labour - Rs 160
Casual Labour :
Male - Rs 40
Female - Rs 30

Table AN12.7.10

GVT - M Pradesh - Jhabua: Village Chenpura: Incremental Migration Support Benefit Stream (Rs'000).

Without \ With Project Migration Support	Benefit Streams (Rs '000)									
	Year 1 1999/00	Year 2 2000/01	Year 3 2001/02	Year 4 2002/03	Year 5 2003/04	Year 6 2004/05	Year 7 2005/06	Year 8 2006/07	Year 9 2007/08	Year 10 2008/09
Development Activity: Migration Support Before / Without Project Situation: Assumptions Economic Value per Day Days / Month / Household Economic Value per Month Months Migration / Year Economic Value per Household Households per Village Households per Village Migrating Total Without Project Benefits	-	-	-	-	-	28.8	28.8	28.8	28.8	28.8
After / With Project Situation: Assumptions Economic Value per Day \1 Days / Month / Household Economic Value per Month Months Migration / Year Economic Value per Household Households per Village Households per Village Migrating Subtotal Migration Income Other Income Total With Project Benefits Incremental Benefits	-	-	-	-	-	31.9	31.9	31.9	31.9	31.9
	-	-	-	-	-	-	-	-	-	-
	-	-	-	-	-	31.9	31.9	31.9	31.9	31.9
	-	-	-	-	-	3.1	3.1	3.1	3.1	3.1

Source:

Cost Benefit Analysis (CBA) Study Estimate Jan 2005.

- 1\ Financial Wages (Rs/day):
 Skill Labour - Rs 160
 Casual Labour :
 Male - Rs 40
 Female - Rs 30

Table AN12.7.11 GVT - M Pradesh - Jhabua: Village Chenpura: Weighted Household Crop Net Margin Summary (Rs/Household).

Item	WBR (%)	Before / Without Project			After / With Project			Increment		
		Khalif	Rabi	Total	Khalif	Rabi	Total	Khalif	Rabi	Total
Phase II										
Well Being Ranking - Very Poor Household Net Margin (Rs)	28.0%	834.6	102.5	937.1	1,849.8	1,067.8	2,917.6	1,015.2	965.3	1,980.5
Well Being Ranking - Poor Household Net Margin (Rs)	50.0%	637.7	-	637.7	4,803.0	220.7	5,023.7	4,165.3	220.7	4,386.0
Well Being Ranking - Moderate Household Net Margin (Rs)	15.0%	994.0	89.3	1,083.3	3,711.4	2,508.3	6,219.6	2,717.4	2,419.0	5,136.4
Well Being Ranking - Better Off Household Net Margin (Rs)	7.0%	6,180.9	1,756.7	7,937.5	16,195.9	2,039.3	18,235.2	10,015.0	282.7	10,297.7
Well Being Ranking - Weighted Household Net Margin (Rs)	100.0%	1,134.3	165.1	1,299.3	4,609.9	928.3	5,538.2	3,475.6	763.2	4,238.8
Phase I \1										
Well Being Ranking - Very Poor Household Net Margin (Rs)	28.0%	436.3	267.5	703.8	3,866.5	1,668.8	5,535.3	3,430.3	1,401.3	4,831.5
Well Being Ranking - Poor Household Net Margin (Rs)	50.0%	485.8	657.5	1,143.3	10,136.0	5,690.3	15,826.3	9,650.3	5,032.8	14,683.0
Well Being Ranking - Moderate Household Net Margin (Rs)	15.0%	986.3	3,385.0	4,371.3	9,457.5	5,195.0	14,652.5	8,471.3	1,810.0	10,281.3
Well Being Ranking - Better Off Household Net Margin (Rs)	7.0%	2,778.0	937.0	3,715.0	4,915.0	9,560.0	14,475.0	2,137.0	8,623.0	10,760.0
Well Being Ranking - Weighted Household Net Margin (Rs)	100.0%	707.4	977.0	1,684.4	7,913.3	4,760.8	12,674.1	7,205.9	3,783.8	10,989.7

Source: Study of Impact of WIRFP on Net Incomes of Target Households, Jan 2004.

WBR = GVT Household Well Being Ranking. Survey figures adjusted to Village Profile WBR.

\1 GVT - Madhya Pradesh - Phase I: Village Naganwat Choti: Weighted Household Crop Net Margin Summary.

Table AN12.7.12 GVT - M Pradesh - Jhabua: Village Chenpura: Weighted Household Crop Net Margin Sensitivity Analysis (Rs/Household).

Item	EIRR	Before / Without Project			After / With Project			Increment		
		Khalif	Rabi	Total	Khalif	Rabi	Total	Khalif	Rabi	Total
Development Activity: Crop Technology, SWC and WRD										
Weighted Net Margin (Phase II)										
Household Net Margin (Rs)		1,134.3	165.1	1,299.3	4,609.9	928.3	5,538.2	3,475.6	763.2	4,238.8
Incremental Benefit (Phase II / Phase I)										39%
Base Case Assumptions										
Household Net Margin (Rs)		1,134.3	165.1	1,299.3	4,609.9	928.3	5,538.2	3,475.6	763.2	4,238.8
Incremental Benefit (Phase II / Phase I)										39%
Sensitivity Increase (%)	0%									
Development Activity	23%									
Overall Village	18%									
Sensitivity Assumptions										
Household Net Margin (Rs)		1,134.3	165.1	1,299.3	4,609.9	928.3	5,538.2	3,475.6	763.2	4,238.8
Incremental Benefit (Phase II / Phase I)										39%
Sensitivity Increase (%)	0%									
Development Activity	23%									
Overall Village	18%									
Weighted Net Margin (Phase I)										
Household Net Margin (Rs)		707.4	977.0	1,684.4	7,913.3	4,760.8	12,674.1	7,205.9	3,783.8	10,989.7

Source: Study of Impact of WIRFP on Net Incomes of Target Households, Jan 2004.
EIRR = Economic Internal Rate of Return (rate at which NPV equal to zero).

Table AN12.7.13 GVT - M Pradesh - Jhabua: Village Chenpura: Weighted Household Livestock Net Margin Summary (Rs/Household).

Well Being Ranking	Weight (%)	Before / Without Project		After / With Project		Increment \1	
		Herd Value	Net Margin	Herd Value	Net Margin	Herd Value	Net Margin
Phase I - Well Being Ranking (WBR) \1							
Madhya Pradesh - WBR Weighted Data							
Very Poor	28.0%						
Average		580	(185.0)	5,650	412.5	474	597.5
Poor	50.0%						
Average		2,350	982.5	8,250	2,141.0	1,180	1,158.5
Moderate	15.0%						
Average		14,700	6,730.0	1,900	2,820.0	1,900	(3,910.0)
Better Off	7.0%						
Average		15,580	3,000.0	14,600	10,790.0	(196)	7,790.0
Phase I - WBR Weighted Data	100.0%	4,633	1,659.0	7,014	2,364.3	994	705.4
Phase II - Well Being Ranking (WBR)							
Very Poor	28.0%						
Average		5,756	149.2	10,970	1,446.4	1,043	1,297.2
Poor	50.0%						
Average		13,128	852.2	25,979	3,008.8	2,570	2,156.8
Moderate	15.0%						
Average		13,525	4,035.1	27,020	5,249.5	2,699	1,214.4
Better Off	7.0%						
Average		12,700	(781.7)	41,873	2,573.3	5,835	3,355.0
Phase II - WBR Weighted Data	100.0%	11,093	1,018.4	23,045	2,877.0	2,390	1,858.6

Source: Study of Impact of WIRFP on Net Incomes of Target Households, Jan 2004.

WBR = GVT Household Well Being Ranking.

Survey figures adjusted to Village Profile WBR.

\1 GVT - Madhya Pradesh - Phase I: Village Naganwat Choti: Weighted Household Livestock Net Margin Summary.

WIRFP - Phase II - Cost Benefit Analysis Study

Tables AN12.0 Individual Village Cost Benefit Analysis

Tables AN12.8 GVT - Madhya Pradesh - Jhabua: Village Kadwapada.

- Table AN12.8.1 GVT - M Pradesh - Jhabua: Village Kadwapada: Village Profile.
- Table AN12.8.2 GVT - M Pradesh - Jhabua: Village Kadwapada: Cost Benefit Analysis Summary (Rs'000).
- Table AN12.8.3 GVT - M Pradesh - Jhabua: Village Kadwapada: Cost Benefit Analysis Development Activity Summary A (Rs'000).
- Table AN12.8.4 GVT - M Pradesh - Jhabua: Village Kadwapada: Cost Benefit Analysis Development Activity Summary B (Rs'000).
- Table AN12.8.5 GVT - M Pradesh - Jhabua: Village Kadwapada: Costs - Financial (Rs'000).
GVT - M Pradesh - Jhabua: Village Kadwapada: Costs - Economic (Rs'000).
- Table AN12.8.6 GVT - M Pradesh - Jhabua: Village Kadwapada: VOD Household Assumptions.
GVT - M Pradesh - Jhabua: Village Kadwapada: Incremental VOD Benefit Stream (Rs'000).
- Table AN12.8.7 GVT - M Pradesh - Jhabua: Village Kadwapada: Household Crop Net Margin Assumptions.
GVT - M Pradesh - Jhabua: Village Kadwapada: Incremental Crop Benefit Stream (Rs'000).
- Table AN2.8.8 GVT - M Pradesh - Jhabua: Village Kadwapada: Household Livestock Net Margin Assumptions.
GVT - M Pradesh - Jhabua: Village Kadwapada: Incremental Livestock Benefit Stream (Rs'000).
- Table AN12.8.9 GVT - M Pradesh - Jhabua: Village Kadwapada: Forestry Benefit Assumptions.
GVT - M Pradesh - Jhabua: Village Kadwapada: Incremental Forestry Benefit Stream (Rs'000).
- Table AN12.8.10 GVT - M Pradesh - Jhabua: Village Kadwapada: Migration Support Benefit Assumptions.
GVT - M Pradesh - Jhabua: Village Kadwapada: Incremental Migration Support Benefit Stream (Rs'000).
- Table AN12.8.11 GVT - M Pradesh - Jhabua: Village Kadwapada: Weighted Household Crop Net Margin Summary (Rs/Household).
- Table AN12.8.12 GVT - M Pradesh - Jhabua: Village Kadwapada: Weighted Household Crop Net Margin Sensitivity Analysis (Rs/Household).
- Table AN12.8.13 GVT - M Pradesh - Jhabua: Village Kadwapada: Weighted Household Livestock Net Margin Summary (Rs/Household).

Table AN12.8.1 GVT - M Pradesh - Jhabua: Village Kadwapada: Village Profile.

Village Profile		
A. Background		
Village Name	Kadwapada	
District	Jhabua	
State	M P	
Participatory Planning Process (PPP)		
Village entry	Nov-99	
PRA	Jul-00	
CPA	Jan-01	
B. Infrastructure		
Hand Pumps (no)	8	
Wells (no)	20	
Linked by Road	1 km	
Electrification	Yes	
School	Primary	
C. Demographic Data		
Households (no)	125	
Participating Households	96	
Population	1,935	
Adults:		
Male	401	
Female	375	
Children:		
Boys	603	
Girls	556	
D. Well Being Ranking (No Households)		
Very Poor	8	9.2%
Poor	26	29.9%
Moderate	40	46.0%
Better Off	13	14.9%
Total	87	100%
E. Land Resource (ha)		
Total Area	291	
Revenue Land	159	
Forest Area - F	61	
Pasture Land	8	
Arable Land	63	
	291	
F. Livestock		
G. Self Help Groups (No Households)		
1. Group 1	18	
2. Group 2	18	
3. Group 3	12	
4. Group 4	13	
5. Group 5	11	
6. Group 6	14	
	86	

Source: GVT Jhabua Coordination Office - Madhya Pradesh.

Table AN12.8.4 GVT - M Pradesh - Jhabua: Village Kadwapada: Cost Benefit Analysis Development Activity Summary B (Rs'000).

Administration Costs / Development Activity	EIRR 11	NPV 12		Year 1 1999/00	Year 2 2000/01	Year 3 2001/02	Year 4 2002/03	Year 5 2003/04	Year 6 2004/05	Year 7 2005/06	Year 8 2006/07	Year 9 2007/08	Year 10 2008/09	Year 11 2009/10	Year 12 2010/11	Year 13 2011/12	Year 14	Year 15	Year 16	Year 17	Year 18	Year 19	Year 20	Year 21	Year 22	Year 23	Year 24	Year 25	
		(10%)	(%)																										
6. Livestock																													
Cost Stream																													
Investment				-	4.5	36.0	66.5	54.6	37.5	4.8	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Recurrent				-	-	0.5	4.0	10.7	16.2	19.9	20.4	20.4	20.4	20.4	20.4	20.4	20.4	20.4	20.4	20.4	20.4	20.4	20.4	20.4	20.4	20.4	20.4	20.4	20.4
Total Costs				-	4.5	36.4	70.6	65.3	53.7	24.7	20.4	20.4	20.4	20.4	20.4	20.4	20.4	20.4	20.4	20.4	20.4	20.4	20.4	20.4	20.4	20.4	20.4	20.4	
Benefit Stream																													
Before / Without Project				-	-	-	-	150.2	150.2	150.2	150.2	150.2	150.2	150.2	150.2	150.2	150.2	150.2	150.2	150.2	150.2	150.2	150.2	150.2	150.2	150.2	150.2	150.2	
Alter / With Project				-	-	-	-	157.6	222.1	286.6	286.6	286.6	286.6	286.6	286.6	286.6	286.6	286.6	286.6	286.6	286.6	286.6	286.6	286.6	286.6	286.6	286.6	286.6	
Incremental Benefits				-	-	-	-	7.5	71.9	136.4	136.4	136.4	136.4	136.4	136.4	136.4	136.4	136.4	136.4	136.4	136.4	136.4	136.4	136.4	136.4	136.4	136.4		
Net Incremental Benefits	37%	289.8	186%	-	(4.5)	(36.4)	(70.6)	(57.8)	18.3	111.7	116.0	116.0	116.0	116.0	116.0	116.0	116.0	116.0	116.0	116.0	116.0	116.0	116.0	116.0	116.0	116.0	116.0	116.0	
7. Forestry																													
Cost Stream																													
Investment				-	-	24.7	34.3	29.4	26.0	1.8	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	
Recurrent				-	-	-	2.5	5.9	8.8	11.4	11.6	11.6	11.6	11.6	11.6	11.6	11.6	11.6	11.6	11.6	11.6	11.6	11.6	11.6	11.6	11.6	11.6	11.6	
Total Costs				-	-	24.7	36.7	35.3	34.8	13.2	11.6	11.6	11.6	11.6	11.6	11.6	11.6	11.6	11.6	11.6	11.6	11.6	11.6	11.6	11.6	11.6	11.6	11.6	
Benefit Stream																													
Before / Without Project				-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	
Alter / With Project				-	-	-	21.3	30.2	38.7	38.7	38.7	38.7	38.7	38.7	38.7	38.7	38.7	38.7	38.7	38.7	38.7	38.7	38.7	38.7	38.7	38.7	38.7	38.7	
Incremental Benefits				-	-	-	21.3	30.2	38.7	38.7	38.7	38.7	38.7	38.7	38.7	38.7	38.7	38.7	38.7	38.7	38.7	38.7	38.7	38.7	38.7	38.7	38.7		
Net Incremental Benefits	31%	61.8	35%	-	-	(24.7)	(15.5)	(5.2)	3.9	25.5	27.1	27.1	27.1	27.1	27.1	27.1	27.1	27.1	27.1	27.1	27.1	27.1	27.1	27.1	27.1	27.1	27.1		
8. Migration Support																													
Cost Stream																													
Investment				-	-	-	-	31.5	32.4	9.0	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-		
Recurrent				-	-	-	-	3.2	6.4	7.3	7.3	7.3	7.3	7.3	7.3	7.3	7.3	7.3	7.3	7.3	7.3	7.3	7.3	7.3	7.3	7.3	7.3		
Total Costs				-	-	-	-	31.5	35.6	15.4	7.3	7.3	7.3	7.3	7.3	7.3	7.3	7.3	7.3	7.3	7.3	7.3	7.3	7.3	7.3	7.3	7.3		
Benefit Stream																													
Before / Without Project				-	-	-	-	54.2	54.2	54.2	54.2	54.2	54.2	54.2	54.2	54.2	54.2	54.2	54.2	54.2	54.2	54.2	54.2	54.2	54.2	54.2	54.2		
Alter / With Project				-	-	-	-	65.1	70.1	75.1	75.1	75.1	75.1	75.1	75.1	75.1	75.1	75.1	75.1	75.1	75.1	75.1	75.1	75.1	75.1	75.1	75.1		
Incremental Benefits				-	-	-	-	10.9	15.9	20.9	20.9	20.9	20.9	20.9	20.9	20.9	20.9	20.9	20.9	20.9	20.9	20.9	20.9	20.9	20.9	20.9			
Net Incremental Benefits	17%	9.5	5%	-	-	-	-	(31.5)	(24.6)	0.5	13.6	13.6	13.6	13.6	13.6	13.6	13.6	13.6	13.6	13.6	13.6	13.6	13.6	13.6	13.6	13.6			
Summary																													
Cost Stream																													
Investment				35.9	287.0	570.2	785.2	824.1	574.6	292.6	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-		
Recurrent				-	-	2.2	24.2	71.6	124.5	154.7	183.4	183.4	183.4	183.4	183.4	183.4	183.4	183.4	183.4	183.4	183.4	183.4	183.4	183.4	183.4	183.4	183.4		
Total Costs				35.9	287.0	572.4	809.5	895.7	699.1	447.3	183.4	183.4	183.4	183.4	183.4	183.4	183.4	183.4	183.4	183.4	183.4	183.4	183.4	183.4	183.4	183.4	183.4		
Benefit Stream																													
Before / Without Project				-	-	-	-	296.9	351.0	351.0	351.0	351.0	351.0	351.0	351.0	351.0	351.0	351.0	351.0	351.0	351.0	351.0	351.0	351.0	351.0	351.0			
Alter / With Project				-	-	69.5	91.2	808.5	947.1	1,017.1	1,022.6	1,023.2	1,023.7	1,023.7	1,023.7	1,023.7	1,023.7	1,023.7	1,023.7	1,023.7	1,023.7	1,023.7	1,023.7	1,023.7	1,023.7	1,023.7			
Incremental Benefits				-	-	69.5	91.2	511.6	596.0	666.0	671.6	672.1	672.7	672.7	672.7	672.7	672.7	672.7	672.7	672.7	672.7	672.7	672.7	672.7	672.7	672.7			
Net Incremental Benefits	14%	174.6	100%	(35.9)	(287.0)	(502.9)	(718.2)	(384.1)	(103.1)	218.7	488.2	488.7	489.3	489.3	489.3	489.3	489.3	489.3	489.3	489.3	489.3	489.3	489.3	489.3	489.3	489.3			

Source: Cost Benefit Analysis (CBA) Study Estimate Jan 2005.

11 EIRR = Economic Internal Rate of Return (rate at which NPV equal to zero).

12 NPV = Net Present Value of net incremental benefits at 12% (indicative opportunity cost of capital for rural development projects in India).

N/A = Not analysed as EIRR negative.

Table AN12.8.5

GVT - M Pradesh - Jhabua: Village Kadwapada: Costs - Financial (Rs'000).

Cost Head / Subhead	1999/00	2000/01	2001/02	2002/03	2003/04	2004/05	2005/06	Totals	
	Actual	Actual	Actual	Actual	Actual	Budget	Budget	(Rs'000)	(%)
A. Administration Costs									
GVT Bhopal (PHQ)	-	60.3	75.4	67.3	52.8	66.8	61.1	383.7	10%
DFIDI Consultancy	35.9	71.4	26.9	63.2	47.4	54.7	39.2	338.6	9%
Jhabua Coordination Office	-	112.9	157.8	124.3	247.5	135.5	125.0	903.0	23%
Total A	35.9	244.5	260.2	254.8	347.7	257.0	225.3	1,625.4	41%
B. Development Costs									
Component A									
1. PPGF	-	13.5	19.5	37.0	41.2	12.5	6.0	129.7	3%
2. VOD	-	17.2	91.4	92.1	58.6	24.6	30.2	314.0	8%
3. Crop Technology	-	30.8	113.4	124.3	50.7	90.4	6.0	415.6	10%
4. SWC	-	-	104.9	213.4	97.1	115.8	-	531.1	13%
5. WRD	-	-	-	113.8	281.3	72.7	47.8	515.6	13%
6. Livestock	-	5.0	40.0	73.9	60.7	41.7	5.3	226.6	6%
7. Forestry	-	-	27.4	38.1	32.7	28.9	2.0	129.1	3%
8. Migration Support	-	-	-	-	35.0	36.0	10.0	81.0	2%
Subtotal	-	66.5	396.6	692.5	657.3	422.4	107.4	2,342.7	59%
Other Development Costs									
Subtotal	-	-	-	-	-	-	-	-	0%
Total B	-	66.5	396.6	692.5	657.3	422.4	107.4	2,342.7	59%
Total A + B	35.9	311.0	656.8	947.3	1,005.0	679.5	332.7	3,968.1	100%
GVT	-	233.6	594.7	810.8	874.8	586.6	282.2	3,382.7	85%
DFIDI	35.9	71.4	26.9	63.2	47.4	54.7	39.2	338.6	9%
Community	-	5.8	33.8	72.1	81.5	36.8	9.6	239.6	6%
Government	-	0.2	1.4	1.2	1.3	1.3	1.8	7.1	0%

Source:

GVT Jhabua Coordination Office - Madhya Pradesh.

DFIDI = Department for International Development (India).

PPGF = Participatory Planning and Group Formation.

VOD = Village Organisation and Development.

SWC = Soil and Water Conservation.

WRD = Water Resource Development.

Table AN12.8.5

GVT - M Pradesh - Jhabua: Village Kadwapada: Costs - Financial (Rs'000).

Cost Head / Subhead	Conversion Factors		1999/00 Actual	2000/01 Actual	2001/02 Actual	2002/03 Actual	2003/04 Actual	2004/05 Budget	2005/06 Budget	Totals	
	CF	SCF								(Rs'000)	(%)
A. Administration Costs											
GVT Bhopal (PHQ)	0.90	1.00	-	54.2	67.9	60.6	47.5	60.1	55.0	345.4	10%
DFIDI Consultancy	1.00	1.00	35.9	71.4	26.9	63.2	47.4	54.7	39.2	338.6	10%
Jhabua Coordination Office	0.90	1.00	-	101.6	142.0	111.9	222.7	122.0	112.5	812.7	24%
Total A			35.9	227.2	236.8	235.6	317.7	236.8	206.7	1,496.7	44%
B. Development Costs											
Component A											
1. PPGF	0.90	1.00	-	12.2	17.6	33.3	37.1	11.3	5.4	116.7	3%
2. VOD	0.90	1.00	-	15.4	82.2	82.9	52.8	22.1	27.2	282.6	8%
3. Crop Technology	0.90	1.00	-	27.7	102.1	111.8	45.7	81.3	5.4	374.0	11%
4. SWC	0.90	0.75	-	-	70.8	144.0	65.5	78.1	-	358.5	11%
5. WRD	0.90	0.75	-	-	-	76.8	189.9	49.1	32.3	348.0	10%
6. Livestock	0.90	1.00	-	4.5	36.0	66.5	54.6	37.5	4.8	203.9	6%
7. Forestry	0.90	1.00	-	-	24.7	34.3	29.4	26.0	1.8	116.2	3%
8. Migration Support	0.90	1.00	-	-	-	-	31.5	32.4	9.0	72.9	2%
Subtotal			-	59.8	333.4	549.6	506.4	337.8	85.9	1,872.9	56%
Other Development Costs											
Subtotal	0.90	1.00	-	-	-	-	-	-	-	-	0%
Total B			-	59.8	333.4	549.6	506.4	337.8	85.9	1,872.9	56%
Total A + B			35.9	287.0	570.2	785.2	824.1	574.6	292.6	3,369.6	100%
GVT			-	-	-	-	-	-	-	N/A	
DFIDI			-	-	-	-	-	-	-	N/A	
Community			-	-	-	-	-	-	-	N/A	
Government			-	-	-	-	-	-	-	N/A	

Source:

Cost Benefit Analysis (CBA) Study Estimate Jan 2005.

DFIDI = Department for International Development (India).

PPGF = Participatory Planning and Group Formation.

VOD = Village Organisation and Development.

SWC = Soil and Water Conservation.

WRD = Water Resource Development.

Table AN12.8.6

GVT - M Pradesh - Jhabua: Village Kadwapada: VOD Household Assumptions.

Without \ With Project Village Organisation and Development	Units	Assumptions			Benefits		
					Year 1 (Rs)	Year 2 (Rs)	Year 3 (Rs)
Development Activity: Village Organisation and Development							
Before / Without Project Situation:							
A. Self Help Groups (SHGs)							
Assumption	Sum	Zero	Zero	Zero	-	-	-
B. Drudgery Reduction							
Assumption	Sum	Zero	Zero	Zero			
c Total Without Project Benefits					-	-	-
After / With Project Situation:							
A. Self Help Groups (SHGs)							
Assumptions							
Average Saving / Household	Rs	2,219					
Households / Village	No	86					
Present Group Deposits	Rs'000	190.8			190.8	196.5	202.4
Annual Savings Increase	%	3%					
Deposits on Loan to Members	%	55%					
SHG Interest Income	% / Year	15%					
Assumed Benefit	Rs'000				15.7	16.2	16.7
B. Drudgery Reduction							
Assumptions							
Hours Saved / Day / Household	No	1.0					
Number of Days / Year / Household	No	200					
Days / Year / Household (8hrs/day)	No	25.0					
Households / Village	No	86					
Day Equivalent / Village	No	2,150					
Economic Value per Day	(Rs/day)	25					
Assumed Benefit	Rs'000				53.8	53.8	53.8
Total With Project Benefits	Rs'000				69.5	70.0	70.4
Incremental Benefits	Rs'000				69.5	70.0	70.4

Source:

VOD = Village Organisation and Development.
Households per village: Kadwapada

Cost Benefit Analysis (CBA) Study Estimate Jan 2005.

Table AN12.8.6

GVT - M Pradesh - Jhabua: Village Kadwapada: Incremental VOD Benefit Stream (Rs'000).

Without \ With Project Village Organisation and Development	Benefit Streams (Rs '000)									
	Year 1 1999/00	Year 2 2000/01	Year 3 2001/02	Year 4 2002/03	Year 5 2003/04	Year 6 2004/05	Year 7 2005/06	Year 8 2006/07	Year 9 2007/08	Year 10 2008/09
Development Activity: Village Organisation and Development										
Before / Without Project Situation:										
A. Self Help Groups (SHGs) Assumption										
B. Drudgery Reduction Assumption										
c Total Without Project Benefits	-	-	-	-	-	-	-	-	-	-
After / With Project Situation:										
A. Self Help Groups (SHGs) Assumptions Average Saving / Household Households / Village Present Group Deposits Annual Savings Increase Deposits on Loan to Members SHG Interest Income Assumed Benefit	-	-	190.8	196.5	202.4	208.5	214.7	221.2	227.8	234.7
B. Drudgery Reduction Assumptions Hours Saved / Day / Household Number of Days / Year / Household Days / Year / Household (8hrs/day) Households / Village Day Equivalent / Village Economic Value per Day Assumed Benefit	-	-	53.8	53.8	53.8	53.8	53.8	53.8	53.8	53.8
Total With Project Benefits	-	-	69.5	70.0	70.4	71.0	71.5	72.0	72.5	73.1
Incremental Benefits	-	-	69.5	70.0	70.4	71.0	71.5	72.0	72.5	73.1

Source:

VOD = Village Organisation and Development.
Households per village: Kadwapada

Cost Benefit Analysis (CBA) Study Estimate Jan 2005.

Table AN12.8.7

GVT - M Pradesh - Jhabua: Village Kadwapada: Household Crop Net Margin Assumptions.

Without \ With Project Crop Technology, SWC and WRD	Units	Assumptions			Benefits		
					Year 1 (Rs/HH)	Year 2 (Rs/HH)	Year 3 (Rs/HH)
Development Activity: Crop Technology, SWC and WRD							
Before / Without Project Situation: Assumptions							
Households (HHs)	No	86					
Crop Adoption Assumptions		100%	100%	100%			
Kharif Crop Net Margin	Rs/HH				1,433.7	1,433.7	1,433.7
Rabi Crop Net Margin	Rs/HH				272	272.3	272.3
Total Without Project Benefits	Rs/HH				1,705.9	1,705.9	1,705.9
After / With Project Situation: Assumptions							
Households (HHs)	No	86					
Crop Adoption Assumptions		100%	100%	100%			
Kharif Crop Net Margin	Rs/HH				4,986.8	4,986.8	4,986.8
Rabi Crop Net Margin	Rs/HH				1,411.2	1,411.2	1,411.2
Total With Project Benefits	Rs/HH				6,398.0	6,398.0	6,398.0
Incremental Benefits	Rs/HH				4,692.0	4,692.0	4,692.0

Source:

Cost Benefit Analysis (CBA) Study Estimate Jan 2005.

Table AN12.8.7

GVT - M Pradesh - Jhabua: Village Kadwapada: Incremental Crop Benefit Stream (Rs'000).

Without \ With Project Crop Technology, SWC and WRD	Benefit Streams (Rs '000)									
	Year 1 1999/00	Year 2 2000/01	Year 3 2001/02	Year 4 2002/03	Year 5 2003/04	Year 6 2004/05	Year 7 2005/06	Year 8 2006/07	Year 9 2007/08	Year 10 2008/09
Development Activity: Crop Technology, SWC and WRD										
Before / Without Project Situation: Assumptions										
Households (HHs)										
Crop Adoption Assumptions										
Kharif Crop Net Margin	-	-	-	-	123.3	123.3	123.3	123.3	123.3	123.3
Rabi Crop Net Margin	-	-	-	-	23.4	23.4	23.4	23.4	23.4	23.4
Total Without Project Benefits	-	-	-	-	146.7	146.7	146.7	146.7	146.7	146.7
After / With Project Situation: Assumptions										
Households (HHs)										
Crop Adoption Assumptions										
Kharif Crop Net Margin	-	-	-	-	428.9	428.9	428.9	428.9	428.9	428.9
Rabi Crop Net Margin	-	-	-	-	121.4	121.4	121.4	121.4	121.4	121.4
Total With Project Benefits	-	-	-	-	550.2	550.2	550.2	550.2	550.2	550.2
Incremental Benefits	-	-	-	-	403.5	403.5	403.5	403.5	403.5	403.5

Source:

Cost Benefit Analysis (CBA) Study Estimate Jan 2005.

Table AN2.8.8

GVT - M Pradesh - Jhabua: Village Kadwapada: Household Livestock Net Margin Assumptions.

Without \ With Project Livestock	Units	Assumptions			Benefits		
					Year 1 (Rs)	Year 2 (Rs)	Year 3 (Rs)
Development Activity: Livestock							
Before / Without Project Situation: Assumptions							
Households (HHs)	No	86					
Annual Livestock Net Margin	Rs/HH						
Total Without Project Benefits					1,745.9	1,745.9	1,745.9
After / With Project Situation:							
Development Activity: Assumptions							
Households (HHs)	No	86					
Adoption Assumptions	Percent	55%	78%	100%			
Annual Livestock Net Margin	Rs/HH						
Total With Project Benefits					1,832.8	2,582.6	3,332.3
Incremental Benefits	Rs/HH				86.8	836.6	1,586.4

Source:

Cost Benefit Analysis (CBA) Study Estimate Jan 2005.

Table AN2.8.8

GVT - M Pradesh - Jhabua: Village Kadwapada: Incremental Livestock Benefit Stream (Rs'000).

Without \ With Project Livestock	Benefit Streams (Rs '000)									
	Year 1 1999/00	Year 2 2000/01	Year 3 2001/02	Year 4 2002/03	Year 5 2003/04	Year 6 2004/05	Year 7 2005/06	Year 8 2006/07	Year 9 2007/08	Year 10 2008/09
Development Activity: Livestock										
Before / Without Project Situation:										
Assumptions										
Households (HHs)										
Annual Livestock Net Margin										
Total Without Project Benefits	-	-	-	-	150.2	150.2	150.2	150.2	150.2	150.2
After / With Project Situation:										
Development Activity:										
Assumptions										
Households (HHs)										
Adoption Assumptions										
Annual Livestock Net Margin										
Total With Project Benefits	-	-	-	-	157.6	222.1	286.6	286.6	286.6	286.6
Incremental Benefits	-	-	-	-	7.5	71.9	136.4	136.4	136.4	136.4

Source:

Cost Benefit Analysis (CBA) Study Estimate Jan 2005.

Table AN12.8.9

GVT - M Pradesh - Jhabua: Village Kadwapada: Forestry Benefit Assumptions.

Without \ With Project Forestry	Units	Assumptions			Benefits		
					Year 1 (Rs)	Year 2 (Rs)	Year 3 (Rs)
Development Activity: Forestry							
Before / Without Project Situation: Assumptions							
Households (HHs)	No	86					
Annual Forestry Net Margin	Rs/HH				-	-	-
Total Without Project Benefits							
After / With Project Situation: Assumptions							
Households (HHs)	No	86					
Adoption Assumptions	Percent	55%	78%	100%			
Annual Forestry Net Margin	Rs/HH				247.5	351.0	450.0
Total With Project Benefits							
Incremental Benefits	Rs/HH				247.5	351.0	450.0

Source:

Cost Benefit Analysis (CBA) Study Estimate Jan 2005.

Table AN12.8.9

GVT - M Pradesh - Jhabua: Village Kadwapada: Incremental Forestry Benefit Stream (Rs'000).

Without \ With Project Forestry	Benefit Streams (Rs '000)									
	Year 1 1999/00	Year 2 2000/01	Year 3 2001/02	Year 4 2002/03	Year 5 2003/04	Year 6 2004/05	Year 7 2005/06	Year 8 2006/07	Year 9 2007/08	Year 10 2008/09
Development Activity: Forestry										
Before / Without Project Situation: Assumptions										
Households (HHs)										
Annual Forestry Net Margin										
Total Without Project Benefits	-	-	-	-	-	-	-	-	-	-
After / With Project Situation: Assumptions										
Households (HHs)										
Adoption Assumptions										
Annual Forestry Net Margin										
Total With Project Benefits	-	-	-	21.3	30.2	38.7	38.7	38.7	38.7	38.7
Incremental Benefits	-	-	-	21.3	30.2	38.7	38.7	38.7	38.7	38.7

Source:

Cost Benefit Analysis (CBA) Study Estimate Jan 2005.

Table AN12.8.10

GVT - M Pradesh - Jhabua: Village Kadwapada: Migration Support Benefit Assumptions.

Without \ With Project	Assumptions				Benefits		
					Year 1 (Rs)	Year 2 (Rs)	Year 3 (Rs)
Development Activity: Migration Support							
Before / Without Project Situation:							
Assumptions							
Economic Value per Day	Rs/day	25.0					
Days / Month / Household	No	18					
Economic Value per Month	Rs/month	450.0					
Months Migration / Year	Months	4.0					
Economic Value per Household	Rs/HH	1,800.0					
Households per Village	No	86					
Households per Village Migrating	Percent	35%					
Total Without Project Benefits	Rs/Village				54.2	54.2	54.2
After / With Project Situation:							
Assumptions							
Economic Value per Day \1	Rs/day	25.0	30%	32.5			
Days / Month / Household	No	18	30%	24.0			
Economic Value per Month	Rs/month	450.0		780.0			
Months Migration / Year	Months	4.0	-20%	3.2			
Economic Value per Household	Rs/HH	1,800.0		2,496.0			
Households per Village	No	86		86			
Households per Village Migrating	Percent	35%	-20%	28%			
Subtotal Migration Income	Rs/Village				60.1	60.1	60.1
Other Income	Sum (Rs'000)	5.0	10.0	15.0	5.0	10.0	15.0
Total With Project Benefits	Rs/Village				65.1	70.1	75.1
Incremental Benefits	Rs/Village				10.9	15.9	20.9

Source:

Cost Benefit Analysis (CBA) Study Estimate Jan 2005.

- 1\ Financial Wages (Rs/day):
 - Skill Labour - Rs 160
 - Casual Labour :
 - Male - Rs 40
 - Female - Rs 30

Table AN12.8.10

GVT - M Pradesh - Jhabua: Village Kadwapada: Incremental Migration Support Benefit Stream (Rs'000).

Without \ With Project	Benefit Streams (Rs '000)									
	Year 1 1999/00	Year 2 2000/01	Year 3 2001/02	Year 4 2002/03	Year 5 2003/04	Year 6 2004/05	Year 7 2005/06	Year 8 2006/07	Year 9 2007/08	Year 10 2008/09
Development Activity: Migration Support Before / Without Project Situation: Assumptions Economic Value per Day Days / Month / Household Economic Value per Month Months Migration / Year Economic Value per Household Households per Village Households per Village Migrating Total Without Project Benefits	-	-	-	-	-	54.2	54.2	54.2	54.2	54.2
After / With Project Situation: Assumptions Economic Value per Day \1 Days / Month / Household Economic Value per Month Months Migration / Year Economic Value per Household Households per Village Households per Village Migrating Subtotal Migration Income Other Income Total With Project Benefits Incremental Benefits	-	-	-	-	-	60.1	60.1	60.1	60.1	60.1
	-	-	-	-	-	5.0	10.0	15.0	15.0	15.0
	-	-	-	-	-	65.1	70.1	75.1	75.1	75.1
	-	-	-	-	-	10.9	15.9	20.9	20.9	20.9

Source:

Cost Benefit Analysis (CBA) Study Estimate Jan 2005.

- 1\ Financial Wages (Rs/day):
 Skill Labour - Rs 160
 Casual Labour :
 Male - Rs 40
 Female - Rs 30

Table AN12.8.11 GVT - M Pradesh - Jhabua: Village Kadwapada: Weighted Household Crop Net Margin Summary (Rs/Household).

Item	WBR (%)	Before / Without Project			After / With Project			Increment		
		Khalif	Rabi	Total	Khalif	Rabi	Total	Khalif	Rabi	Total
Phase II										
Well Being Ranking - Very Poor Household Net Margin (Rs)	8.0%	834.6	102.5	937.1	1,849.8	1,067.8	2,917.6	1,015.2	965.3	1,980.5
Well Being Ranking - Poor Household Net Margin (Rs)	26.0%	637.7	-	637.7	4,803.0	220.7	5,023.7	4,165.3	220.7	4,386.0
Well Being Ranking - Moderate Household Net Margin (Rs)	40.0%	994.0	89.3	1,083.3	3,711.4	2,508.3	6,219.6	2,717.4	2,419.0	5,136.4
Well Being Ranking - Better Off Household Net Margin (Rs)	13.0%	6,180.9	1,756.7	7,937.5	16,195.9	2,039.3	18,235.2	10,015.0	282.7	10,297.7
Well Being Ranking - Weighted Household Net Margin (Rs)	87.0%	1,433.7	272.3	1,705.9	4,986.8	1,411.2	6,398.0	3,553.1	1,138.9	4,692.0
Phase I¹										
Well Being Ranking - Very Poor Household Net Margin (Rs)	8.0%	436.3	267.5	703.8	3,866.5	1,668.8	5,535.3	3,430.3	1,401.3	4,831.5
Well Being Ranking - Poor Household Net Margin (Rs)	26.0%	485.8	657.5	1,143.3	10,136.0	5,690.3	15,826.3	9,650.3	5,032.8	14,683.0
Well Being Ranking - Moderate Household Net Margin (Rs)	40.0%	986.3	3,385.0	4,371.3	9,457.5	5,195.0	14,652.5	8,471.3	1,810.0	10,281.3
Well Being Ranking - Better Off Household Net Margin (Rs)	13.0%	2,778.0	937.0	3,715.0	4,915.0	9,560.0	14,475.0	2,137.0	8,623.0	10,760.0
Well Being Ranking - Weighted Household Net Margin (Rs)	87.0%	916.8	1,668.2	2,585.0	7,366.6	4,933.8	12,300.4	6,449.8	3,265.6	9,715.4

Source: Study of Impact of WIRFP on Net Incomes of Target Households, Jan 2004.

WBR = GVT Household Well Being Ranking. Survey figures adjusted to Village Profile WBR.

¹ GVT - Madhya Pradesh - Phase I: Village Naganwat Choti: Weighted Household Crop Net Margin Summary.

Table AN12.8.12 GVT - M Pradesh - Jhabua: Village Kadwapada: Weighted Household Crop Net Margin Sensitivity Analysis (Rs/Household).

Item	EIRR	Before / Without Project			After / With Project			Increment		
		Khalif	Rabi	Total	Khalif	Rabi	Total	Khalif	Rabi	Total
Development Activity:										
Crop Technology, SWC and WRD										
Weighted Net Margin (Phase II)										
Household Net Margin (Rs)		1,433.7	272.3	1,705.9	4,986.8	1,411.2	6,398.0	3,553.1	1,138.9	4,692.0
Incremental Benefit (Phase II / Phase I)										48%
Base Case Assumptions										
Household Net Margin (Rs)		1,433.7	272.3	1,705.9	4,986.8	1,411.2	6,398.0	3,553.1	1,138.9	4,692.0
Incremental Benefit (Phase II / Phase I)										48%
Sensitivity Increase (%)	0%									
Development Activity (EIRR)	32%									
Overall Village (EIRR)	14%									
Sensitivity Assumptions										
Household Net Margin (Rs)		1,433.7	272.3	1,705.9	4,986.8	1,411.2	6,398.0	3,553.1	1,138.9	4,692.0
Incremental Benefit (Phase II / Phase I)										48%
Sensitivity Increase (%)	0%									
Development Activity (EIRR)	32%									
Overall Village (EIRR)	14%									
Weighted Net Margin (Phase I)										
Household Net Margin (Rs)		916.8	1,668.2	2,585.0	7,366.6	4,933.8	12,300.4	6,449.8	3,265.6	9,715.4

Source: Study of Impact of WIRFP on Net Incomes of Target Households, Jan 2004.
EIRR = Economic Internal Rate of Return (rate at which NPV equal to zero).

Table AN12.8.13 GVT - M Pradesh - Jhabua: Village Kadwapada: Weighted Household Livestock Net Margin Summary (Rs/Household).

Well Being Ranking	Weight (%)	Before / Without Project		After / With Project		Increment \1	
		Herd Value	Net Margin	Herd Value	Net Margin	Herd Value	Net Margin
Phase I - Well Being Ranking (WBR) \1							
Madhya Pradesh - WBR Weighted Data							
Very Poor	8.0%						
Average		580	(185.0)	5,650	412.5	474	597.5
Poor	26.0%						
Average		2,350	982.5	8,250	2,141.0	1,180	1,158.5
Moderate	40.0%						
Average		14,700	6,730.0	1,900	2,820.0	1,900	(3,910.0)
Better Off	13.0%						
Average		15,580	3,000.0	14,600	10,790.0	(196)	7,790.0
Phase I - WBR Weighted Data	87.0%	8,563	3,322.7	5,255	3,120.4	1,079	(202.3)
Phase II - Well Being Ranking (WBR)							
Very Poor	8.0%						
Average		5,756	149.2	10,970	1,446.4	1,043	1,297.2
Poor	26.0%						
Average		13,128	852.2	25,979	3,008.8	2,570	2,156.8
Moderate	40.0%						
Average		13,525	4,035.1	27,020	5,249.5	2,699	1,214.4
Better Off	13.0%						
Average		12,700	(781.7)	41,873	2,573.3	5,835	3,355.0
Phase II - WBR Weighted Data	87.0%	10,935	1,745.9	23,884	3,332.3	2,590	1,586.4

Source: Study of Impact of WIRFP on Net Incomes of Target Households, Jan 2004.

WBR = GVT Household Well Being Ranking.

Survey figures adjusted to Village Profile WBR.

\1 GVT - Madhya Pradesh - Phase I: Village Naganwat Choti: Weighted Household Livestock Net Margin Summary.

WIRFP - Phase II - Cost Benefit Analysis Study

Tables AN12.0 Individual Village Cost Benefit Analysis

Tables AN12.9 GVT - Madhya Pradesh - Jhabua: Village Padabanda.

- Table AN12.9.1 GVT - M Pradesh - Jhabua: Village Padabanda: Village Profile.
- Table AN12.9.2 GVT - M Pradesh - Jhabua: Village Padabanda: Cost Benefit Analysis Summary (Rs'000).
- Table AN12.9.3 GVT - M Pradesh - Jhabua: Village Padabanda: Cost Benefit Analysis Development Activity Summary A (Rs'000).
- Table AN12.9.4 GVT - M Pradesh - Jhabua: Village Padabanda: Cost Benefit Analysis Development Activity Summary B (Rs'000).
- Table AN12.9.5 GVT - M Pradesh - Jhabua: Village Padabanda: Costs - Financial (Rs'000).
GVT - M Pradesh - Jhabua: Village Padabanda: Costs - Economic (Rs'000).
- Table AN12.9.6 GVT - M Pradesh - Jhabua: Village Padabanda: VOD Household Assumptions.
GVT - M Pradesh - Jhabua: Village Padabanda: Incremental VOD Benefit Stream (Rs'000).
- Table AN12.9.7 GVT - M Pradesh - Jhabua: Village Padabanda: Household Crop Net Margin Assumptions.
GVT - M Pradesh - Jhabua: Village Padabanda: Incremental Crop Benefit Stream (Rs'000).
- Table AN12.9.8 GVT - M Pradesh - Jhabua: Village Padabanda: Household Livestock Net Margin Assumptions.
GVT - M Pradesh - Jhabua: Village Padabanda: Incremental Livestock Benefit Stream (Rs'000).
- Table AN12.9.9 GVT - M Pradesh - Jhabua: Village Padabanda: Forestry Benefit Assumptions.
GVT - M Pradesh - Jhabua: Village Padabanda: Incremental Forestry Benefit Stream (Rs'000).
- Table AN12.9.10 GVT - M Pradesh - Jhabua: Village Padabanda: Migration Support Benefit Assumptions.
GVT - M Pradesh - Jhabua: Village Padabanda: Incremental Migration Support Benefit Stream (Rs'000).
- Table AN12.9.11 GVT - M Pradesh - Jhabua: Village Padabanda: Weighted Household Crop Net Margin Summary (Rs/Household).
- Table AN12.9.12 GVT - M Pradesh - Jhabua: Village Padabanda: Weighted Household Crop Net Margin Sensitivity Analysis (Rs/Household).
- Table AN12.9.13 GVT - M Pradesh - Jhabua: Village Padabanda: Weighted Household Livestock Net Margin Summary (Rs/Household).

Table AN12.9.1 GVT - M Pradesh - Jhabua: Village Padabanda: Village Profile.

Village Profile \1					
A. Background			D. Well Being Ranking (No Households)		
Village Name	Padabanda		Very Poor	4	10.8%
District	Jhabua		Poor	11	29.7%
State	M P		Moderate	11	29.7%
			Better Off	11	29.7%
			Total	37	100%
B. Participatory Planning Process (PPP)			E. Land Resource (ha)		
Village entry	Jan-00		Total Area		N/A
PRA	Sep-00		Revenue Land (unused)		N/A
CPA	Sep-00		Forest Area - Revenue		N/A
			Pasture Land		N/A
			Arable Land		N/A
					-
C. Infrastructure			F. Livestock		
Hand Pumps (no)		4			
Wells (no)		11			
Linked by Road		5 km			
Electrification		Yes			
School		Primary			
D. Demographic Data			G. Self Help Groups (No Households)		
Households (no)		40	1. Group 1		17
Participating Households		37	2. Group 2		10
Population (Adults)		295	3. Group 3		10
Adults:			4. Group 4		-
Male		183	5. Group 5		-
Female		112	6. Group 6		-
Children:					
Boys		N/A			
Girls		N/A			
					37

Source: GVT Jhabua Coordination Office - Madhya Pradesh.

\1 Subject to final adjustment following consolidation exercise prior to Annual Review Meeting (ARM) in Feb 2005.

Table AN12.9.2 GVT - M Pradesh - Jhabua: Village Padabanda: Cost Benefit Analysis Summary (Rs'000).

Administration Costs / Development Activity	EIRR ¹	NPV ²		Year 1 1999/00	Year 2 2000/01	Year 3 2001/02	Year 4 2002/03	Year 5 2003/04	Year 6 2004/05	Year 7 2005/06	Year 8 2006/07	Year 9 2007/08	Year 10 2008/09
		(10%)	(%)										
A. Administration Costs													
Total A	N/A	-985	62%	35.9	227.2	236.8	235.6	317.7	236.8	206.7	20.7	20.7	20.7
B. Development Intervention Component A													
1. PPGF													
Net Incremental Benefits	N/A	-50	3%	-	(13.1)	(15.4)	(17.0)	(5.6)	(9.3)	(10.4)	(1.7)	(1.7)	(1.7)
2. VOD													
Net Incremental Benefits	-4%	-106	7%	-	(16.6)	(62.6)	(92.4)	(23.7)	(3.3)	(8.0)	10.0	10.1	10.1
3/5. Crop Technology, SWC and WRD													
Net Incremental Benefits	N/A	-710	45%	-	-	(272.8)	(449.9)	(16.9)	(569.3)	0.6	23.3	23.3	23.3
6. Livestock													
Net Incremental Benefits	61%	227	-14%	-	-	(24.6)	(36.2)	12.4	68.3	63.8	67.8	67.8	67.8
7. Forestry													
Net Incremental Benefits	36%	19	-1%	-	-	(1.8)	(13.3)	4.8	8.8	(2.1)	7.7	7.7	7.7
8. Migration Support													
Net Incremental Benefits	N/A	12	-1%	-	-	-	-	-	2.2	3.2	3.2	3.2	3.2
Summary													
Net Incremental Benefits	N/A	(1,593)	100%	(35.9)	(256.9)	(614.1)	(844.4)	(346.7)	(739.4)	(159.7)	89.7	89.7	89.7
Sensitivity Analysis													
Analysis Period													
12 Years	N/A	(1,708)											
20 Years (Base Case)	N/A	(1,593)											
25 Years	N/A	(1,560)											
30 Years	-2%	(1,541)											
Costs - Administration													
Investment Costs Decreased by 20 percent	N/A	(1,396)											
Costs - Administration and Development													
Recurrent Costs Increased by 20 percent	N/A	(1,783)											
Benefits - Crop, SWC and WRD													
Crop Benefits Increased by 20 percent	-3%	(1,349)											
Livestock Benefits Increased by 20 percent	N/A	(1,489)											

Source: Cost Benefit Analysis (CBA) Study Estimate Jan 2005.

¹ EIRR = Economic Internal Rate of Return (rate at which NPV equal to zero).

² NPV = Net Present Value of net incremental benefits at 12% (indicative opportunity cost of capital for rural development projects in India).

N/A = Not analysed as EIRR negative.

Table AN12.9.3 GVT - M Pradesh - Jhabua: Village Padabanda: Cost Benefit Analysis Development Activity Summary A (Rs'000).

Administration Costs / Development Activity	EIRR ¹	NPV ²		Year 1 1999/00	Year 2 2000/01	Year 3 2001/02	Year 4 2002/03	Year 5 2003/04	Year 6 2004/05	Year 7 2005/06	Year 8 2006/07	Year 9 2007/08	Year 10 2008/09
		(10%)	(%)										
A. Administration Costs													
Investment				35.9	227.2	236.8	235.6	317.7	236.8	206.7	-	-	-
Recurrent				-	-	-	-	-	-	-	20.7	20.7	20.7
Total (A)	N/A	(985.3)	62%	35.9	227.2	236.8	235.6	317.7	236.8	206.7	20.7	20.7	20.7
B. Development Intervention Component A													
1. PPGF													
Cost Stream													
Investment				-	13.1	15.1	16.3	4.5	8.1	9.0	-	-	-
Recurrent				-	-	0.3	0.7	1.1	1.2	1.4	1.7	1.7	1.7
Total Costs				-	13.1	15.4	17.0	5.6	9.3	10.4	1.7	1.7	1.7
Benefit Stream													
Before / Without Project				-	-	-	-	-	-	-	-	-	-
After / With Project				-	-	-	-	-	-	-	-	-	-
Incremental Benefits				-	-	-	-	-	-	-	-	-	-
Net Incremental Benefits	N/A	(49.6)	3%	-	(13.1)	(15.4)	(17.0)	(5.6)	(9.3)	(10.4)	(1.7)	(1.7)	(1.7)
2. VOD													
Cost Stream													
Investment				-	16.6	85.9	111.4	37.2	15.0	18.9	-	-	-
Recurrent				-	-	0.8	5.1	10.7	12.6	13.3	14.3	14.3	14.3
Total Costs				-	16.6	86.7	116.6	47.9	27.5	32.2	14.3	14.3	14.3
Benefit Stream													
Before / Without Project				-	-	-	-	-	-	-	-	-	-
After / With Project				-	-	24.1	24.1	24.2	24.2	24.2	24.3	24.3	24.3
Incremental Benefits				-	-	24.1	24.1	24.2	24.2	24.2	24.3	24.3	24.3
Net Incremental Benefits	-4%	(106.0)	7%	-	(16.6)	(62.6)	(92.4)	(23.7)	(3.3)	(8.0)	10.0	10.1	10.1
3/5. Crop Technology, SWC and WRD													
Cost Stream													
Investment													
Crop Technology				-	-	32.1	62.2	24.2	12.6	9.5	-	-	-
Soil Water Conservation				-	-	168.7	285.9	63.1	69.7	-	-	-	-
Water Resource Development				-	-	72.0	69.0	76.6	614.0	15.8	-	-	-
Recurrent													
Crop Technology				-	-	-	0.8	2.4	3.0	3.3	3.5	3.5	3.5
Soil Water Conservation				-	-	-	21.1	56.8	64.7	73.4	73.4	73.4	73.4
Water Resource Development				-	-	-	10.8	21.2	32.6	124.8	127.1	127.1	127.1
Total Costs				-	-	272.8	449.9	244.2	796.6	226.7	204.1	204.1	204.1
Benefit Stream													
Before / Without Project				-	-	-	-	110.7	110.7	110.7	110.7	110.7	110.7
After / With Project				-	-	-	-	338.0	338.0	338.0	338.0	338.0	338.0
Incremental Benefits				-	-	-	-	227.3	227.3	227.3	227.3	227.3	227.3
Net Incremental Benefits	N/A	(710.2)	45%	-	-	(272.8)	(449.9)	(16.9)	(569.3)	0.6	23.3	23.3	23.3

Source: Cost Benefit Analysis (CBA) Study Estimate Jan 2005.

¹ EIRR = Economic Internal Rate of Return (rate at which NPV equal to zero).

² NPV = Net Present Value of net incremental benefits at 12% (indicative opportunity cost of capital for rural development projects in India).

N/A = Not analysed as EIRR negative.

Table AN12.9.4 GVT - M Pradesh - Jhabua: Village Padabanda: Cost Benefit Analysis Development Activity Summary B (Rs'000).

Administration Costs / Development Activity	EIRR \1	NPV \2		Year 1 1999/00	Year 2 2000/01	Year 3 2001/02	Year 4 2002/03	Year 5 2003/04	Year 6 2004/05	Year 7 2005/06	Year 8 2006/07	Year 9 2007/08	Year 10 2008/09
		(10%)	(%)										
6. Livestock													
Cost Stream													
Investment				-	-	24.6	56.7	30.7	-	4.5	-	-	-
Recurrent				-	-	-	2.5	8.1	11.2	11.2	11.6	11.6	11.6
Total Costs				-	-	24.6	59.2	38.8	11.2	15.7	11.6	11.6	11.6
Benefit Stream													
Before / Without Project				-	-	-	46.1	46.1	46.1	46.1	46.1	46.1	46.1
After / With Project				-	-	-	69.1	97.3	125.6	125.6	125.6	125.6	125.6
Incremental Benefits				-	-	-	22.9	51.2	79.5	79.5	79.5	79.5	79.5
Net Incremental Benefits	61%	227.0	-14%	-	-	(24.6)	(36.2)	12.4	68.3	63.8	67.8	67.8	67.8
7. Forestry													
Cost Stream													
Investment				-	-	1.8	19.2	1.8	-	10.9	-	-	-
Recurrent				-	-	-	0.2	2.1	2.3	3.4	3.4	3.4	3.4
Total Costs				-	-	1.8	19.4	3.9	2.3	13.2	3.4	3.4	3.4
Benefit Stream													
Before / Without Project				-	-	-	-	-	-	-	-	-	-
After / With Project				-	-	-	6.1	8.7	11.1	11.1	11.1	11.1	11.1
Incremental Benefits				-	-	-	6.1	8.7	11.1	11.1	11.1	11.1	11.1
Net Incremental Benefits	36%	18.9	-1%	-	-	(1.8)	(13.3)	4.8	8.8	(2.1)	7.7	7.7	7.7
8. Migration Support													
Cost Stream													
Investment				-	-	-	-	-	1.1	-	-	-	-
Recurrent				-	-	-	-	-	-	0.1	0.1	0.1	0.1
Total Costs				-	-	-	-	-	1.1	0.1	0.1	0.1	0.1
Benefit Stream													
Before / Without Project				-	-	-	-	-	30.0	30.0	30.0	30.0	30.0
After / With Project				-	-	-	-	-	33.2	33.2	33.2	33.2	33.2
Incremental Benefits				-	-	-	-	-	3.3	3.3	3.3	3.3	3.3
Net Incremental Benefits	N/A	11.8	-1%	-	-	-	-	-	2.2	3.2	3.2	3.2	3.2
Summary													
Cost Stream													
Investment				35.9	256.9	637.1	856.4	555.6	957.2	275.3	-	-	-
Recurrent				-	-	1.2	41.2	102.4	127.6	229.8	255.8	255.8	255.8
Total Costs				35.9	256.9	638.2	897.6	658.0	1,084.8	505.1	255.8	255.8	255.8
Benefit Stream													
Before / Without Project				-	-	-	46.1	156.8	186.8	186.8	186.8	186.8	186.8
After / With Project				-	-	24.1	99.3	468.2	532.1	532.2	532.2	532.2	532.3
Incremental Benefits				-	-	24.1	53.2	311.4	345.4	345.4	345.4	345.5	345.5
Net Incremental Benefits	N/A	(1,593.4)	100%	(35.9)	(256.9)	(614.1)	(844.4)	(346.7)	(739.4)	(159.7)	89.7	89.7	89.7

Source: Cost Benefit Analysis (CBA) Study Estimate Jan 2005.

Table AN12.9.5

GVT - M Pradesh - Jhabua: Village Padabanda: Costs - Financial (Rs'000).

Cost Head / Subhead	1999/00	2000/01	2001/02	2002/03	2003/04	2004/05	2005/06	Totals	
	Actual	Actual	Actual	Actual	Actual	Budget	Budget	(Rs'000)	(%)
A. Administration Costs									
GVT Bhopal (PHQ)	-	60.3	75.4	67.3	52.8	66.8	61.1	383.7	9%
DFIDI Consultancy	35.9	71.4	26.9	63.2	47.4	54.7	39.2	338.6	8%
Jhabua Coordination Office	-	112.9	157.8	124.3	247.5	135.5	125.0	903.0	20%
Total A	35.9	244.5	260.2	254.8	347.7	257.0	225.3	1,625.4	36%
B. Development Costs									
Component A									
1. PPGF	-	14.5	16.8	18.1	5.0	9.0	10.0	73.4	2%
2. VOD	-	18.5	95.4	123.8	41.3	16.6	21.0	316.7	7%
3. Crop Technology	-	-	35.6	69.1	26.9	14.0	10.5	156.1	3%
4. SWC	-	-	250.0	423.6	93.5	103.2	-	870.2	19%
5. WRD	-	-	106.7	102.3	113.5	909.7	23.4	1,255.5	28%
6. Livestock	-	-	27.4	63.0	34.1	-	5.0	129.4	3%
7. Forestry	-	-	2.0	21.3	2.0	-	12.2	37.5	1%
8. Migration Support	-	-	-	-	-	1.2	-	1.2	0%
Subtotal	-	33.0	533.8	821.2	316.2	1,053.7	82.1	2,840.0	64%
Other Development Costs									
Subtotal	-	-	-	-	-	-	-	-	0%
Total B	-	33.0	533.8	821.2	316.2	1,053.7	82.1	2,840.0	64%
Total A + B	35.9	277.5	794.0	1,076.0	663.9	1,310.7	307.4	4,465.4	100%
GVT	-	205.6	625.8	790.3	567.7	1,096.8	262.2	3,548.4	79%
DFIDI	35.9	71.4	26.9	63.2	47.4	54.7	39.2	338.6	8%
Community	-	0.1	139.9	216.3	46.3	158.6	4.6	565.9	13%
Government	-	0.4	1.3	6.2	2.4	0.6	1.5	12.5	0%

Source:

GVT Jhabua Coordination Office - Madhya Pradesh.

DFIDI = Department for International Development (India).
PPGF = Participatory Planning and Group Formation.
VOD = Village Organisation and Development.
SWC = Soil and Water Conservation.
WRD = Water Resource Development.

Table AN12.9.5

GVT - M Pradesh - Jhabua: Village Padabanda: Costs - Economic (Rs'000).

Cost Head / Subhead	Conversion Factors		1999/00 Actual	2000/01 Actual	2001/02 Actual	2002/03 Actual	2003/04 Actual	2004/05 Budget	2005/06 Budget	Totals	
	CF	SCF								(Rs'000)	(%)
A. Administration Costs											
GVT Bhopal (PHQ)	0.90	1.00	-	54.2	67.9	60.6	47.5	60.1	55.0	345.4	10%
DFIDI Consultancy	1.00	1.00	35.9	71.4	26.9	63.2	47.4	54.7	39.2	338.6	9%
Jhabua Coordination Office	0.90	1.00	-	101.6	142.0	111.9	222.7	122.0	112.5	812.7	23%
Total A			35.9	227.2	236.8	235.6	317.7	236.8	206.7	1,496.7	42%
B. Development Costs											
Component A											
1. PPGF	0.90	1.00	-	13.1	15.1	16.3	4.5	8.1	9.0	66.0	2%
2. VOD	0.90	1.00	-	16.6	85.9	111.4	37.2	15.0	18.9	285.0	8%
3. Crop Technology	0.90	1.00	-	-	32.1	62.2	24.2	12.6	9.5	140.5	4%
4. SWC	0.90	0.75	-	-	168.7	285.9	63.1	69.7	-	587.4	16%
5. WRD	0.90	0.75	-	-	72.0	69.0	76.6	614.0	15.8	847.5	24%
6. Livestock	0.90	1.00	-	-	24.6	56.7	30.7	-	4.5	116.4	3%
7. Forestry	0.90	1.00	-	-	1.8	19.2	1.8	-	10.9	33.8	1%
8. Migration Support	0.90	1.00	-	-	-	-	-	1.1	-	1.1	0%
Subtotal			-	29.7	400.2	620.8	238.0	720.4	68.6	2,077.7	58%
Other Development Costs											
Subtotal	0.90	1.00	-	-	-	-	-	-	-	-	0%
Total B			-	29.7	400.2	620.8	238.0	720.4	68.6	2,077.7	58%
Total A + B			35.9	256.9	637.1	856.4	555.6	957.2	275.3	3,574.4	100%
GVT			-	-	-	-	-	-	-	N/A	
DFIDI			-	-	-	-	-	-	-	N/A	
Community			-	-	-	-	-	-	-	N/A	
Government			-	-	-	-	-	-	-	N/A	

Source:

Cost Benefit Analysis (CBA) Study Estimate Jan 2005.

DFIDI = Department for International Development (India).

PPGF = Participatory Planning and Group Formation.

VOD = Village Organisation and Development.

SWC = Soil and Water Conservation.

WRD = Water Resource Development.

Table AN12.9.6

GVT - M Pradesh - Jhabua: Village Padabanda: VOD Household Assumptions.

Without \ With Project Village Organisation and Development	Units	Assumptions			Benefits		
					Year 1 (Rs)	Year 2 (Rs)	Year 3 (Rs)
Development Activity: Village Organisation and Development							
Before / Without Project Situation:							
A. Self Help Groups (SHGs)							
Assumption	Sum	Zero	Zero	Zero	-	-	-
B. Drudgery Reduction							
Assumption	Sum	Zero	Zero	Zero			
Total Without Project Benefits					-	-	-
After / With Project Situation:							
A. Self Help Groups (SHGs)							
Assumptions							
Average Saving / Household	Rs	889					
Households / Village	No	37					
Group Savings Deposits	Rs'000	32.9			32.9	33.9	34.9
Annual Savings Increase	%	3%					
Deposits on Loan to Members	%	20%					
SHG Interest Income	% / Year	15%					
Assumed Benefit	Rs'000				1.0	1.0	1.0
B. Drudgery Reduction							
Assumptions							
Hours Saved / Day / Household	No	1.0					
Number of Days / Year / Household	No	200					
Days / Year / Household (8hrs/day)	No	25.0					
Households / Village	No	37					
Day Equivalent / Village	No	925					
Economic Value per Day	(Rs/day)	25					
Assumed Benefit	Rs'000				23.1	23.1	23.1
Total With Project Benefits	Rs'000				24.1	24.1	24.2
Incremental Benefits	Rs'000				24.1	24.1	24.2

Source:

VOD = Village Organisation and Development.
Participating households per village: Padabanda

Cost Benefit Analysis (CBA) Study Estimate Jan 2005.

Table AN12.9.6

GVT - M Pradesh - Jhabua: Village Padabanda: Incremental VOD Benefit Stream (Rs'000).

Without \ With Project Village Organisation and Development	Benefit Streams (Rs '000)									
	Year 1 1999/00	Year 2 2000/01	Year 3 2001/02	Year 4 2002/03	Year 5 2003/04	Year 6 2004/05	Year 7 2005/06	Year 8 2006/07	Year 9 2007/08	Year 10 2008/09
Development Activity: Village Organisation and Development										
Before / Without Project Situation:										
A. Self Help Groups (SHGs) Assumption										
B. Drudgery Reduction Assumption										
Total Without Project Benefits	-	-	-	-	-	-	-	-	-	-
After / With Project Situation:										
A. Self Help Groups (SHGs) Assumptions Average Saving / Household Households / Village										
Group Savings Deposits	-	-	32.9	33.9	34.9	36.0	37.0	38.1	39.3	40.5
Annual Savings Increase										
Deposits on Loan to Members										
SHG Interest Income										
Assumed Benefit	-	-	1.0	1.0	1.0	1.1	1.1	1.1	1.2	1.2
B. Drudgery Reduction Assumptions Hours Saved / Day / Household Number of Days / Year / Household Days / Year / Household (8hrs/day) Households / Village Day Equivalent / Village Economic Value per Day										
Assumed Benefit	-	-	23.1	23.1	23.1	23.1	23.1	23.1	23.1	23.1
Total With Project Benefits	-	-	24.1	24.1	24.2	24.2	24.2	24.3	24.3	24.3
Incremental Benefits	-	-	24.1	24.1	24.2	24.2	24.2	24.3	24.3	24.3

Source:

VOD = Village Organisation and Development.
Participating households per village: Padabanda

Cost Benefit Analysis (CBA) Study Estimate Jan 2005.

Table AN12.9.7

GVT - M Pradesh - Jhabua: Village Padabanda: Household Crop Net Margin Assumptions.

Without \ With Project Crop Technology, SWC and WRD	Units	Assumptions			Benefits		
					Year 1 (Rs/HH)	Year 2 (Rs/HH)	Year 3 (Rs/HH)
Development Activity: Crop Technology, SWC and WRD							
Before / Without Project Situation: Assumptions							
Households (HHs)	No	37					
Crop Adoption Assumptions		100%	100%	100%			
Kharif Crop Net Margin	Rs/HH				2,427.2	2,427.2	2,427.2
Rabi Crop Net Margin	Rs/HH				564	564.0	564.0
Total Without Project Benefits	Rs/HH				2,991.2	2,991.2	2,991.2
After / With Project Situation: Assumptions							
Households (HHs)	No	37					
Crop Adoption Assumptions		100%	100%	100%			
Kharif Crop Net Margin	Rs/HH				7,598.0	7,598.0	7,598.0
Rabi Crop Net Margin	Rs/HH				1,537.3	1,537.3	1,537.3
Total With Project Benefits	Rs/HH				9,135.3	9,135.3	9,135.3
Incremental Benefits	Rs/HH				6,144.0	6,144.0	6,144.0

Source:

Cost Benefit Analysis (CBA) Study Estimate Jan 2005.

Table AN12.9.7

GVT - M Pradesh - Jhabua: Village Padabanda: Incremental Crop Benefit Stream (Rs'000).

Without \ With Project Crop Technology, SWC and WRD	Benefit Streams (Rs '000)									
	Year 1 1999/00	Year 2 2000/01	Year 3 2001/02	Year 4 2002/03	Year 5 2003/04	Year 6 2004/05	Year 7 2005/06	Year 8 2006/07	Year 9 2007/08	Year 10 2008/09
Development Activity: Crop Technology, SWC and WRD										
Before / Without Project Situation: Assumptions										
Households (HHs)										
Crop Adoption Assumptions										
Kharif Crop Net Margin	-	-	-	-	89.8	89.8	89.8	89.8	89.8	89.8
Rabi Crop Net Margin	-	-	-	-	20.9	20.9	20.9	20.9	20.9	20.9
Total Without Project Benefits	-	-	-	-	110.7	110.7	110.7	110.7	110.7	110.7
After / With Project Situation: Assumptions										
Households (HHs)										
Crop Adoption Assumptions										
Kharif Crop Net Margin	-	-	-	-	281.1	281.1	281.1	281.1	281.1	281.1
Rabi Crop Net Margin	-	-	-	-	56.9	56.9	56.9	56.9	56.9	56.9
Total With Project Benefits	-	-	-	-	338.0	338.0	338.0	338.0	338.0	338.0
Incremental Benefits	-	-	-	-	227.3	227.3	227.3	227.3	227.3	227.3

Source:

Cost Benefit Analysis (CBA) Study Estimate Jan 2005.

Table AN12.9.8

GVT - M Pradesh - Jhabua: Village Padabanda: Household Livestock Net Margin Assumptions.

Without \ With Project Livestock	Units	Assumptions			Benefits		
					Year 1 (Rs)	Year 2 (Rs)	Year 3 (Rs)
Development Activity: Livestock							
Before / Without Project Situation: Assumptions							
Households (HHs)	No	37					
Annual Livestock Net Margin	Rs/HH						
Total Without Project Benefits					1,246.6	1,246.6	1,246.6
After / With Project Situation:							
Development Activity: Assumptions							
Households (HHs)	No	37					
Adoption Assumptions	Percent	55%	78%	100%			
Annual Livestock Net Margin	Rs/HH						
Total With Project Benefits					1,866.8	2,630.5	3,394.1
Incremental Benefits	Rs/HH				620.2	1,383.8	2,147.5

Source:

Cost Benefit Analysis (CBA) Study Estimate Jan 2005.

Table AN12.9.8

GVT - M Pradesh - Jhabua: Village Padabanda: Incremental Livestock Benefit Stream (Rs'000).

Without \ With Project Livestock	Benefit Streams (Rs '000)									
	Year 1 1999/00	Year 2 2000/01	Year 3 2001/02	Year 4 2002/03	Year 5 2003/04	Year 6 2004/05	Year 7 2005/06	Year 8 2006/07	Year 9 2007/08	Year 10 2008/09
Development Activity: Livestock										
Before / Without Project Situation:										
Assumptions										
Households (HHs)										
Annual Livestock Net Margin										
Total Without Project Benefits	-	-	-	46.1	46.1	46.1	46.1	46.1	46.1	46.1
After / With Project Situation:										
Development Activity:										
Assumptions										
Households (HHs)										
Adoption Assumptions										
Annual Livestock Net Margin										
Total With Project Benefits	-	-	-	69.1	97.3	125.6	125.6	125.6	125.6	125.6
Incremental Benefits	-	-	-	22.9	51.2	79.5	79.5	79.5	79.5	79.5

Source:

Cost Benefit Analysis (CBA) Study Estimate Jan 2005.

Table AN12.9.9

GVT - M Pradesh - Jhabua: Village Padabanda: Forestry Benefit Assumptions.

Without \ With Project Forestry	Units	Assumptions			Benefits		
					Year 1 (Rs)	Year 2 (Rs)	Year 3 (Rs)
Development Activity: Forestry							
Before / Without Project Situation: Assumptions							
Households (HHs)	No	37					
Annual Forestry Net Margin	Rs/HH				-	-	-
Total Without Project Benefits							
After / With Project Situation: Assumptions							
Households (HHs)	No	37					
Adoption Assumptions	Percent	55%	78%	100%			
Annual Forestry Net Margin	Rs/HH				165.0	234.0	300.0
Total With Project Benefits							
Incremental Benefits	Rs/HH				165.0	234.0	300.0

Source:

Cost Benefit Analysis (CBA) Study Estimate Jan 2005.

Table AN12.9.9

GVT - M Pradesh - Jhabua: Village Padabanda: Incremental Forestry Benefit Stream (Rs'000).

Without \ With Project Forestry	Benefit Streams (Rs '000)									
	Year 1 1999/00	Year 2 2000/01	Year 3 2001/02	Year 4 2002/03	Year 5 2003/04	Year 6 2004/05	Year 7 2005/06	Year 8 2006/07	Year 9 2007/08	Year 10 2008/09
Development Activity: Forestry										
Before / Without Project Situation: Assumptions										
Households (HHs)										
Annual Forestry Net Margin										
Total Without Project Benefits	-	-	-	-	-	-	-	-	-	-
After / With Project Situation: Assumptions										
Households (HHs)										
Adoption Assumptions										
Annual Forestry Net Margin										
Total With Project Benefits	-	-	-	6.1	8.7	11.1	11.1	11.1	11.1	11.1
Incremental Benefits	-	-	-	6.1	8.7	11.1	11.1	11.1	11.1	11.1

Source:

Cost Benefit Analysis (CBA) Study Estimate Jan 2005.

Table AN12.9.10

GVT - M Pradesh - Jhabua: Village Padabanda: Migration Support Benefit Assumptions.

Without \ With Project	Assumptions				Benefits		
					Year 1 (Rs)	Year 2 (Rs)	Year 3 (Rs)
Development Activity: Migration Support							
Before / Without Project Situation:							
Assumptions							
Economic Value per Day	Rs/day	25.0					
Days / Month / Household	No	18					
Economic Value per Month	Rs/month	450.0					
Months Migration / Year	Months	4.0					
Economic Value per Household	Rs/HH	1,800.0					
Households per Village	No	37					
Households per Village Migrating	Percent	45%					
Total Without Project Benefits	Rs/Village				30.0	30.0	30.0
After / With Project Situation:							
Assumptions							
Economic Value per Day \1	Rs/day	25.0	30%	32.5			
Days / Month / Household	No	18	30%	24.0			
Economic Value per Month	Rs/month	450.0		780.0			
Months Migration / Year	Months	4.0	-20%	3.2			
Economic Value per Household	Rs/HH	1,800.0		2,496.0			
Households per Village	No	37		37			
Households per Village Migrating	Percent	45%	-20%	36%			
Subtotal Migration Income	Rs/Village				33.2	33.2	33.2
Other Income	Sum (Rs)	-	-	-	-	-	-
Total With Project Benefits	Rs/Village				33.2	33.2	33.2
Incremental Benefits	Rs/Village				3.3	3.3	3.3

Source:

Cost Benefit Analysis (CBA) Study Estimate Jan 2005.

- 1\ Financial Wages (Rs/day):
 - Skill Labour - Rs 160
 - Casual Labour :
 - Male - Rs 40
 - Female - Rs 30

Table AN12.9.10

GVT - M Pradesh - Jhabua: Village Padabanda: Incremental Migration Support Benefit Stream (Rs'000).

Without \ With Project	Benefit Streams (Rs '000)									
	Year 1 1999/00	Year 2 2000/01	Year 3 2001/02	Year 4 2002/03	Year 5 2003/04	Year 6 2004/05	Year 7 2005/06	Year 8 2006/07	Year 9 2007/08	Year 10 2008/09
Development Activity: Migration Support Before / Without Project Situation: Assumptions Economic Value per Day Days / Month / Household Economic Value per Month Months Migration / Year Economic Value per Household Households per Village Households per Village Migrating Total Without Project Benefits	-	-	-	-	-	30.0	30.0	30.0	30.0	30.0
After / With Project Situation: Assumptions Economic Value per Day \1 Days / Month / Household Economic Value per Month Months Migration / Year Economic Value per Household Households per Village Households per Village Migrating Subtotal Migration Income Other Income Total With Project Benefits Incremental Benefits	-	-	-	-	-	33.2	33.2	33.2	33.2	33.2
	-	-	-	-	-	-	-	-	-	-
	-	-	-	-	-	33.2	33.2	33.2	33.2	33.2
	-	-	-	-	-	3.3	3.3	3.3	3.3	3.3

Source:

Cost Benefit Analysis (CBA) Study Estimate Jan 2005.

- 1\ Financial Wages (Rs/day):
 Skill Labour - Rs 160
 Casual Labour :
 Male - Rs 40
 Female - Rs 30

Table AN12.9.11 GVT - M Pradesh - Jhabua: Village Padabanda: Weighted Household Crop Net Margin Summary (Rs/Household).

Item	WBR (%)	Before / Without Project			After / With Project			Increment		
		Khalif	Rabi	Total	Khalif	Rabi	Total	Khalif	Rabi	Total
Phase II										
Well Being Ranking - Very Poor Household Net Margin (Rs)	10.0%	834.6	102.5	937.1	1,849.8	1,067.8	2,917.6	1,015.2	965.3	1,980.5
Well Being Ranking - Poor Household Net Margin (Rs)	30.0%	637.7	-	637.7	4,803.0	220.7	5,023.7	4,165.3	220.7	4,386.0
Well Being Ranking - Moderate Household Net Margin (Rs)	30.0%	994.0	89.3	1,083.3	3,711.4	2,508.3	6,219.6	2,717.4	2,419.0	5,136.4
Well Being Ranking - Better Off Household Net Margin (Rs)	30.0%	6,180.9	1,756.7	7,937.5	16,195.9	2,039.3	18,235.2	10,015.0	282.7	10,297.7
Well Being Ranking - Weighted Household Net Margin (Rs)	100.0%	2,427.2	564.0	2,991.2	7,598.0	1,537.3	9,135.3	5,170.8	973.2	6,144.0
Phase I \1										
Well Being Ranking - Very Poor Household Net Margin (Rs)	10.0%	436.3	267.5	703.8	3,866.5	1,668.8	5,535.3	3,430.3	1,401.3	4,831.5
Well Being Ranking - Poor Household Net Margin (Rs)	30.0%	485.8	657.5	1,143.3	10,136.0	5,690.3	15,826.3	9,650.3	5,032.8	14,683.0
Well Being Ranking - Moderate Household Net Margin (Rs)	30.0%	986.3	3,385.0	4,371.3	9,457.5	5,195.0	14,652.5	8,471.3	1,810.0	10,281.3
Well Being Ranking - Better Off Household Net Margin (Rs)	30.0%	2,778.0	937.0	3,715.0	4,915.0	9,560.0	14,475.0	2,137.0	8,623.0	10,760.0
Well Being Ranking - Weighted Household Net Margin (Rs)	100.0%	1,318.6	1,520.6	2,839.2	7,739.2	6,300.5	14,039.7	6,420.6	4,779.9	11,200.4

Source: Study of Impact of WIRFP on Net Incomes of Target Households, Jan 2004.

WBR = GVT Household Well Being Ranking.

Survey figures adjusted to Village Profile WBR.

\1 GVT - Madhya Pradesh - Phase I: Village Naganwat Choti: Weighted Household Crop Net Margin Summary.

Table AN12.9.12 GVT - M Pradesh - Jhabua: Village Padabanda: Weighted Household Crop Net Margin Sensitivity Analysis (Rs/Household).

Item	EIRR	Before / Without Project			After / With Project			Increment		
		Khalif	Rabi	Total	Khalif	Rabi	Total	Khalif	Rabi	Total
Development Activity:										
Crop Technology, SWC and WRD										
Weighted Net Margin (Phase II)										
Household Net Margin (Rs)		2,427.2	564.0	2,991.2	7,598.0	1,537.3	9,135.3	5,170.8	973.2	6,144.0
Incremental Benefit (Phase II / Phase I)										55%
Base Case Assumptions										
Household Net Margin (Rs)		2,427.2	564.0	2,991.2	7,598.0	1,537.3	9,135.3	5,170.8	973.2	6,144.0
Incremental Benefit (Phase II / Phase I)										55%
Sensitivity Increase (%)	0%									
Development Activity										
Overall Village										
Sensitivity Assumptions										
Household Net Margin (Rs)		2,427.2	564.0	2,991.2	17,475.5	3,535.7	21,011.2	15,048.3	2,971.7	18,019.9
Incremental Benefit (Phase II / Phase I)										161%
Sensitivity Increase (%)	0%									
Development Activity										
Overall Village										
Weighted Net Margin (Phase I)										
Household Net Margin (Rs)		1,318.6	1,520.6	2,839.2	7,739.2	6,300.5	14,039.7	6,420.6	4,779.9	11,200.4

Source: Study of Impact of WIRFP on Net Incomes of Target Households, Jan 2004.

EIRR = Economic Internal Rate of Return (rate at which NPV equal to zero).

N/A = Not analysed as EIRR negative.

Table AN12.9.13 GVT - M Pradesh - Jhabua: Village Padabanda: Weighted Household Livestock Net Margin Summary (Rs/Household).

Well Being Ranking	Weight (%)	Before / Without Project		After / With Project		Increment \1	
		Herd Value	Net Margin	Herd Value	Net Margin	Herd Value	Net Margin
Phase I - Well Being Ranking (WBR) \1							
Madhya Pradesh - WBR Weighted Data							
Very Poor	10.0%						
Average		580	(185.0)	5,650	412.5	474	597.5
Poor	30.0%						
Average		2,350	982.5	8,250	2,141.0	1,180	1,158.5
Moderate	30.0%						
Average		14,700	6,730.0	1,900	2,820.0	1,900	(3,910.0)
Better Off	30.0%						
Average		15,580	3,000.0	14,600	10,790.0	(196)	7,790.0
Phase I - WBR Weighted Data	100.0%	9,847	3,195.3	7,990	4,766.6	913	1,571.3
Phase II - Well Being Ranking (WBR)							
Very Poor	10.0%						
Average		5,756	149.2	10,970	1,446.4	1,043	1,297.2
Poor	30.0%						
Average		13,128	852.2	25,979	3,008.8	2,570	2,156.8
Moderate	30.0%						
Average		13,525	4,035.1	27,020	5,249.5	2,699	1,214.4
Better Off	30.0%						
Average		12,700	(781.7)	41,873	2,573.3	5,835	3,355.0
Phase II - WBR Weighted Data	100.0%	12,382	1,246.6	29,559	3,394.1	3,435	2,147.6

Source: Study of Impact of WIRFP on Net Incomes of Target Households, Jan 2004.

WBR = GVT Household Well Being Ranking.

Survey figures adjusted to Village Profile WBR.

\1 GVT - Madhya Pradesh - Phase I: Village Naganwat Choti: Weighted Household Livestock Net Margin Summary.

WIRFP - Phase II - Cost Benefit Analysis Study

Tables AN12.0 Individual Village Cost Benefit Analysis

Tables AN12.10 GVT - Rajasthan - Banswara: Village Bakaner.

- Table AN12.10.1 GVT - Rajasthan - Banswara: Village Bakaner: Village Profile.
- Table AN12.10.2 GVT - Rajasthan - Banswara: Village Bakaner - Cost Benefit Analysis Summary (Rs'000).
- Table AN12.10.3 GVT - Rajasthan - Banswara: Village Bakaner - Cost Benefit Analysis Development Activity Summary A (Rs'000).
- Table AN12.10.4 GVT - Rajasthan - Banswara: Village Bakaner - Cost Benefit Analysis Development Activity Summary B (Rs'000).
- Table AN12.10.5 GVT - Rajasthan - Banswara: Village Bakaner - Costs - Financial (Rs'000).
GVT - Rajasthan - Banswara: Village Bakaner - Costs - Economic (Rs'000).
- Table AN12.10.6 GVT - Rajasthan - Banswara: Village Bakaner: VOD Household Assumptions.
GVT - Rajasthan - Banswara: Village Bakaner: Incremental VOD Benefit Stream (Rs'000).
- Table AN12.10.7 GVT - Rajasthan - Banswara: Village Bakaner: Household Crop Net Margin Assumptions.
GVT - Rajasthan - Banswara: Village Bakaner: Incremental Crop Benefit Stream (Rs'000).
- Table AN12.10.8 GVT - Rajasthan - Banswara: Village Bakaner: Household Livestock Net Margin Assumptions.
GVT - Rajasthan - Banswara: Village Bakaner: Incremental Livestock Benefit Stream (Rs'000).
- Table AN12.10.9 GVT - Rajasthan - Banswara: Village Bakaner: Forestry Benefit Assumptions.
GVT - Rajasthan - Banswara: Village Bakaner: Incremental Forestry Benefit Stream (Rs'000).
- Table AN12.10.10 GVT - Rajasthan - Banswara: Village Bakaner: Migration Support Benefit Assumptions.
GVT - Rajasthan - Banswara: Village Bakaner: Incremental Migration Support Benefit Stream (Rs'000).
- Table AN12.10.11 GVT - Rajasthan - Banswara: Village Bakaner: Weighted Household Crop Net Margin Summary (Rs/Household).
- Table AN12.10.12 GVT - Rajasthan - Banswara: Village Bakaner: Household Crop Net Margin Sensitivity Analysis.
- Table AN12.10.13 GVT - Rajasthan - Banswara: Village Bakaner: Weighted Household Livestock Net Margin Summary (Rs/Household).

Table AN12.10.1 GVT - Rajasthan - Banswara: Village Bakaner: Village Profile.

Village Profile \1			
A. Background			
Village Name	Bakaner		
District	Banswara		
State	Rajasthan		
B. Participatory Planning Process (PPP)			
Village entry	Aug-00		
PRA	Jan-01		
CPA	Jan-01		
C. Infrastructure			
Hand Pumps (no)	6		
Wells (no)	16		
Linked by Road	No		
Electrification	No		
School	Primary		
D. Demographic Data			
Households (no)	72		
Participating Households	70		
Population (Adults)	329		
Adults:			
Male	167		
Female	162		
Children:			
Boys	103		
Girls	94		
E. Well Being Ranking (No Households)			
Very Poor	15	22.7%	
Poor	18	27.3%	
Moderate	27	40.9%	
Better Off	6	9.1%	
Total	66	100%	
F. Land Resource (ha)			
Total Area			215
Revenue Land (unused)			15
Forest Area - Revenue			78
Pasture Land			8
Arable Land			114
G. Livestock			
Oxen			162
Cows			79
Buffalo			81
Goats			239
Poultry			N/A
H. Self Help Groups (Membership)			
1	Group 1		20
2	Group 2		21
3	Group 3		13
4	Group 4		16
5	Group 5		15
6	Group 6		20
7	Group 7		12
8	Group 8		21
9	Group 9		-
10	Group 10		-
11	Group 11		-
12	Group 12		-
13	Group 13		-
	Total Memberhip		138

Source: GVT Banswara Coordination Office - Rajasthan.

\1 Subject to final adjustment following consolidation exercise prior to Annual Review Meeting (ARM) in Feb 2005.

Table AN12.10.2 GVT - Rajasthan - Banswara: Village Bakaner - Cost Benefit Analysis Summary (Rs'000).

Administration Costs / Development Activity	EIRR ^{\1}	NPV ^{\2}		Year 1 1999/00	Year 2 2000/01	Year 3 2001/02	Year 4 2002/03	Year 5 2003/04	Year 6 2004/05	Year 7 2005/06	Year 8 2006/07	Year 9 2007/08	Year 10 2008/09
		(10%)	(%)										
A. Administration Costs													
Total A	N/A	(972)	106%	35.9	241.3	227.1	238.6	249.5	250.3	223.6	22.4	22.4	22.4
B. Development Activity Component A													
1. PPGF													
Net Incremental Benefits	N/A	(141)	15%	-	(13.2)	(34.0)	(53.1)	(47.6)	(30.1)	(35.2)	(5.0)	(5.0)	(5.0)
2. VOD													
Net Incremental Benefits	18%	70	-8%	-	(46.5)	(103.8)	(29.2)	7.6	35.5	31.2	55.3	55.8	56.3
3/5. Crop Technology, SWC and WRD													
Net Incremental Benefits	9%	(174)	19%	-	(5.8)	(364.4)	(757.7)	(226.7)	136.3	108.4	200.3	200.3	200.3
6. Livestock													
Net Incremental Benefits	41%	269	-29%	-	-	(27.3)	(42.4)	(52.3)	59.6	(32.9)	113.4	113.4	113.4
7. Forestry													
Net Incremental Benefits	39%	30	-3%	-	(5.2)	(5.0)	(1.5)	3.9	6.8	6.8	10.4	10.4	10.4
8. Migration Support													
Net Incremental Benefits	N/A	-	0%	-	-	-	-	-	-	-	-	-	-
Summary													
Net Incremental Benefits	4%	(918)	100%	(35.9)	(312.1)	(761.6)	(1,122.5)	(564.5)	(42.1)	(145.3)	352.0	352.5	353.0
Sensitivity Analysis													
Analysis Period													
12 Years	-8%	(1,368)											
20 Years (Base Case)	4%	(918)											
25 Years	7%	(786)											
30 Years	8%	(712)											
Costs - Administration													
Investment Costs Decreased by 20 percent.	6%	(724)											
Costs - Administration and Development													
Recurrent Costs Increased by 20 percent.	2%	(1,140)											
Benefits - Crop, SWC and WRD													
Crop Benefits Increased by 20 percent.	8%	(514)											
Livestock Benefits Increased by 20 percent.	7%	(689)											

Source: Cost Benefit Analysis (CBA) Study Estimate Jan 2005.

\1 EIRR = Economic Internal Rate of Return (rate at which NPV equal to zero).

\2 NPV = Net Present Value of net incremental benefits at 12% (indicative opportunity cost of capital for rural development projects in India).

N/A = Not analysed as EIRR negative.

Table AN12.10.3 GVT - Rajasthan - Banswara: Village Bakaner - Cost Benefit Analysis Development Activity Summary A (Rs'000).

Administration Costs / Development Activity	EIRR ¹	NPV ²		Year 1 1999/00	Year 2 2000/01	Year 3 2001/02	Year 4 2002/03	Year 5 2003/04	Year 6 2004/05	Year 7 2005/06	Year 8 2006/07	Year 9 2007/08	Year 10 2008/09
		(10%)	(%)										
A. Administration Costs													
Investment				35.9	241.3	227.1	238.6	249.5	250.3	223.6	-	-	-
Projected				-	-	-	-	-	-	-	22.4	22.4	22.4
Total A	N/A	(972)	106%	35.9	241.3	227.1	238.6	249.5	250.3	223.6	22.4	22.4	22.4
B. Development Intervention Component A													
1. PPGF													
Cost Stream													
Investment				-	13.2	33.7	51.9	45.1	26.5	30.9	-	-	-
Recurrent				-	-	0.3	1.2	2.5	3.6	4.3	5.0	5.0	5.0
Total Costs				-	13.2	34.0	53.1	47.6	30.1	35.2	5.0	5.0	5.0
Benefit Stream													
Before / Without Project				-	-	-	-	-	-	-	-	-	-
After / With Project				-	-	-	-	-	-	-	-	-	-
Incremental Benefits				-	-	-	-	-	-	-	-	-	-
Net Incremental Benefits	N/A	(141)	15%	-	(13.2)	(34.0)	(53.1)	(47.6)	(30.1)	(35.2)	(5.0)	(5.0)	(5.0)
2. VOD													
Cost Stream													
Investment				-	46.5	101.4	92.2	51.2	21.2	24.9	-	-	-
Recurrent				-	-	2.3	7.4	12.0	14.6	15.6	16.9	16.9	16.9
Total Costs				-	46.5	103.8	99.6	63.2	35.8	40.5	16.9	16.9	16.9
Benefit Stream													
Before / Without Project				-	-	-	-	-	-	-	-	-	-
After / With Project				-	-	-	70.4	70.9	71.3	71.7	72.2	72.7	73.2
Incremental Benefits				-	-	-	70.4	70.9	71.3	71.7	72.2	72.7	73.2
Net Incremental Benefits	18%	70	-8%	-	(46.5)	(103.8)	(29.2)	7.6	35.5	31.2	55.3	55.8	56.3
3/5. Crop Technology, SWC and WRD													
Cost Stream													
Investment													
Crop Tecnology				-	5.8	45.6	38.9	31.0	11.5	9.4	-	-	-
Soil Water Conservation				-	-	278.7	545.6	454.8	-	-	-	-	-
Water Resource Development				-	-	40.0	131.1	30.5	79.5	97.4	-	-	-
Recurrent													
Crop Tecnology				-	-	0.1	1.3	2.3	3.0	3.3	3.6	3.6	3.6
Soil Water Conservation				-	-	-	34.8	103.0	159.9	159.9	159.9	159.9	159.9
Water Resource Development				-	-	-	6.0	25.7	30.2	42.2	56.8	56.8	56.8
Total Costs				-	5.8	364.4	757.7	647.2	284.2	312.2	220.2	220.2	220.2
Benefit Stream													
Before / Without Project				-	-	-	-	139.2	139.2	139.2	139.2	139.2	139.2
After / With Project				-	-	-	-	559.7	559.7	559.7	559.7	559.7	559.7
Incremental Benefits				-	-	-	-	420.5	420.5	420.5	420.5	420.5	420.5
Net Incremental Benefits	9%	(174)	19%	-	(5.8)	(364.4)	(757.7)	(226.7)	136.3	108.4	200.3	200.3	200.3

Source: Cost Benefit Analysis (CBA) Study Estimate Jan 2005.

¹ EIRR = Economic Internal Rate of Return (rate at which NPV equal to zero).

² NPV = Net Present Value of net incremental benefits at 12% (indicative opportunity cost of capital for rural development projects in India).

N/A = Not analysed as EIRR negative.

Table AN12.10.4 GVT - Rajasthan - Banswara: Village Bakaner - Cost Benefit Analysis Development Activity Summary B (Rs'000).

Administration Costs / Development Activity	EIRR \1	NPV \2		Year 1 1999/00	Year 2 2000/01	Year 3 2001/02	Year 4 2002/03	Year 5 2003/04	Year 6 2004/05	Year 7 2005/06	Year 8 2006/07	Year 9 2007/08	Year 10 2008/09
		(10%)	(%)										
6. Livestock													
Cost Stream													
Investment				-	-	27.3	38.4	43.5	-	156.0	-	-	-
Recurrent				-	-	-	4.0	17.1	20.2	28.1	37.8	37.8	37.8
Total Costs				-	-	27.3	42.4	60.6	20.2	184.1	37.8	37.8	37.8
Benefit Stream													
Before / Without Project				-	-	-	-	166.4	166.4	166.4	166.4	166.4	166.4
After / With Project				-	-	-	-	174.7	246.1	317.6	317.6	317.6	317.6
Incremental Benefits				-	-	-	-	8.3	79.8	151.2	151.2	151.2	151.2
Net Incremental Benefits	41%	269	-29%	-	-	(27.3)	(42.4)	(52.3)	59.6	(32.9)	113.4	113.4	113.4
7. Forestry													
Cost Stream													
Investment				-	5.2	4.4	7.9	4.9	4.4	4.1	-	-	-
Recurrent				-	-	0.5	1.0	1.8	2.2	2.7	3.1	3.1	3.1
Total Costs				-	5.2	5.0	8.9	6.7	6.7	6.7	3.1	3.1	3.1
Benefit Stream													
Before / Without Project				-	-	-	-	-	-	-	-	-	-
After / With Project				-	-	-	7.4	10.5	13.5	13.5	13.5	13.5	13.5
Incremental Benefits				-	-	-	7.4	10.5	13.5	13.5	13.5	13.5	13.5
Net Incremental Benefits	39%	30	-3%	-	(5.2)	(5.0)	(1.5)	3.9	6.8	6.8	10.4	10.4	10.4
8. Migration Support													
Cost Stream													
Investment				-	-	-	-	-	-	-	-	-	-
Recurrent				-	-	-	-	-	-	-	-	-	-
Total Costs				-	-	-	-	-	-	-	-	-	-
Benefit Stream													
Before / Without Project				-	-	-	-	-	-	-	-	-	-
After / With Project				-	-	-	-	-	-	-	-	-	-
Incremental Benefits				-	-	-	-	-	-	-	-	-	-
Net Incremental Benefits	N/A	-	0%	-	-	-	-	-	-	-	-	-	-
Summary													
Cost Stream													
Investment				35.9	312.1	758.3	1,144.7	910.4	393.4	546.2	-	-	-
Recurrent				-	-	3.3	55.7	164.3	233.7	256.1	305.4	305.4	305.4
Total Costs				35.9	312.1	761.6	1,200.4	1,074.7	627.1	802.3	305.4	305.4	305.4
Benefit Stream													
Before / Without Project				-	-	-	-	305.5	305.5	305.5	305.5	305.5	305.5
After / With Project				-	-	-	77.9	815.7	890.6	962.5	963.0	963.5	964.0
Incremental Benefits				-	-	-	77.9	510.2	585.1	657.0	657.5	657.9	658.4
Net Incremental Benefits	4%	(918)	100%	(35.9)	(312.1)	(761.6)	(1,122.5)	(564.5)	(42.1)	(145.3)	352.0	352.5	353.0

Source: Cost Benefit Analysis (CBA) Study Estimate Jan 2005.

\1 EIRR = Economic Internal Rate of Return (rate at which NPV equal to zero).

\2 NPV = Net Present Value of net incremental benefits at 12% (indicative opportunity cost of capital for rural development projects in India).

N/A = Not analysed as EIRR negative.

Table AN12.10.5

GVT - Rajasthan - Banswara: Village Bakaner - Costs - Financial (Rs'000).

Cost Head / Subhead	1999/00	2000/01	2001/02	2002/03	2003/04	2004/05	2005/06	Totals	
	Actual	Actual	Actual	Actual	Actual	Budget	Budget	(Rs'000)	(%)
A. Administration Costs									
GVT Bhopal (PHQ)	-	60.3	75.4	67.3	52.8	66.8	61.1	383.7	7%
DFIDI Consultancy	35.9	71.4	26.9	63.2	47.4	54.7	39.2	338.6	7%
Rajasthan Coordination Office	-	128.5	147.0	127.6	171.7	150.5	143.8	869.1	17%
Total A	35.9	260.2	249.4	258.1	271.9	272.0	244.1	1,591.5	31%
B. Development Costs						0%	0%		
Component A									
1. PPGF	-	14.7	37.4	57.7	50.1	29.5	34.3	223.7	4%
2. VOD	-	51.7	112.7	102.5	56.9	23.5	27.7	375.0	7%
3. Crop Technology	-	6.5	50.7	43.2	34.4	12.8	10.4	158.0	3%
4. SWC	-	-	412.8	808.4	673.8	-	-	1,895.0	37%
5. WRD	-	-	59.3	194.2	45.2	117.8	144.3	560.7	11%
6. Livestock	-	-	30.3	42.7	48.3	-	173.4	294.6	6%
7. Forestry	-	5.8	4.9	8.8	5.5	4.9	4.5	34.3	1%
8. Migration Support	-	-	-	-	-	-	-	-	0%
Subtotal	-	78.6	708.2	1,257.4	914.1	188.5	394.6	3,541.4	69%
Other Development Costs									
Subtotal	-	-	-	-	-	-	-	-	-
Total B	-	78.6	708.2	1,257.4	914.1	188.5	394.6	3,541.4	69%
Total A + B	35.9	338.8	957.5	1,515.5	1,186.0	460.5	638.6	5,132.9	100%
GVT	-	251.1	662.8	930.6	767.2	342.4	519.3	3,473.4	68%
DFIDI	35.9	71.4	26.9	63.2	47.4	54.7	39.2	338.6	7%
Community	-	15.6	247.2	458.0	356.0	25.5	30.5	1,132.8	22%
Government	-	0.8	20.6	63.6	15.4	38.0	49.7	188.0	4%

Source:

GVT Banswara Coordination Office - Rajasthan.

DFIDI = Department for International Development (India).
PPGF = Participatory Planning and Group Formation.
VOD = Village Organisation and Development.
SWC = Soil and Water Conservation.
WRD = Water Resource Development.

Table AN12.10.5

GVT - Rajasthan - Banswara: Village Bakaner - Costs - Economic (Rs'000).

Cost Head / Subhead	Conversion Factors		1999/00 Actual	2000/01 Actual	2001/02 Actual	2002/03 Actual	2003/04 Actual	2004/05 Budget	2005/06 Budget	Totals	
	CF	SCF								(Rs'000)	(%)
A. Administration Costs											
GVT Bhopal (PHQ)	0.90	1.00	-	54.2	67.9	60.6	47.5	60.1	55.0	345.4	8%
DFIDI Consultancy	1.00	1.00	35.9	71.4	26.9	63.2	47.4	54.7	39.2	338.6	8%
Rajasthan Coordination Office	0.90	1.00	-	115.7	132.3	114.8	154.5	135.5	129.4	782.2	19%
Total A			35.9	241.3	227.1	238.6	249.5	250.3	223.6	1,466.2	36%
B. Development Costs											
Component A											
1. PPGF	0.90	1.00	-	13.2	33.7	51.9	45.1	26.5	30.9	201.4	5%
2. VOD	0.90	1.00	-	46.5	101.4	92.2	51.2	21.2	24.9	337.5	8%
3. Crop Technology	0.90	1.00	-	5.8	45.6	38.9	31.0	11.5	9.4	142.2	3%
4. SWC	0.90	0.75	-	-	278.7	545.6	454.8	-	-	1,279.1	31%
5. WRD	0.90	0.75	-	-	40.0	131.1	30.5	79.5	97.4	378.5	9%
6. Livestock	0.90	1.00	-	-	27.3	38.4	43.5	-	156.0	265.2	6%
7. Forestry	0.90	1.00	-	5.2	4.4	7.9	4.9	4.4	4.1	30.9	1%
8. Migration Support	0.90	1.00	-	-	-	-	-	-	-	-	0%
Subtotal			-	70.8	531.1	906.1	660.9	143.1	322.7	2,634.7	64%
Other Development Costs											
Subtotal	0.90	1.00	-	-	-	-	-	-	-	-	0%
Total B			-	70.8	531.1	906.1	660.9	143.1	322.7	2,634.7	64%
Total A + B			35.9	312.1	758.3	1,144.7	910.4	393.4	546.2	4,100.9	100%
GVT			-	-	-	-	-	-	-	N/A	
DFIDI			-	-	-	-	-	-	-	N/A	
Community			-	-	-	-	-	-	-	N/A	
Government			-	-	-	-	-	-	-	N/A	

Source:

Cost Benefit Analysis (CBA) Study Estimate Jan 2005.

DFIDI = Department for International Development (India).
PPGF = Participatory Planning and Group Formation.
VOD = Village Organisation and Development.
SWC = Soil and Water Conservation.
WRD = Water Resource Development.

Table AN12.10.6

GVT - Rajasthan - Banswara: Village Bakaner: VOD Household Assumptions.

Without \ With Project	Units	Assumptions			Benefits		
					Year 1 (Rs)	Year 2 (Rs)	Year 3 (Rs)
Development Activity: Village Organisation and Development							
Before / Without Project Situation:							
A. Self Help Groups (SHGs)							
Assumption	Sum	Zero	Zero	Zero	-	-	-
B. Drudgery Reduction							
Assumption	Sum	Zero	Zero	Zero			
Total Without Project Benefits					-	-	-
After / With Project Situation:							
A. Self Help Groups (SHGs)							
Assumptions							
Average Household Savings	Rs	3,365.6					
Households (HHs)	No	90					
Present Group Savings	Rs'000	302.9					
Annual Savings Increase	%	3%			302.9	312.0	321.3
Deposits on Loan to Members	%	26%					
SHG Interest Income	% / Year	18%					
Assumed Benefit	Rs'000				14.2	14.6	15.0
B. Drudgery Reduction							
Assumptions							
Hours Saved / Day / Household	No	1.0					
Number of Days / Year / Household	No	200					
Days / Year / Household (8hrs/day)	No	25.0					
Households / Village	No	90					
Day Equivalent / Village	No	2,250					
Economic Value per Day	(Rs/day)	25					
Assumed Benefit	Rs'000				56.3	56.3	56.3
Total With Project Benefits	Rs'000				70.4	70.9	71.3
Incremental Benefits	Rs'000				70.4	70.9	71.3

Source:

VOD = Village Organisation and Development.
Households per village: Bakaner

Cost Benefit Analysis (CBA) Study Estimate Jan 2005.

Table AN12.10.6

GVT - Rajasthan - Banswara: Village Bakaner: Incremental VOD Benefit Stream (Rs'000).

Without \ With Project	Benefit Streams (Rs '000)									
	Year 1 1999/00	Year 2 2000/01	Year 3 2001/02	Year 4 2002/03	Year 5 2003/04	Year 6 2004/05	Year 7 2005/06	Year 8 2006/07	Year 9 2007/08	Year 10 2008/09
Development Activity: Village Organisation and Development Before / Without Project Situation: A. Self Help Groups (SHGs) Assumption B. Drudgery Reduction Assumption Total Without Project Benefits	-	-	-	-	-	-	-	-	-	-
After / With Project Situation: A. Self Help Groups (SHGs) Assumptions Average Household Savings Households (HHs) Present Group Savings Annual Savings Increase Deposits on Loan to Members SHG Interest Income Assumed Benefit B. Drudgery Reduction Assumptions Hours Saved / Day / Household Number of Days / Year / Household Days / Year / Household (8hrs/day) Households / Village Day Equivalent / Village Economic Value per Day Assumed Benefit Total With Project Benefits Incremental Benefits	-	-	-	302.9	312.0	321.3	331.0	340.9	351.1	361.7
	-	-	-	14.2	14.6	15.0	15.5	16.0	16.4	16.9
	-	-	-	56.3	56.3	56.3	56.3	56.3	56.3	56.3
	-	-	-	70.4	70.9	71.3	71.7	72.2	72.7	73.2
	-	-	-	70.4	70.9	71.3	71.7	72.2	72.7	73.2

Source:

VOD = Village Organisation and Development.
Households per village: Bakaner

Cost Benefit Analysis (CBA) Study Estimate Jan 2005.

Table AN12.10.7

GVT - Rajasthan - Banswara: Village Bakaner: Household Crop Net Margin Assumptions.

Without \ With Project	Units	Assumptions			Benefits		
					Year 1 (Rs)	Year 2 (Rs)	Year 3 (Rs)
Development Activity: Crop Technology, SWC and WRD							
Before / Without Project Situation: Assumptions							
Households (HHs)	No	90					
Crop Adoption Assumptions		100%	100%	100%			
Kharif Crop Net Margin	Rs/HH				1,327.9	1,327.9	1,327.9
Rabi Crop Net Margin	Rs/HH				218.3	218.3	218.3
Total Without Project Benefits	Rs/HH				1,546.2	1,546.2	1,546.2
After / With Project Situation: Assumptions							
Households (HHs)	No	90					
Crop Adoption Assumptions		100%	100%	100%			
Kharif Crop Net Margin	Rs/HH				4,701.5	4,701.5	4,701.5
Rabi Crop Net Margin	Rs/HH				1,517.1	1,517.1	1,517.1
Total With Project Benefits	Rs/HH				6,218.6	6,218.6	6,218.6
Incremental Benefits	Rs/HH				4,672.4	4,672.4	4,672.4

Source:

Cost Benefit Analysis (CBA) Study Estimate Jan 2005.

Table AN12.10.7

GVT - Rajasthan - Banswara: Village Bakaner: Incremental Crop Benefit Stream (Rs'000).

Without \ With Project	Benefit Streams (Rs '000)									
	Year 1 1999/00	Year 2 2000/01	Year 3 2001/02	Year 4 2002/03	Year 5 2003/04	Year 6 2004/05	Year 7 2005/06	Year 8 2006/07	Year 9 2007/08	Year 10 2008/09
Development Activity: Crop Technology, SWC and WRD										
Before / Without Project Situation:										
Assumptions										
Households (HHs)										
Crop Adoption Assumptions										
Kharif Crop Net Margin	-	-	-	-	119.5	119.5	119.5	119.5	119.5	119.5
Rabi Crop Net Margin	-	-	-	-	19.6	19.6	19.6	19.6	19.6	19.6
Total Without Project Benefits	-	-	-	-	139.2	139.2	139.2	139.2	139.2	139.2
After / With Project Situation:										
Assumptions										
Households (HHs)										
Crop Adoption Assumptions										
Kharif Crop Net Margin	-	-	-	-	423.1	423.1	423.1	423.1	423.1	423.1
Rabi Crop Net Margin	-	-	-	-	136.5	136.5	136.5	136.5	136.5	136.5
Total With Project Benefits	-	-	-	-	559.7	559.7	559.7	559.7	559.7	559.7
Incremental Benefits	-	-	-	-	420.5	420.5	420.5	420.5	420.5	420.5

Source:

Cost Benefit Analysis (CBA) Study Estimate Jan 2005.

Table AN12.10.8

GVT - Rajasthan - Banswara: Village Bakaner: Household Livestock Net Margin Assumptions.

Without \ With Project Livestock	Units	Assumptions			Benefits		
					Year 1 (Rs)	Year 2 (Rs)	Year 3 (Rs)
Development Activity: Livestock							
Before / Without Project Situation: Assumptions							
Households (HHs)	No	90					
Annual Livestock Net Margin	Rs/HH						
Total Without Project Benefits					1,848.5	1,848.5	1,848.5
After / With Project Situation:							
Development Activity: Assumptions							
Households (HHs)	No	90					
Adoption Assumptions	Percent	55%	78%	100%			
Annual Livestock Net Margin	Rs/HH						
Total With Project Benefits					1,940.9	2,734.9	3,528.9
Incremental Benefits	Rs/HH				92.5	886.5	1,680.5

Source:

Cost Benefit Analysis (CBA) Study Estimate Jan 2005.

Table AN12.10.8

GVT - Rajasthan - Banswara: Village Bakaner: Incremental Livestock Benefit Stream (Rs'000).

Without \ With Project Livestock	Benefit Streams (Rs '000)									
	Year 1 1999/00	Year 2 2000/01	Year 3 2001/02	Year 4 2002/03	Year 5 2003/04	Year 6 2004/05	Year 7 2005/06	Year 8 2006/07	Year 9 2007/08	Year 10 2008/09
Development Activity: Livestock										
Before / Without Project Situation: Assumptions										
Households (HHs)										
Annual Livestock Net Margin										
Total Without Project Benefits	-	-	-	-	166.4	166.4	166.4	166.4	166.4	166.4
After / With Project Situation:										
Development Activity:										
Assumptions										
Households (HHs)										
Adoption Assumptions										
Annual Livestock Net Margin										
Total With Project Benefits	-	-	-	-	174.7	246.1	317.6	317.6	317.6	317.6
Incremental Benefits	-	-	-	-	8.3	79.8	151.2	151.2	151.2	151.2

Source:

Cost Benefit Analysis (CBA) Study Estimate Jan 2005.

Table AN12.10.9

GVT - Rajasthan - Banswara: Village Bakaner: Forestry Benefit Assumptions.

Without \ With Project Forestry	Units	Assumptions			Benefits		
					Year 1 (Rs)	Year 2 (Rs)	Year 3 (Rs)
Development Activity: Forestry							
Before / Without Project Situation: Assumptions							
Households (HHs)	No	90					
Annual Forestry Net Margin	Rs/HH				-	-	-
Total Without Project Benefits							
After / With Project Situation: Assumptions							
Households (HHs)	No	90					
Adoption Assumptions	Percent	55%	78%	100%			
Annual Forestry Net Margin	Rs/HH						
Total With Project Benefits					82.5	117.0	150.0
Incremental Benefits	Rs/HH				82.5	117.0	150.0

Source:

Cost Benefit Analysis (CBA) Study Estimate Jan 2005.

Table AN12.10.9

GVT - Rajasthan - Banswara: Village Bakaner: Incremental Forestry Benefit Stream (Rs'000).

Without \ With Project Forestry	Benefit Streams (Rs '000)									
	Year 1 1999/00	Year 2 2000/01	Year 3 2001/02	Year 4 2002/03	Year 5 2003/04	Year 6 2004/05	Year 7 2005/06	Year 8 2006/07	Year 9 2007/08	Year 10 2008/09
Development Activity: Forestry										
Before / Without Project Situation: Assumptions										
Households (HHs)										
Annual Forestry Net Margin										
Total Without Project Benefits	-	-	-	-	-	-	-	-	-	-
After / With Project Situation: Assumptions										
Households (HHs)										
Adoption Assumptions										
Annual Forestry Net Margin										
Total With Project Benefits	-	-	-	7.4	10.5	13.5	13.5	13.5	13.5	13.5
Incremental Benefits	-	-	-	7.4	10.5	13.5	13.5	13.5	13.5	13.5

Source:

Cost Benefit Analysis (CBA) Study Estimate Jan 2005.

Table AN12.10.10

GVT - Rajasthan - Banswara: Village Bakaner: Migration Support Benefit Assumptions.

Without \ With Project Migration Support	Assumptions			Benefits		
				Year 1 (Rs)	Year 2 (Rs)	Year 3 (Rs)
Development Activity: Migration Support						
Before / Without Project Situation: Assumptions						
Economic Value per Day	Rs/day	25.0				
Days / Month / Household	No	18				
Economic Value per Month	Rs/month	450.0				
Months Migration / Year	Months	4.0				
Economic Value per Household	Rs/HH	1,800.0				
Households per Village	No	-				
Households per Village Migrating	Percent	45%				
Total Without Project Benefits	Rs/Village			-	-	-
After / With Project Situation: Assumptions						
Economic Value per Day \1	Rs/day	25.0	25%	31.3		
Days / Month / Household	No	18	30%	24.0		
Economic Value per Month	Rs/month	450.0		750.0		
Months Migration / Year	Months	4.0	-25%	3.0		
Economic Value per Household	Rs/HH	1,800.0		2,250.0		
Households per Village	No	-		-		
Households per Village Migrating	Percent	45%	-10%	41%		
Subtotal Migration Benefits	Rs/Village				-	-
Other Income	Sum (Rs'000)	-	-	-	-	-
Total With Project Benefits	Rs/Village				-	-
Incremental Benefits	Rs/Village				-	-

Source:

Cost Benefit Analysis (CBA) Study Estimate Jan 2005.

- 1\ Financial Wages (Rs/day):
 Skill Labour - Rs 160
 Casual Labour :
 Male - Rs 40
 Female - Rs 30

Table AN12.10.10

GVT - Rajasthan - Banswara: Village Bakaner: Incremental Migration Support Benefit Stream (Rs'000).

Without \ With Project Migration Support	Benefit Streams (Rs '000)									
	Year 1 1999/00	Year 2 2000/01	Year 3 2001/02	Year 4 2002/03	Year 5 2003/04	Year 6 2004/05	Year 7 2005/06	Year 8 2006/07	Year 9 2007/08	Year 10 2008/09
Development Activity: Migration Support Before / Without Project Situation: Assumptions Economic Value per Day Days / Month / Household Economic Value per Month Months Migration / Year Economic Value per Household Households per Village Households per Village Migrating Total Without Project Benefits	-	-	-	-	-	-	-	-	-	-
After / With Project Situation: Assumptions Economic Value per Day \1 Days / Month / Household Economic Value per Month Months Migration / Year Economic Value per Household Households per Village Households per Village Migrating Subtotal Migration Benefits Other Income Total With Project Benefits Incremental Benefits	-	-	-	-	-	-	-	-	-	-

Source:

Cost Benefit Analysis (CBA) Study Estimate Jan 2005.

- 1\ Financial Wages (Rs/day):
 Skill Labour - Rs 160
 Casual Labour :
 Male - Rs 40
 Female - Rs 30

Table AN12.10.11 GVT - Rajasthan - Banswara: Village Bakaner: Weighted Household Crop Net Margin Summary (Rs/Household).

Item	WBR (%)	Before / Without Project			After / With Project			Increment		
		Khalif	Rabi	Total	Khalif	Rabi	Total	Khalif	Rabi	Total
Phase II										
WBR - Very Poor										
Household Net Margin (Rs)	23.0%	834.6	102.5	937.1	1,849.8	1,067.8	2,917.6	1,015.2	965.3	1,980.5
WBR - Poor										
Household Net Margin (Rs)	27.0%	637.7	-	637.7	4,803.0	220.7	5,023.7	4,165.3	220.7	4,386.0
WBR - Moderate										
Household Net Margin (Rs)	41.0%	994.0	89.3	1,083.3	3,711.4	2,508.3	6,219.6	2,717.4	2,419.0	5,136.4
WBR - Better Off										
Household Net Margin (Rs)	9.0%	6,180.9	1,756.7	7,937.5	16,195.9	2,039.3	18,235.2	10,015.0	282.7	10,297.7
WBR - Weighted										
Household Net Margin (Rs)	100%	1,327.9	218.3	1,546.2	4,701.5	1,517.1	6,218.6	3,373.6	1,298.8	4,672.4
Phase I \1										
WBR - Very Poor										
Household Net Margin (Rs)	23.0%	436.3	267.5	703.8	3,866.5	1,668.8	5,535.3	3,430.3	1,401.3	4,831.5
WBR - Poor										
Household Net Margin (Rs)	27.0%	485.8	657.5	1,143.3	10,136.0	5,690.3	15,826.3	9,650.3	5,032.8	14,683.0
WBR - Moderate										
Household Net Margin (Rs)	41.0%	986.3	3,385.0	4,371.3	9,457.5	5,195.0	14,652.5	8,471.3	1,810.0	10,281.3
WBR - Better Off										
Household Net Margin (Rs)	9.0%	2,778.0	937.0	3,715.0	4,915.0	9,560.0	14,475.0	2,137.0	8,623.0	10,760.0
WBR - Weighted										
Household Net Margin (Rs)	100.0%	885.9	1,711.2	2,597.1	7,945.9	4,910.5	12,856.5	7,060.1	3,199.3	10,259.4

Source: Study of Impact of WIRFP on Net Incomes of Target Households, Jan 2004.

WBR = GVT Household Well Being Ranking. Survey figures adjusted to Village Profile WBR.

\1 GVT - Madhya Pradesh - Phase I: Village Naganwat Choti: Weighted Household Crop Net Margin Summary.

Table AN12.10.12 GVT - Rajasthan - Banswara: Village Bakaner: Household Crop Net Margin Sensitivity Analysis.

Item	EIRR	Before / Without Project			After / With Project			Increment		
		Khalif	Rabi	Total	Khalif	Rabi	Total	Khalif	Rabi	Total
Development Activity: Crop Technology, SWC and WRD										
Weighted Net Margin (Phase II)										
Household Net Margin (Rs)		1,327.9	218.3	1,546.2	4,701.5	1,517.1	6,218.6	3,373.6	1,298.8	4,672.4
Incremental Benefit (Phase II / Phase I)										46%
Base Case Assumptions										
Household Net Margin (Rs)		1,327.9	218.3	1,546.2	4,701.5	1,517.1	6,218.6	3,373.6	1,298.8	4,672.4
Incremental Benefit (Phase II / Phase I)										46%
Sensitivity Increase (%)	0%									
Development Activity EIRR	9%									
Overall Village EIRR	4%									
Sensitivity Assumptions										
Household Net Margin (Rs)		1,327.9	218.3	1,546.2	6,817.2	2,199.8	9,017.0	5,489.3	1,981.5	7,470.8
Incremental Benefit (Phase II / Phase I)										73%
Sensitivity Increase (%)	0%									
Development Activity EIRR	22%									
Overall Village EIRR	12%									
Weighted Net Margin (Phase I)										
Household Net Margin (Rs)		885.9	1,711.2	2,597.1	7,945.9	4,910.5	12,856.5	7,060.1	3,199.3	10,259.4

Source: Cost Benefit Analysis (CBA) Study Estimate Jan 2005.

EIRR = Economic Internal Rate of Return (rate at which NPV equal to zero).

Table AN12.10.13 GVT - Rajasthan - Banswara: Village Bakaner: Weighted Household Livestock Net Margin Summary (Rs/Household).

Well Being Ranking	Weight (%)	Before / Without Project		After / With Project		Increment \1	
		Herd Value	Net Margin	Herd Value	Net Margin	Herd Value	Net Margin
Phase I - Well Being Ranking (WBR) \1							
Madhya Pradesh - WBR Weighted Data							
Very Poor	23.0%						
Average		580	(185.0)	5,650	412.5	474	597.5
Poor	27.0%						
Average		2,350	982.5	8,250	2,141.0	1,180	1,158.5
Moderate	41.0%						
Average		14,700	6,730.0	1,900	2,820.0	1,900	(3,910.0)
Better Off	9.0%						
Average		15,580	3,000.0	14,600	10,790.0	(196)	7,790.0
Phase I - WBR Weighted Data	100.0%	8,197	3,252.0	5,620	2,800.2	1,189	(451.8)
Phase II - Well Being Ranking (WBR)							
Very Poor	23.0%						
Average		5,756	149.2	10,970	1,446.4	1,043	1,297.2
Poor	27.0%						
Average		13,128	852.2	25,979	3,008.8	2,570	2,156.8
Moderate	41.0%						
Average		13,525	4,035.1	27,020	5,249.5	2,699	1,214.4
Better Off	9.0%						
Average		12,700	(781.7)	41,873	2,573.3	5,835	3,355.0
Phase II - WBR Weighted Data	100.0%	11,557	1,848.5	24,384	3,528.9	2,565	1,680.5

Source: Study of Impact of WIRFP on Net Incomes of Target Households, Jan 2004.

WBR = GVT Household Well Being Ranking.

Survey figures adjusted to Village Profile WBR.

\1 GVT - Madhya Pradesh - Phase I: Village Naganwat Choti: Weighted Household Livestock Net Margin Summary.

WIRFP - Phase II - Cost Benefit Analysis Study

Tables AN12.0 Individual Village Cost Benefit Analysis

Tables AN12.11 GVT - Rajasthan - Banswara: Village Bhuripada.

Table AN12.11.1 GVT - Rajasthan - Banswara: Village Bhuripada: Village Profile.

Table AN12.11.2 GVT - Rajasthan - Banswara: Village Bhuripada: Cost Benefit Analysis Summary (Rs'000).

Table AN12.11.3 GVT - Rajasthan - Banswara: Village Bhuripada: Cost Benefit Analysis Development Activity Summary A (Rs'000).

Table AN12.11.4 GVT - Rajasthan - Banswara: Village Bhuripada: Cost Benefit Analysis Development Activity Summary B (Rs'000).

Table AN12.11.5 GVT - Rajasthan - Banswara: Village Bhuripada: Costs - Financial (Rs'000).

GVT - Rajasthan - Banswara: Village Bhuripada: Costs - Economic (Rs'000).

Table AN12.11.6 GVT - Rajasthan - Banswara: Village Bhuripada: VOD Household Assumptions.

GVT - Rajasthan - Banswara: Village Bhuripada: Incremental VOD Benefit Stream (Rs'000).

Table AN12.11.7 GVT - Rajasthan - Banswara: Village Bhuripada: Household Crop Net Margin Assumptions.

GVT - Rajasthan - Banswara: Village Bhuripada: Incremental Crop Benefit Stream (Rs'000).

Table AN12.11.8 GVT - Rajasthan - Banswara: Village Bhuripada: Household Livestock Net Margin Assumptions.

GVT - Rajasthan - Banswara: Village Bhuripada: Incremental Livestock Benefit Stream (Rs'000).

Table AN12.11.9 GVT - Rajasthan - Banswara: Village Bhuripada: Forestry Benefit Assumptions.

GVT - Rajasthan - Banswara: Village Bhuripada: Incremental Forestry Benefit Stream (Rs'000).

Table AN12.11.10 GVT - Rajasthan - Banswara: Village Bhuripada: Migration Support Benefit Assumptions.

GVT - Rajasthan - Banswara: Village Bhuripada: Incremental Migration Support Benefit Stream (Rs'000).

Table AN12.11.11 GVT - Rajasthan - Banswara: Village Bhuripada: Weighted Household Crop Net Margin Summary (Rs/Household).

Table AN12.11.12 GVT - Rajasthan - Banswara: Village Bhuripada: Household Crop Net Margin Sensitivity Analysis.

Table AN12.11.13 GVT - Rajasthan - Banswara: Village Bhuripada: Weighted Household Livestock Net Margin Summary (Rs/Household).

Table AN12.11.1 GVT - Rajasthan - Banswara: Village Bhuripada: Village Profile.

Village Profile \1			
A. Background			
Village Name	Bhuripada		
District	Banswara		
State	Rajasthan		
B. Participatory Planning Process (PPP)			
Village entry	Jan-00		
PRA	Aug-00		
CPA	Sep-00		
C. Infrastructure			
Hand Pumps (no)	7		
Wells (no)	6		
Linked by Road	No		
Electrification	Yes		
School	Primary		
D. Demographic Data			
Households (no)	265		
Participating Households	160		
Population (Adults)	1,500		
Adults:			
Male	700		
Female	800		
Children:			
Boys	N/A		
Girls	N/A		
E. Well Being Ranking (No Households)			
Very Poor	21	28.4%	
Poor	37	50.0%	
Moderate	11	14.9%	
Better Off	5	6.8%	
Total	74	100%	
F. Land Resource (ha)			
Total Area			532
Revenue Land (unused)			41
Forest Area - Revenue			175
Pasture Land			49
Arable Land			267
G. Livestock			
Oxen			N/A
Cows			N/A
Buffalo			N/A
Goats			N/A
Poultry			N/A
H. Self Help Groups (No Households)			
1	Group 1		24
2	Group 2		23
3	Group 3		21
4	Group 4		20
5	Group 5		19
6	Group 6		21
7	Group 7		19
8	Group 8		23
9	Group 9		20
10	Group 10		
11	Group 11		
12	Group 12		
13	Group 13		
	Total Memberhip		190

Source: GVT Banswara Coordination Office - Rajasthan.

\1 Subject to final adjustment following consolidation exercise prior to Annual Review Meeting (ARM) in Feb 2005.

Table AN12.11.2 GVT - Rajasthan - Banswara: Village Bhuripada: Cost Benefit Analysis Summary (Rs'000).

Administration Costs / Development Activity	EIRR \1	NPV \2		Year 1 1999/00	Year 2 2000/01	Year 3 2001/02	Year 4 2002/03	Year 5 2003/04	Year 6 2004/05	Year 7 2005/06	Year 8 2006/07	Year 9 2007/08	Year 10 2008/09
		(10%)	(%)										
A. Administration Costs													
Total A	N/A	(972)	-301%	35.9	241.3	227.1	238.6	249.5	250.3	223.6	22.4	22.4	22.4
B. Development Activity Component A													
1. PPGF													
Net Incremental Benefits	N/A	(129)	-40%	-	(16.9)	(29.0)	(43.9)	(38.2)	(30.8)	(35.5)	(4.6)	(4.6)	(4.6)
2. VOD													
Net Incremental Benefits	49%	369	114%	-	(71.1)	(46.7)	63.3	60.7	81.1	81.6	104.5	105.0	105.6
3/5. Crop Technology, SWC and WRD													
Net Incremental Benefits	19%	497	154%	-	(2.5)	(401.3)	(963.6)	(166.0)	316.6	335.5	405.9	405.9	405.9
6. Livestock													
Net Incremental Benefits	100%	520	161%	-	(3.3)	(32.3)	(15.1)	42.5	128.3	134.9	228.7	125.1	125.1
7. Forestry													
Net Incremental Benefits	42%	38	12%	-	(4.0)	(7.0)	(3.3)	4.7	9.7	9.3	12.6	12.6	12.6
8. Migration Support													
Net Incremental Benefits	N/A	-	0%	-	-	-	-	-	-	-	-	-	-
Summary													
Net Incremental Benefits	14%	323	100%	(35.9)	(339.2)	(743.5)	(1,201.2)	(345.9)	254.5	302.2	724.7	621.6	622.2
Sensitivity Analysis													
Analysis Period													
12 Years	6%	(470)											
20 Years (Base Case)	14%	323											
25 Years	15%	556											
30 Years	16%	688											
Costs - Administration													
Investment Costs Decreased by 20 percent	16%	518											
Costs - Administration and Development													
Recurrent Costs Increased by 20 percent	12%	61											
Benefits - Crops, SWC and WRD													
Crop Benefits Increased by 20 percent	18%	963											
Livestock Benefits Increased by 20 percent	16%	541											

Source: Cost Benefit Analysis (CBA) Study Estimate Jan 2005.

\1 EIRR = Economic Internal Rate of Return (rate at which NPV equal to zero).

\2 NPV = Net Present Value of net incremental benefits at 12% (indicative opportunity cost of capital for rural development projects in India).

N/A = Not analysed as EIRR negative.

Table AN12.11.3 GVT - Rajasthan - Banswara: Village Bhuripada: Cost Benefit Analysis Development Activity Summary A (Rs'000).

Administration Costs / Development Activity	EIRR ¹	NPV ²		Year 1 1999/00	Year 2 2000/01	Year 3 2001/02	Year 4 2002/03	Year 5 2003/04	Year 6 2004/05	Year 7 2005/06	Year 8 2006/07	Year 9 2007/08	Year 10 2008/09
		(10%)	(%)										
A. Administration Costs													
Investment				35.9	241.3	227.1	238.6	249.5	250.3	223.6	-	-	-
Projected				-	-	-	-	-	-	-	22.4	22.4	22.4
Total A	N/A	(972)	-301%	35.9	241.3	227.1	238.6	249.5	250.3	223.6	22.4	22.4	22.4
B. Development Intervention Component A													
1. PPGF													
Cost Stream													
Investment				-	16.9	28.5	42.8	36.0	27.7	31.7	-	-	-
Recurrent				-	-	0.4	1.1	2.2	3.1	3.8	4.6	4.6	4.6
Total Costs				-	16.9	29.0	43.9	38.2	30.8	35.5	4.6	4.6	4.6
Benefit Stream													
Before / Without Project				-	-	-	-	-	-	-	-	-	-
After / With Project				-	-	-	-	-	-	-	-	-	-
Incremental Benefits				-	-	-	-	-	-	-	-	-	-
Net Incremental Benefits	N/A	(129)	-40%	-	(16.9)	(29.0)	(43.9)	(38.2)	(30.8)	(35.5)	(4.6)	(4.6)	(4.6)
2. VOD													
Cost Stream													
Investment				-	71.1	43.2	46.3	47.1	24.9	23.6	-	-	-
Recurrent				-	-	3.6	5.7	8.0	10.4	11.6	12.8	12.8	12.8
Total Costs				-	71.1	46.7	52.1	55.2	35.3	35.3	12.8	12.8	12.8
Benefit Stream													
Before / Without Project				-	-	-	-	-	-	-	-	-	-
After / With Project				-	-	-	115.4	115.9	116.3	116.8	117.3	117.9	118.4
Incremental Benefits				-	-	-	115.4	115.9	116.3	116.8	117.3	117.9	118.4
Net Incremental Benefits	49%	369	114%	-	(71.1)	(46.7)	63.3	60.7	81.1	81.6	104.5	105.0	105.6
3/5. Crop Technology, SWC and WRD													
Cost Stream													
Investment													
Crop Tecnology				-	2.5	49.6	68.1	20.8	29.1	23.8	-	-	-
Soil Water Conservation				-	-	328.3	611.1	376.5	-	-	-	-	-
Water Resource Development				-	-	23.3	238.6	287.2	82.1	55.4	-	-	-
Recurrent													
Crop Tecnology				-	-	0.1	1.3	3.0	3.5	4.3	4.8	4.8	4.8
Soil Water Conservation				-	-	-	41.0	117.4	164.5	164.5	164.5	164.5	164.5
Water Resource Development				-	-	-	3.5	39.3	82.4	94.7	103.0	103.0	103.0
Total Costs				-	2.5	401.3	963.6	844.2	361.6	342.7	272.3	272.3	272.3
Benefit Stream													
Before / Without Project				-	-	-	-	207.9	207.9	207.9	207.9	207.9	207.9
After / With Project				-	-	-	-	886.1	886.1	886.1	886.1	886.1	886.1
Incremental Benefits				-	-	-	-	678.2	678.2	678.2	678.2	678.2	678.2
Net Incremental Benefits	19%	497	154%	-	(2.5)	(401.3)	(963.6)	(166.0)	316.6	335.5	405.9	405.9	405.9

Source: Cost Benefit Analysis (CBA) Study Estimate Jan 2005.

¹ EIRR = Economic Internal Rate of Return (rate at which NPV equal to zero).

² NPV = Net Present Value of net incremental benefits at 12% (indicative opportunity cost of capital for rural development projects in India).

N/A = Not analysed as EIRR negative.

Table AN12.11.4 GVT - Rajasthan - Banswara: Village Bhuripada: Cost Benefit Analysis Development Activity Summary B (Rs'000).

Administration Costs / Development Activity	EIRR \1	NPV \2		Year 1 1999/00	Year 2 2000/01	Year 3 2001/02	Year 4 2002/03	Year 5 2003/04	Year 6 2004/05	Year 7 2005/06	Year 8 2006/07	Year 9 2007/08	Year 10 2008/09
		(10%)	(%)										
6. Livestock													
Cost Stream													
Investment				-	3.3	32.3	12.8	21.6	10.6	99.4	-	-	-
Recurrent				-	-	-	2.3	26.2	54.9	63.1	68.7	68.7	68.7
Total Costs				-	3.3	32.3	15.1	47.8	65.5	162.5	68.7	68.7	68.7
Benefit Stream													
Before / Without Project				-	-	-	-	162.9	162.9	162.9	162.9	162.9	162.9
After / With Project				-	-	-	-	253.2	356.7	460.3	460.3	356.7	356.7
Incremental Benefits				-	-	-	-	90.2	193.8	297.4	297.4	193.8	193.8
Net Incremental Benefits	100%	520	161%	-	(3.3)	(32.3)	(15.1)	42.5	128.3	134.9	228.7	125.1	125.1
7. Forestry													
Cost Stream													
Investment				-	4.0	6.6	11.0	5.6	3.6	3.6	-	-	-
Recurrent				-	-	0.4	1.1	2.2	2.7	3.1	3.4	3.4	3.4
Total Costs				-	4.0	7.0	12.1	7.8	6.3	6.7	3.4	3.4	3.4
Benefit Stream													
Before / Without Project				-	-	-	-	-	-	-	-	-	-
After / With Project				-	-	-	8.8	12.5	16.0	16.0	16.0	16.0	16.0
Incremental Benefits				-	-	-	8.8	12.5	16.0	16.0	16.0	16.0	16.0
Net Incremental Benefits	42%	38	12%	-	(4.0)	(7.0)	(3.3)	4.7	9.7	9.3	12.6	12.6	12.6
8. Migration Support													
Cost Stream													
Investment				-	-	-	-	-	-	-	-	-	-
Recurrent				-	-	-	-	-	-	-	-	-	-
Total Costs				-	-	-	-	-	-	-	-	-	-
Benefit Stream													
Before / Without Project				-	-	-	-	-	-	-	-	-	-
After / With Project				-	-	-	-	-	-	-	-	-	-
Incremental Benefits				-	-	-	-	-	-	-	-	-	-
Net Incremental Benefits	N/A	-	0%	-	-	-	-	-	-	-	-	-	-
Summary													
Cost Stream													
Investment				35.9	339.2	739.0	1,269.3	1,044.3	428.3	461.1	-	-	-
Recurrent				-	-	4.4	56.1	198.3	321.5	345.1	384.2	384.2	384.2
Total Costs				35.9	339.2	743.5	1,325.4	1,242.6	749.8	806.2	384.2	384.2	384.2
Benefit Stream													
Before / Without Project				-	-	-	-	370.8	370.8	370.8	370.8	370.8	370.8
After / With Project				-	-	-	124.2	1,267.6	1,375.2	1,479.2	1,479.8	1,376.7	1,377.2
Incremental Benefits				-	-	-	124.2	896.8	1,004.3	1,108.4	1,108.9	1,005.9	1,006.4
Net Incremental Benefits	14%	323	100%	(35.9)	(339.2)	(743.5)	(1,201.2)	(345.9)	254.5	302.2	724.7	621.6	622.2

Source: Cost Benefit Analysis (CBA) Study Estimate Jan 2005.

Table AN12.11.5

GVT - Rajasthan - Banswara: Village Bhuripada: Costs - Financial (Rs'000).

Cost Head / Subhead	1999/00 Actual	2000/01 Actual	2001/02 Actual	2002/03 Actual	2003/04 Actual	2004/05 Budget	2005/06 Budget	Total	
								(Rs'000)	(%)
A. Administration Costs									
GVT Bhopal (PHQ)	-	60.3	75.4	67.3	52.8	66.8	61.1	383.7	7%
DFIDI Consultancy	35.9	71.4	26.9	63.2	47.4	54.7	39.2	338.6	6%
Rajasthan Coordination Office	-	128.5	147.0	127.6	171.7	150.5	143.8	869.1	16%
Total A	35.9	260.2	249.4	258.1	271.9	272.0	244.1	1,591.5	29%
B. Development Costs									
Component A									
1. PPGF	-	18.8	31.7	47.5	40.0	30.8	35.2	204.1	4%
2. VOD	-	79.0	48.0	51.5	52.4	27.7	26.2	284.8	5%
3. Crop Technology	-	2.8	55.2	75.7	23.1	32.4	26.5	215.6	4%
4. SWC	-	-	486.4	905.3	557.8	-	-	1,949.5	35%
5. WRD	-	-	34.5	353.4	425.5	121.6	82.1	1,017.3	18%
6. Livestock	-	3.7	35.9	14.2	24.0	11.8	110.4	200.0	4%
7. Forestry	-	4.5	7.3	12.3	6.2	4.0	4.0	38.3	1%
8. Migration Support	-	-	-	-	-	-	-	-	0%
Subtotal	-	108.7	699.0	1,459.9	1,129.0	228.2	284.5	3,909.4	71%
Other Development Costs									
Subtotal	-	-	-	-	-	-	-	-	0%
Total B	-	108.7	699.0	1,459.9	1,129.0	228.2	284.5	3,909.4	71%
Total A + B	35.9	368.9	948.4	1,718.0	1,400.9	500.2	528.6	5,500.9	100%
GVT	-	286.1	666.0	1,117.1	968.0	410.6	459.5	3,907.3	71%
DFIDI	35.9	71.4	26.9	63.2	47.4	54.7	39.2	338.6	6%
Community	-	9.1	253.2	535.9	383.5	33.9	26.5	1,242.0	23%
Government	-	2.4	2.2	1.8	2.1	1.1	3.4	13.0	0%

Source:

GVT Banswara Coordination Office - Rajasthan.

DFIDI = Department for International Development (India).

PPGF = Participatory Planning and Group Formation.

VOD = Village Organisation and Development.

SWC = Soil and Water Conservation.

WRD = Water Resource Development.

Table AN12.11.5

GVT - Rajasthan - Banswara: Village Bhuripada: Costs - Economic (Rs'000).

Cost Head / Subhead	Conversion Factors		1999/00 Actual	2000/01 Actual	2001/02 Actual	2002/03 Actual	2003/04 Actual	2004/05 Budget	2005/06 Budget	Totals	
	CF	SCF								(Rs'000)	(%)
A. Administration Costs											
GVT Bhopal (PHQ)	0.90	1.00	-	54.2	67.9	60.6	47.5	60.1	55.0	345.4	8%
DFIDI Consultancy	1.00	1.00	35.9	71.4	26.9	63.2	47.4	54.7	39.2	338.6	8%
Rajasthan Coordination Office	0.90	1.00	-	115.7	132.3	114.8	154.5	135.5	129.4	782.2	18%
Total A			35.9	241.3	227.1	238.6	249.5	250.3	223.6	1,466.2	34%
B. Development Costs											
Component A											
1. PPGF	0.90	1.00	-	16.9	28.5	42.8	36.0	27.7	31.7	183.7	4%
2. VOD	0.90	1.00	-	71.1	43.2	46.3	47.1	24.9	23.6	256.3	6%
3. Crop Technology	0.90	1.00	-	2.5	49.6	68.1	20.8	29.1	23.8	194.0	4%
4. SWC	0.90	0.75	-	-	328.3	611.1	376.5	-	-	1,315.9	30%
5. WRD	0.90	0.75	-	-	23.3	238.6	287.2	82.1	55.4	686.7	16%
6. Livestock	0.90	1.00	-	3.3	32.3	12.8	21.6	10.6	99.4	180.0	4%
7. Forestry	0.90	1.00	-	4.0	6.6	11.0	5.6	3.6	3.6	34.5	1%
8. Migration Support	0.90	1.00	-	-	-	-	-	-	-	-	0%
Subtotal			-	97.9	511.9	1,030.7	794.9	178.0	237.6	2,851.0	66%
Other Development Costs											
Subtotal	0.90	1.00	-	-	-	-	-	-	-	-	0%
Total B			-	97.9	511.9	1,030.7	794.9	178.0	237.6	2,851.0	66%
Total A + B			35.9	339.2	739.0	1,269.3	1,044.3	428.3	461.1	4,317.2	100%
GVT			-	-	-	-	-	-	-	N/A	
DFIDI			-	-	-	-	-	-	-	N/A	
Community			-	-	-	-	-	-	-	N/A	
Government			-	-	-	-	-	-	-	N/A	

Source:

Cost Benefit Analysis (CBA) Study Estimate Jan 2005.

DFIDI = Department for International Development (India).

PPGF = Participatory Planning and Group Formation.

VOD = Village Organisation and Development.

SWC = Soil and Water Conservation.

WRD = Water Resource Development.

Table AN12.11.6

GVT - Rajasthan - Banswara: Village Bhuripada: VOD Household Assumptions.

Without \ With Project	Units	Assumptions			Benefits		
					Year 1 (Rs)	Year 2 (Rs)	Year 3 (Rs)
Development Activity: Village Organisation and Development							
Before / Without Project Situation:							
A. Self Help Groups (SHGs)							
Assumption	Sum	Zero	Zero	Zero	-	-	-
B. Drudgery Reduction							
Assumption	Sum	Zero	Zero	Zero			
Total Without Project Benefits					-	-	-
After / With Project Situation:							
A. Self Help Groups (SHGs)							
Assumptions							
Average Household Savings	Rs	1,162.5					
Households (HHs)	No	160					
Present Group Deposits	Rs'000	186.0					
Annual Savings Increase	%	3%			186.0	191.6	197.3
Deposits on Loan to Members	%	46%					
SHG Interest Income	% / Year	18%					
Assumed Benefit	Rs'000				15.4	15.9	16.3
B. Drudgery Reduction							
Assumptions							
Hours Saved / Day / Household	No	1.0					
Number of Days / Year / Household	No	200					
Days / Year / Household (8hrs/day)	No	25.0					
Households / Village	No	160					
Day Equivalent / Village	No	4,000					
Economic Value per Day	(Rs/day)	25					
Assumed Benefit	Rs'000				100.0	100.0	100.0
Total With Project Benefits	Rs'000				115.4	115.9	116.3
Incremental Benefits	Rs'000				115.4	115.9	116.3

Source:

VOD = Village Organisation and Development.
Households per village: Bhuripada

Cost Benefit Analysis (CBA) Study Estimate Jan 2005.

Table AN12.11.6

GVT - Rajasthan - Banswara: Village Bhuripada: Incremental VOD Benefit Stream (Rs'000).

Without \ With Project	Benefit Streams (Rs '000)									
	Year 1 1999/00	Year 2 2000/01	Year 3 2001/02	Year 4 2002/03	Year 5 2003/04	Year 6 2004/05	Year 7 2005/06	Year 8 2006/07	Year 9 2007/08	Year 10 2008/09
Development Activity: Village Organisation and Development Before / Without Project Situation: A. Self Help Groups (SHGs) Assumption B. Drudgery Reduction Assumption Total Without Project Benefits	-	-	-	-	-	-	-	-	-	-
After / With Project Situation: A. Self Help Groups (SHGs) Assumptions Average Household Savings Households (HHs) Present Group Deposits Annual Savings Increase Deposits on Loan to Members SHG Interest Income Assumed Benefit B. Drudgery Reduction Assumptions Hours Saved / Day / Household Number of Days / Year / Household Days / Year / Household (8hrs/day) Households / Village Day Equivalent / Village Economic Value per Day Assumed Benefit Total With Project Benefits Incremental Benefits	-	-	-	186.0	191.6	197.3	203.2	209.3	215.6	222.1
	-	-	-	15.4	15.9	16.3	16.8	17.3	17.9	18.4
	-	-	-	100.0	100.0	100.0	100.0	100.0	100.0	100.0
	-	-	-	115.4	115.9	116.3	116.8	117.3	117.9	118.4
	-	-	-	115.4	115.9	116.3	116.8	117.3	117.9	118.4

Source:

VOD = Village Organisation and Development.
Households per village: Bhuripada

Cost Benefit Analysis (CBA) Study Estimate Jan 2005.

Table AN12.11.7

GVT - Rajasthan - Banswara: Village Bhuripada: Household Crop Net Margin Assumptions.

Without \ With Project	Units	Assumptions			Benefits		
					Year 1 (Rs)	Year 2 (Rs)	Year 3 (Rs)
Development Activity: Crop Technology, SWC and WRD							
Before / Without Project Situation: Assumptions							
Households (HHs)	No	160					
Crop Adoption Assumptions		100%	100%	100%			
Kharif Crop Net Margin	Rs/HH				1,134.3	1,134.3	1,134.3
Rabi Crop Net Margin	Rs/HH				165.1	165.1	165.1
Total Without Project Benefits	Rs/HH				1,299.3	1,299.3	1,299.3
After / With Project Situation: Assumptions							
Households (HHs)	No	160					
Crop Adoption Assumptions		100%	100%	100%			
Kharif Crop Net Margin	Rs/HH				4,609.9	4,609.9	4,609.9
Rabi Crop Net Margin	Rs/HH				928.3	928.3	928.3
Total With Project Benefits	Rs/HH				5,538.2	5,538.2	5,538.2
Incremental Benefits	Rs/HH				4,238.8	4,238.8	4,238.8

Source:

Cost Benefit Analysis (CBA) Study Estimate Jan 2005.

Table AN12.11.7

GVT - Rajasthan - Banswara: Village Bhuripada: Incremental Crop Benefit Stream (Rs'000).

Without \ With Project	Benefit Streams (Rs '000)									
	Year 1 1999/00	Year 2 2000/01	Year 3 2001/02	Year 4 2002/03	Year 5 2003/04	Year 6 2004/05	Year 7 2005/06	Year 8 2006/07	Year 9 2007/08	Year 10 2008/09
Development Activity: Crop Technology, SWC and WRD										
Before / Without Project Situation:										
Assumptions										
Households (HHs)										
Crop Adoption Assumptions										
Kharif Crop Net Margin	-	-	-	-	181.5	181.5	181.5	181.5	181.5	181.5
Rabi Crop Net Margin	-	-	-	-	26.4	26.4	26.4	26.4	26.4	26.4
Total Without Project Benefits	-	-	-	-	207.9	207.9	207.9	207.9	207.9	207.9
After / With Project Situation:										
Assumptions										
Households (HHs)										
Crop Adoption Assumptions										
Kharif Crop Net Margin	-	-	-	-	737.6	737.6	737.6	737.6	737.6	737.6
Rabi Crop Net Margin	-	-	-	-	148.5	148.5	148.5	148.5	148.5	148.5
Total With Project Benefits	-	-	-	-	886.1	886.1	886.1	886.1	886.1	886.1
Incremental Benefits	-	-	-	-	678.2	678.2	678.2	678.2	678.2	678.2

Source:

Cost Benefit Analysis (CBA) Study Estimate Jan 2005.

Table AN12.11.8

GVT - Rajasthan - Banswara: Village Bhuripada: Household Livestock Net Margin Assumptions

Without \ With Project Livestock	Units	Assumptions			Benefits		
					Year 1 (Rs)	Year 2 (Rs)	Year 3 (Rs)
Development Activity: Livestock							
Before / Without Project Situation: Assumptions							
Households (HHs)	No	160					
Annual Livestock Net Margin	Rs/HH						
Total Without Project Benefits					1,018.4	1,018.4	1,018.4
After / With Project Situation:							
Development Activity: Assumptions							
Households (HHs)	No	160					
Adoption Assumptions	Percent	55%	78%	100%			
Annual Livestock Net Margin	Rs/HH						
Total With Project Benefits					1,582.3	2,229.6	2,877.0
Incremental Benefits	Rs/HH				563.9	1,211.2	1,858.5

Source:

Cost Benefit Analysis (CBA) Study Estimate Jan 2005.

Table AN12.11.8

GVT - Rajasthan - Banswara: Village Bhuripada: Incremental Livestock Benefit Stream (Rs'000).

Without \ With Project Livestock	Benefit Streams (Rs '000)									
	Year 1 1999/00	Year 2 2000/01	Year 3 2001/02	Year 4 2002/03	Year 5 2003/04	Year 6 2004/05	Year 7 2005/06	Year 8 2006/07	Year 9 2007/08	Year 10 2008/09
Development Activity: Livestock										
Before / Without Project Situation:										
Assumptions										
Households (HHs)										
Annual Livestock Net Margin										
Total Without Project Benefits	-	-	-	-	162.9	162.9	162.9	162.9	162.9	162.9
After / With Project Situation:										
Development Activity:										
Assumptions										
Households (HHs)										
Adoption Assumptions										
Annual Livestock Net Margin										
Total With Project Benefits	-	-	-	-	253.2	356.7	460.3	460.3	356.7	356.7
Incremental Benefits	-	-	-	-	90.2	193.8	297.4	297.4	193.8	193.8

Source:

Cost Benefit Analysis (CBA) Study Estimate Jan 2005.

Table AN12.11.9

GVT - Rajasthan - Banswara: Village Bhuripada: Forestry Benefit Assumptions.

Without \ With Project Forestry	Units	Assumptions			Benefits		
					Year 1 (Rs)	Year 2 (Rs)	Year 3 (Rs)
Development Activity: Forestry							
Before / Without Project Situation: Assumptions							
Households (HHs)	No	160					
Annual Forestry Net Margin	Rs/HH				-	-	-
Total Without Project Benefits							
After / With Project Situation: Assumptions							
Households (HHs)	No	160					
Adoption Assumptions	Percent	55%	78%	100%			
Annual Forestry Net Margin	Rs/HH						
Total With Project Benefits					55.0	78.0	100.0
Incremental Benefits	Rs/HH				55.0	78.0	100.0

Source:

Cost Benefit Analysis (CBA) Study Estimate Jan 2005.

Table AN12.11.9

GVT - Rajasthan - Banswara: Village Bhuripada: Incremental Forestry Benefit Stream (Rs'000).

Without \ With Project Forestry	Benefit Streams (Rs '000)									
	Year 1 1999/00	Year 2 2000/01	Year 3 2001/02	Year 4 2002/03	Year 5 2003/04	Year 6 2004/05	Year 7 2005/06	Year 8 2006/07	Year 9 2007/08	Year 10 2008/09
Development Activity: Forestry										
Before / Without Project Situation: Assumptions										
Households (HHs)										
Annual Forestry Net Margin										
Total Without Project Benefits	-	-	-	-	-	-	-	-	-	-
After / With Project Situation: Assumptions										
Households (HHs)										
Adoption Assumptions										
Annual Forestry Net Margin										
Total With Project Benefits	-	-	-	8.8	12.5	16.0	16.0	16.0	16.0	16.0
Incremental Benefits	-	-	-	8.8	12.5	16.0	16.0	16.0	16.0	16.0

Source:

Cost Benefit Analysis (CBA) Study Estimate Jan 2005.

Table AN12.11.10

GVT - Rajasthan - Banswara: Village Bhuripada: Migration Support Benefit Assumptions.

Without \ With Project	Assumptions			Benefits		
				Year 1 (Rs)	Year 2 (Rs)	Year 3 (Rs)
Development Activity: Migration Support						
Before / Without Project Situation:						
Assumptions						
Economic Value per Day	Rs/day	25.0				
Days / Month / Household	No	18				
Economic Value per Month	Rs/month	450.0				
Months Migration / Year	Months	4.0				
Economic Value per Household	Rs/HH	1,800.0				
Households per Village	No	-				
Households per Village Migrating	Percent	45%				
Total Without Project Benefits	Rs/Village			-	-	-
After / With Project Situation:						
Assumptions						
Economic Value per Day \1	Rs/day	25.0	25%	31.3		
Days / Month / Household	No	18	30%	24.0		
Economic Value per Month	Rs/month	450.0		750.0		
Months Migration / Year	Months	4.0	-25%	3.0		
Economic Value per Household	Rs/HH	1,800.0		2,250.0		
Households per Village	No	-		-		
Households per Village Migrating	Percent	45%	-10%	41%		
Subtotal Migration Benefits	Rs/Village				-	-
Other Income	Sum (Rs'000)	-	-	-	-	-
Total With Project Benefits	Rs/Village				-	-
Incremental Benefits	Rs/Village				-	-

Source:

Cost Benefit Analysis (CBA) Study Estimate Jan 2005.

- 1\ Financial Wages (Rs/day):
 - Skill Labour - Rs 160
 - Casual Labour :
 - Male - Rs 40
 - Female - Rs 30

Table AN12.11.10

GVT - Rajasthan - Banswara: Village Bhuripada: Incremental Migration Support Benefit Stream (Rs'000).

Without \ With Project	Benefit Streams (Rs '000)									
	Year 1 1999/00	Year 2 2000/01	Year 3 2001/02	Year 4 2002/03	Year 5 2003/04	Year 6 2004/05	Year 7 2005/06	Year 8 2006/07	Year 9 2007/08	Year 10 2008/09
Development Activity: Migration Support Before / Without Project Situation: Assumptions Economic Value per Day Days / Month / Household Economic Value per Month Months Migration / Year Economic Value per Household Households per Village Households per Village Migrating Total Without Project Benefits	-	-	-	-	-	-	-	-	-	-
After / With Project Situation: Assumptions Economic Value per Day \1 Days / Month / Household Economic Value per Month Months Migration / Year Economic Value per Household Households per Village Households per Village Migrating Subtotal Migration Benefits Other Income Total With Project Benefits Incremental Benefits	-	-	-	-	-	-	-	-	-	-

Source:

Cost Benefit Analysis (CBA) Study Estimate Jan 2005.

- 1\ Financial Wages (Rs/day):
 Skill Labour - Rs 160
 Casual Labour :
 Male - Rs 40
 Female - Rs 30

Table AN12.11.11 GVT - Rajasthan - Banswara: Village Bhuripada: Weighted Household Crop Net Margin Summary (Rs/Household).

Item	WBR (%)	Before / Without Project			After / With Project			Increment		
		Khalif	Rabi	Total	Khalif	Rabi	Total	Khalif	Rabi	Total
Phase II										
Well Being Ranking - Very Poor										
Household Net Margin (Rs)	28.0%	834.6	102.5	937.1	1,849.8	1,067.8	2,917.6	1,015.2	965.3	1,980.5
Well Being Ranking - Very Poor										
Household Net Margin (Rs)	50.0%	637.7	-	637.7	4,803.0	220.7	5,023.7	4,165.3	220.7	4,386.0
Well Being Ranking - Poor										
Household Net Margin (Rs)	15.0%	994.0	89.3	1,083.3	3,711.4	2,508.3	6,219.6	2,717.4	2,419.0	5,136.4
Well Being Ranking - Better Off										
Household Net Margin (Rs)	7.0%	6,180.9	1,756.7	7,937.5	16,195.9	2,039.3	18,235.2	10,015.0	282.7	10,297.7
Well Being Ranking - Weighted										
Household Net Margin (Rs)	100.0%	1,134.3	165.1	1,299.3	4,609.9	928.3	5,538.2	3,475.6	763.2	4,238.8
Phase I \1										
Well Being Ranking - Very Poor										
Household Net Margin (Rs)	28.0%	436.3	267.5	703.8	3,866.5	1,668.8	5,535.3	3,430.3	1,401.3	4,831.5
Well Being Ranking - Very Poor										
Household Net Margin (Rs)	50.0%	485.8	657.5	1,143.3	10,136.0	5,690.3	15,826.3	9,650.3	5,032.8	14,683.0
Well Being Ranking - Poor										
Household Net Margin (Rs)	15.0%	986.3	3,385.0	4,371.3	9,457.5	5,195.0	14,652.5	8,471.3	1,810.0	10,281.3
Well Being Ranking - Better Off										
Household Net Margin (Rs)	7.0%	2,778.0	937.0	3,715.0	4,915.0	9,560.0	14,475.0	2,137.0	8,623.0	10,760.0
Well Being Ranking - Weighted										
Household Net Margin (Rs)	100.0%	707.4	977.0	1,684.4	7,913.3	4,760.8	12,674.1	7,205.9	3,783.8	10,989.7

Source: Study of Impact of WIRFP on Net Incomes of Target Households, Jan 2004.

WBR = GVT Household Well Being Ranking. Survey figures adjusted to Village Profile WBR.

\1 GVT - Madhya Pradesh - Phase I: Village Naganwat Choti: Weighted Household Crop Net Margin Summary.

Table AN12.11.12 GVT - Rajasthan - Banswara: Village Bhuripada: Household Crop Net Margin Sensitivity Analysis.

Item	EIRR	Before / Without Project			After / With Project			Increment		
		Khalif	Rabi	Total	Khalif	Rabi	Total	Khalif	Rabi	Total
Development Activity:										
Crop Technology, SWC and WRD										
Weighted Net Margin (Phase II)										
Household Net Margin (Rs)		1,134.3	165.1	1,299.3	4,609.9	928.3	5,538.2	3,475.6	763.2	4,238.8
Incremental Benefit (Phase II / Phase I)										39%
Base Case Assumptions										
Household Net Margin (Rs)		1,134.3	165.1	1,299.3	4,609.9	928.3	5,538.2	3,475.6	763.2	4,238.8
Incremental Benefit (Phase II / Phase I)										39%
Sensitivity Increase (%)	0%									
Development Activity	19%									
Overall Village	14%									
Sensitivity Assumptions										
Household Net Margin (Rs)		1,134.3	165.1	1,299.3	4,609.9	928.3	5,538.2	3,475.6	763.2	4,238.8
Incremental Benefit (Phase II / Phase I)										39%
Sensitivity Increase (%)	0%									
Development Activity	19%									
Overall Village	14%									
Weighted Net Margin (Phase I)										
Household Net Margin (Rs)		707.4	977.0	1,684.4	7,913.3	4,760.8	12,674.1	7,205.9	3,783.8	10,989.7

Source: Cost Benefit Analysis (CBA) Study Estimate Jan 2005.

EIRR = Economic Internal Rate of Return (rate at which NPV equal to zero).

Table AN12.11.13 GVT - Rajasthan - Banswara: Village Bhuripada: Weighted Household Livestock Net Margin Summary (Rs/Household).

Well Being Ranking	Weight (%)	Before / Without Project		After / With Project		Increment \1	
		Herd Value	Net Margin	Herd Value	Net Margin	Herd Value	Net Margin
Phase I - Well Being Ranking (WBR) \1							
Madhya Pradesh - WBR Weighted Data							
Very Poor	28.0%						
Average		580	(185.0)	5,650	412.5	474	597.5
Poor	50.0%						
Average		2,350	982.5	8,250	2,141.0	1,180	1,158.5
Moderate	15.0%						
Average		14,700	6,730.0	1,900	2,820.0	1,900	(3,910.0)
Better Off	7.0%						
Average		15,580	3,000.0	14,600	10,790.0	(196)	7,790.0
Phase I - WBR Weighted Data	100.0%	4,633	1,659.0	7,014	2,364.3	994	705.4
Phase II - Well Being Ranking (WBR)							
Very Poor	28.0%						
Average		5,756	149.2	10,970	1,446.4	1,043	1,297.2
Poor	50.0%						
Average		13,128	852.2	25,979	3,008.8	2,570	2,156.8
Moderate	15.0%						
Average		13,525	4,035.1	27,020	5,249.5	2,699	1,214.4
Better Off	7.0%						
Average		12,700	(781.7)	41,873	2,573.3	5,835	3,355.0
Phase II - WBR Weighted Data	100.0%	11,093	1,018.4	23,045	2,877.0	2,390	1,858.6

Source: Study of Impact of WIRFP on Net Incomes of Target Households, Jan 2004.

WBR = GVT Household Well Being Ranking.

Survey figures adjusted to Village Profile WBR.

\1 GVT - Madhya Pradesh - Phase I: Village Naganwat Choti: Weighted Household Livestock Net Margin Summary.

WIRFP - Phase II - Cost Benefit Analysis Study

Tables AN12.0 Individual Village Cost Benefit Analysis

Tables AN12.12 GVT - Rajasthan - Banswara: Village Gara.

- Table AN12.12.1 GVT - Rajasthan - Banswara: Village Gara: Village Profile.
- Table AN12.12.2 GVT - Rajasthan - Banswara: Village Gara - Cost Benefit Analysis Summary (Rs'000).
- Table AN12.12.3 GVT - Rajasthan - Banswara: Village Gara - Cost Benefit Analysis Development Activity Summary A (Rs'000).
- Table AN12.12.4 GVT - Rajasthan - Banswara: Village Gara - Cost Benefit Analysis Development Activity Summary B (Rs'000).
- Table AN12.12.5 GVT - Rajasthan - Banswara: Village Gara - Costs - Financial (Rs'000).
GVT - Rajasthan - Banswara: Village Gara - Costs - Economic (Rs'000).
- Table AN12.12.6 GVT - Rajasthan - Banswara: Village Gara: VOD Household Assumptions.
GVT - Rajasthan - Banswara: Village Gara: Incremental VOD Benefit Stream (Rs'000).
- Table AN12.12.7 GVT - Rajasthan - Banswara: Village Gara: Household Crop Net Margin Assumptions.
GVT - Rajasthan - Banswara: Village Gara: Incremental Crop Benefit Stream (Rs'000).
- Table AN12.12.8 GVT - Rajasthan - Banswara: Village Gara: Household Livestock Net Margin Assumptions.
GVT - Rajasthan - Banswara: Village Gara: Incremental Livestock Benefit Stream (Rs'000).
- Table AN12.12.9 GVT - Rajasthan - Banswara: Village Gara: Forestry Benefit Assumptions.
GVT - Rajasthan - Banswara: Village Gara: Incremental Forestry Benefit Stream (Rs'000).
- Table AN12.12.10 GVT - Rajasthan - Banswara: Village Gara: Migration Support Benefit Assumptions.
GVT - Rajasthan - Banswara: Village Gara: Incremental Migration Support Benefit Stream (Rs'000).
- Table AN12.12.11 GVT - Rajasthan - Banswara: Village Gara: Weighted Household Crop Net Margin Summary (Rs/Household).
- Table AN12.12.12 GVT - Rajasthan - Banswara: Village Gara: Household Crop Net Margin Sensitivity Analysis.
- Table AN12.12.13 GVT - Rajasthan - Banswara: Village Gara: Weighted Household Livestock Net Margin Summary (Rs/Household).

Table AN12.12.1

GVT - Rajasthan - Banswara: Village Gara: Village Profile.

Village Profile \1			
A. Background			
Village Name	Gara		
District	Banswara		
State	Rajasthan		
B. Participatory Planning Process (PPP)			
Village entry	Nov-99		
PRA	Jul-01		
CPA	Jul-01		
C. Infrastructure			
Hand Pumps (no)	11		
Wells (no)	13		
Linked by Road	9 Kms		
Electrification	Yes		
School	1 - 5		
D. Demographic Data			
Households (no)	112		
Participating Households	80		
Population	667		
Adults:			
Male	338		
Female	329		
Children:			
Boys	N/A		
Girls	N/A		
E. Well Being Ranking (No Households)			
Very Poor	8	9.2%	
Poor	26	29.9%	
Moderate	40	46.0%	
Better Off	13	14.9%	
Total	87	100%	
F. Land Resource (ha)			
Total Area		290	
Revenue Land (unused)		156	
Forest Area - Revenue		63	
Pasture Land		8	
Arable Land		63	
		290	
G. Livestock			
H. Self Help Groups (No Households)			
1	Group 1		11
2	Group 2		17
3	Group 3		18
4	Group 4		12
5	Group 5		15
6	Group 6		18
7	Group 7		16
8	Group 8		17
9	Group 9		18
10	Group 10		20
11	Group 11		-
12	Group 12		-
13	Group 13		-
14	Group 14		-
15	Group 15		-
16	Group 16		-
17	Group 17		-
18	Group 18		-
19	Group 19		-
	Total		162

Source: GVT Banswara Coordination Office - Rajasthan.

\1 Subject to final adjustment following consolidation exercise prior to Annual Review Meeting (ARM) in Feb 2005.

Table AN12.12.2 GVT - Rajasthan - Banswara: Village Gara - Cost Benefit Analysis Summary (Rs'000).

Administration Costs / Development Activity	EIRR \1	NPV \2		Year 1 1999/00	Year 2 2000/01	Year 3 2001/02	Year 4 2002/03	Year 5 2003/04	Year 6 2004/05	Year 7 2005/06	Year 8 2006/07	Year 9 2007/08	Year 10 2008/09
		(10%)	%										
A. Administration Costs													
Total A	N/A	(972)	159%	35.9	241.3	227.1	238.6	249.5	250.3	223.6	22.4	22.4	22.4
B. Development Activity Component A													
1. PPGF													
Net Incremental Benefits	N/A	(59)	10%	-	(6.4)	(7.1)	(12.8)	(17.6)	(20.9)	(30.3)	(2.3)	(2.3)	(2.3)
2. VOD													
Net Incremental Benefits	57%	202	-33%	-	(2.8)	(8.8)	16.0	(49.4)	(24.0)	44.3	75.1	75.6	76.2
3/5. Crop Technology, SWC and WRD													
Net Incremental Benefits	8%	(107)	18%	-	(4.1)	(92.5)	628.8	(87.9)	(1,560.2)	(296.4)	184.7	184.7	184.7
6. Livestock													
Net Incremental Benefits	166%	307	-50%	-	(5.7)	(15.0)	21.0	77.1	209.9	(29.7)	59.4	59.4	59.4
7. Forestry													
Net Incremental Benefits	126%	18	-3%	-	-	(2.8)	5.7	4.2	(5.1)	(8.0)	6.9	6.9	6.9
8. Migration Support													
Net Incremental Benefits	N/A	-	0%	-	-	-	-	-	-	-	-	-	-
Summary													
Net Incremental Benefits	4%	(611)	100%	(35.9)	(260.3)	(353.3)	420.1	(323.0)	(1,650.7)	(543.7)	301.5	302.1	302.6
Sensitivity Analysis													
Analysis Period													
12 Years	N/A	(997)											
20 Years (Base Case)	4%	(611)											
25 Years	7%	(498)											
30 Years	8%	(434)											
Costs - Administration													
Investment Costs Decreased by 20 percent	6%	(416)											
Costs - Administration and Development													
Recurrent Costs Increased by 20 percent	-1%	(959)											
Benefits - Crop, SWC and WRD													
Crop Benefits Increased by 20 percent	13%	123											
Livestock Benefits Increased by 20 percent	8%	(297)											

Source: Cost Benefit Analysis (CBA) Study Estimate Jan 2005.

\1 EIRR = Economic Internal Rate of Return (rate at which NPV equal to zero).

\2 NPV = Net Present Value of net incremental benefits at 12% (indicative opportunity cost of capital for rural development projects in India).

N/A = Not analysed as EIRR negative.

Table AN12.12.3 GVT - Rajasthan - Banswara: Village Gara - Cost Benefit Analysis Development Activity Summary A (Rs'000).

Administration Costs / Development Activity	EIRR \1	NPV \2		Year 1 1999/00	Year 2 2000/01	Year 3 2001/02	Year 4 2002/03	Year 5 2003/04	Year 6 2004/05	Year 7 2005/06	Year 8 2006/07	Year 9 2007/08	Year 10 2008/09
		(10%)	%										
A. Administration Costs													
Investment				35.9	241.3	227.1	238.6	249.5	250.3	223.6	-	-	-
Recurrent				-	-	-	-	-	-	-	22.4	22.4	22.4
Total A	N/A	(972)	159%	35.9	241.3	227.1	238.6	249.5	250.3	223.6	22.4	22.4	22.4
B. Development Intervention Component A													
1. PPGF													
Cost Stream													
Investment				-	6.4	7.0	12.5	16.9	19.9	28.7	-	-	-
Recurrent				-	-	0.2	0.3	0.6	1.1	1.6	2.3	2.3	2.3
Total Costs				-	6.4	7.1	12.8	17.6	20.9	30.3	2.3	2.3	2.3
Benefit Stream													
Before / Without Project				-	-	-	-	-	-	-	-	-	-
After / With Project				-	-	-	-	-	-	-	-	-	-
Incremental Benefits				-	-	-	-	-	-	-	-	-	-
Net Incremental Benefits	N/A	(59)	10%	-	(6.4)	(7.1)	(12.8)	(17.6)	(20.9)	(30.3)	(2.3)	(2.3)	(2.3)
2. VOD													
Cost Stream													
Investment				-	2.8	8.6	74.4	136.6	104.9	31.8	-	-	-
Recurrent				-	-	0.1	0.6	4.3	11.1	16.4	18.0	18.0	18.0
Total Costs				-	2.8	8.8	75.0	140.9	116.1	48.2	18.0	18.0	18.0
Benefit Stream													
Before / Without Project				-	-	-	-	-	-	-	-	-	-
After / With Project				-	-	-	91.0	91.5	92.0	92.5	93.1	93.6	94.2
Incremental Benefits				-	-	-	91.0	91.5	92.0	92.5	93.1	93.6	94.2
Net Incremental Benefits	57%	202	-33%	-	(2.8)	(8.8)	16.0	(49.4)	(24.0)	44.3	75.1	75.6	76.2
3/5. Crop Technology, SWC and WRD													
Cost Stream													
Investment													
Crop Tecnology				-	4.1	39.2	6.5	58.9	12.9	29.0	-	-	-
Soil Water Conservation				-	-	-	-	635.1	591.1	449.5	-	-	-
Water Resource Development				-	-	53.2	3.7	32.3	1,509.0	70.0	-	-	-
Recurrent													
Crop Tecnology				-	-	0.1	1.1	1.2	2.7	3.0	3.8	3.8	3.8
Soil Water Conservation				-	-	-	-	-	79.4	153.3	209.5	209.5	209.5
Water Resource Development				-	-	-	8.0	8.5	13.4	239.7	250.2	250.2	250.2
Total Costs				-	4.1	92.5	19.3	736.0	2,208.4	944.6	463.5	463.5	463.5
Benefit Stream													
Before / Without Project				-	-	-	235.7	235.7	235.7	235.7	235.7	235.7	235.7
After / With Project				-	-	-	883.9	883.9	883.9	883.9	883.9	883.9	883.9
Incremental Benefits				-	-	-	648.2	648.2	648.2	648.2	648.2	648.2	648.2
Net Incremental Benefits	8%	(107)	18%	-	(4.1)	(92.5)	628.8	(87.9)	(1,560.2)	(296.4)	184.7	184.7	184.7

Source: Cost Benefit Analysis (CBA) Study Estimate Jan 2005.

\1 EIRR = Economic Internal Rate of Return (rate at which NPV equal to zero).

\2 NPV = Net Present Value of net incremental benefits at 12% (indicative opportunity cost of capital for rural development projects in India).

N/A = Not analysed as EIRR negative.

Table AN12.12.4 GVT - Rajasthan - Banswara: Village Gara - Cost Benefit Analysis Development Activity Summary B (Rs'000).

Administration Costs / Development Activity				Year 1 1999/00	Year 2 2000/01	Year 3 2001/02	Year 4 2002/03	Year 5 2003/04	Year 6 2004/05	Year 7 2005/06	Year 8 2006/07	Year 9 2007/08	Year 10 2008/09
6. Livestock													
Cost Stream													
Investment				-	5.7	15.0	29.9	58.5	7.4	96.2	-	-	-
Recurrent				-	-	-	5.3	5.7	8.9	159.8	166.8	166.8	166.8
Total Costs				-	5.7	15.0	35.2	64.2	16.3	256.0	166.8	166.8	166.8
Benefit Stream													
Before / Without Project				-	-	-	151.6	151.6	151.6	151.6	151.6	151.6	151.6
After / With Project				-	-	-	207.8	292.9	377.9	377.9	377.9	377.9	377.9
Incremental Benefits				-	-	-	56.2	141.2	226.3	226.3	226.3	226.3	226.3
Net Incremental Benefits	166%	307	-50%	-	(5.7)	(15.0)	21.0	77.1	209.9	(29.7)	59.4	59.4	59.4
7. Forestry													
Cost Stream													
Investment				-	-	2.8	-	3.9	15.3	16.7	-	-	-
Recurrent				-	-	-	0.3	0.3	0.7	2.2	3.9	3.9	3.9
Total Costs				-	-	2.8	0.3	4.2	15.9	18.8	3.9	3.9	3.9
Benefit Stream													
Before / Without Project				-	-	-	-	-	-	-	-	-	-
After / With Project				-	-	-	5.9	8.4	10.8	10.8	10.8	10.8	10.8
Incremental Benefits				-	-	-	5.9	8.4	10.8	10.8	10.8	10.8	10.8
Net Incremental Benefits	126%	18	-3%	-	-	(2.8)	5.7	4.2	(5.1)	(8.0)	6.9	6.9	6.9
8. Migration Support													
Cost Stream													
Investment				-	-	-	-	-	-	-	-	-	-
Recurrent				-	-	-	-	-	-	-	-	-	-
Total Costs				-	-	-	-	-	-	-	-	-	-
Benefit Stream													
Before / Without Project				-	-	-	-	-	-	-	-	-	-
After / With Project				-	-	-	-	-	-	-	-	-	-
Incremental Benefits				-	-	-	-	-	-	-	-	-	-
Net Incremental Benefits	N/A	-	0%	-	-	-	-	-	-	-	-	-	-
Summary													
Cost Stream													
Investment				35.9	260.3	352.9	365.6	1,191.6	2,510.7	945.5	-	-	-
Recurrent				-	-	0.4	15.6	20.7	117.3	576.0	676.7	676.7	676.7
Total Costs				35.9	260.3	353.3	381.2	1,212.3	2,627.9	1,521.5	676.7	676.7	676.7
Benefit Stream													
Before / Without Project				-	-	-	387.4	387.4	387.4	387.4	387.4	387.4	387.4
After / With Project				-	-	-	1,188.7	1,276.7	1,364.6	1,365.1	1,365.7	1,366.2	1,366.8
Incremental Benefits				-	-	-	801.4	889.3	977.2	977.8	978.3	978.8	979.4
Net Incremental Benefits	4%	(611)	100%	(35.9)	(260.3)	(353.3)	420.1	(323.0)	(1,650.7)	(543.7)	301.5	302.1	302.6

Source: Cost Benefit Analysis (CBA) Study Estimate Jan 2005.

Table AN12.12.5

GVT - Rajasthan - Banswara: Village Gara - Costs - Financial (Rs'000).

Cost Head / Subhead	1999/00 Actual	2000/01 Actual	2001/02 Actual	2002/03 Actual	2003/04 Actual	2004/05 Budget	2005/06 Budget	Total	
								(Rs'000)	(%)
A. Administration Costs									
GVT Bhopal (PHQ)	-	60.3	75.4	67.3	52.8	66.8	61.1	383.7	5%
DFIDI Consultancy	35.9	71.4	26.9	63.2	47.4	54.7	39.2	338.6	5%
Rajasthan Coordination Office	-	128.5	147.0	127.6	171.7	150.5	143.8	869.1	12%
Total A	35.9	260.2	249.4	258.1	271.9	272.0	244.1	1,591.5	21%
B. Development Costs									
Component A									
1. PPGF	-	7.1	7.7	13.8	18.8	22.1	31.9	101.4	1%
2. VOD	-	3.2	9.6	82.7	151.8	116.6	35.3	399.2	5%
3. Crop Technology	-	4.6	43.5	7.3	65.4	14.3	32.2	167.3	2%
4. SWC	-	-	-	-	940.9	875.7	666.0	2,482.6	33%
5. WRD	-	-	78.8	5.5	47.8	2,235.5	103.8	2,471.4	33%
6. Livestock	-	6.3	16.7	33.2	65.0	8.2	106.9	236.2	3%
7. Forestry	-	-	3.1	-	4.3	17.0	18.5	42.9	1%
8. Migration Support	-	-	-	-	-	-	-	-	0%
Subtotal	-	21.1	159.5	142.5	1,294.0	3,289.3	994.6	5,901.0	79%
Other Development Costs									
Subtotal	-	-	-	-	-	-	-	-	-
Total (B)	-	21.1	159.5	142.5	1,294.0	3,289.3	994.6	5,901.0	79%
Total A + B	35.9	281.3	408.8	400.6	1,565.9	3,561.3	1,238.6	7,492.5	100%
GVT	-	209.1	373.3	323.8	1,113.4	2,993.2	917.5	5,930.4	79%
DFIDI	35.9	71.4	26.9	63.2	47.4	54.7	39.2	338.6	5%
Community	-	0.8	5.6	12.5	401.9	430.9	277.6	1,129.3	15%
Government	-	0.0	3.0	1.0	3.3	82.5	4.4	94.2	1%

Source:

GVT Banswara Coordination Office - Rajasthan.

DFIDI = Department for International Development (India).

PPGF = Participatory Planning and Group Formation.

VOD = Village Organisation and Development.

SWC = Soil and Water Conservation.

WRD = Water Resource Development.

Table AN12.12.5

GVT - Rajasthan - Banswara: Village Gara - Costs - Economic (Rs'000).

Cost Head / Subhead	Conversion Factors		1999/00 Actual	2000/01 Actual	2001/02 Actual	2002/03 Actual	2003/04 Actual	2004/05 Budget	2005/06 Budget	Totals	
	CF	SCF								(Rs'000)	(%)
A. Administration Costs											
GVT Bhopal (PHQ)	0.90	1.00	-	54.2	67.9	60.6	47.5	60.1	55.0	345.4	6%
DFIDI Consultancy	1.00	1.00	35.9	71.4	26.9	63.2	47.4	54.7	39.2	338.6	6%
Rajasthan Coordination Office	0.90	1.00	-	115.7	132.3	114.8	154.5	135.5	129.4	782.2	14%
Total A			35.9	241.3	227.1	238.6	249.5	250.3	223.6	1,466.2	26%
B. Development Costs											
Component A											
1. PPGF	0.90	1.00	-	6.4	7.0	12.5	16.9	19.9	28.7	91.3	2%
2. VOD	0.90	1.00	-	2.8	8.6	74.4	136.6	104.9	31.8	359.3	6%
3. Crop Technology	0.90	1.00	-	4.1	39.2	6.5	58.9	12.9	29.0	150.6	3%
4. SWC	0.90	0.75	-	-	-	-	635.1	591.1	449.5	1,675.7	30%
5. WRD	0.90	0.75	-	-	53.2	3.7	32.3	1,509.0	70.0	1,668.2	29%
6. Livestock	0.90	1.00	-	5.7	15.0	29.9	58.5	7.4	96.2	212.6	4%
7. Forestry	0.90	1.00	-	-	2.8	-	3.9	15.3	16.7	38.6	1%
8. Migration Support	0.90	1.00	-	-	-	-	-	-	-	-	0%
Subtotal			-	19.0	125.8	127.0	942.2	2,260.4	721.9	4,196.3	74%
Other Development Costs											
Subtotal	0.90	1.00	-	-	-	-	-	-	-	-	-
Total (B)			-	19.0	125.8	127.0	942.2	2,260.4	721.9	4,196.3	74%
Total A + B			35.9	260.3	352.9	365.6	1,191.6	2,510.7	945.5	5,662.5	100%
GVT			-	-	-	-	-	-	-	N/A	
DFIDI			-	-	-	-	-	-	-	N/A	
Community			-	-	-	-	-	-	-	N/A	
Government			-	-	-	-	-	-	-	N/A	

Source:

Cost Benefit Analysis (CBA) Study Estimate Jan 2005.

DFIDI = Department for International Development (India).

PPGF = Participatory Planning and Group Formation.

VOD = Village Organisation and Development.

SWC = Soil and Water Conservation.

WRD = Water Resource Development.

Table AN12.12.6

GVT - Rajasthan - Banswara: Village Gara: VOD Household Assumptions.

Without \ With Project	Units	Assumptions			Benefits		
					Year 1 (Rs)	Year 2 (Rs)	Year 3 (Rs)
Development Activity: Village Organisation and Development							
Before / Without Project Situation:							
A. Self Help Groups (SHGs)							
Assumption	Sum	Zero	Zero	Zero	-	-	-
B. Drudgery Reduction							
Assumption	Sum	Zero	Zero	Zero			
Total Without Project Benefits					-	-	-
After / With Project Situation:							
A. Self Help Groups (SHGs)							
Assumptions							
Average Household Savings	Rs	2,121.7					
Households (HHs)	No	120					
Present Group Deposits	Rs'000	254.6					
Annual Savings Increase	%	3%			254.6	262.2	270.1
Deposits on Loan to Members	%	35%					
SHG Interest Income	% / Year	18%					
Assumed Benefit	Rs'000				16.0	16.5	17.0
B. Drudgery Reduction							
Assumptions							
Hours Saved / Day / Household	No	1.0					
Number of Days / Year / Household	No	200					
Days / Year / Household (8hrs/day)	No	25.0					
Households / Village	No	120					
Day Equivalent / Village	No	3,000					
Economic Value per Day	(Rs/day)	25					
Assumed Benefit	Rs'000				75.0	75.0	75.0
Total With Project Benefits	Rs'000				91.0	91.5	92.0
Incremental Benefits	Rs'000				91.0	91.5	92.0

Source:

VOD = Village Organisation and Development.
Households per village: Gara

Cost Benefit Analysis (CBA) Study Estimate Jan 2005.

Table AN12.12.6

GVT - Rajasthan - Banswara: Village Gara: Incremental VOD Benefit Stream (Rs'000).

Without \ With Project	Benefit Streams (Rs '000)									
	Year 1 1999/00	Year 2 2000/01	Year 3 2001/02	Year 4 2002/03	Year 5 2003/04	Year 6 2004/05	Year 7 2005/06	Year 8 2006/07	Year 9 2007/08	Year 10 2008/09
Development Activity: Village Organisation and Development Before / Without Project Situation: A. Self Help Groups (SHGs) Assumption B. Drudgery Reduction Assumption Total Without Project Benefits	-	-	-	-	-	-	-	-	-	-
After / With Project Situation: A. Self Help Groups (SHGs) Assumptions Average Household Savings Households (HHs) Present Group Deposits Annual Savings Increase Deposits on Loan to Members SHG Interest Income Assumed Benefit B. Drudgery Reduction Assumptions Hours Saved / Day / Household Number of Days / Year / Household Days / Year / Household (8hrs/day) Households / Village Day Equivalent / Village Economic Value per Day Assumed Benefit Total With Project Benefits Incremental Benefits	-	-	-	254.6	262.2	270.1	278.2	286.6	295.2	304.0
	-	-	-	16.0	16.5	17.0	17.5	18.1	18.6	19.2
	-	-	-	75.0	75.0	75.0	75.0	75.0	75.0	75.0
	-	-	-	91.0	91.5	92.0	92.5	93.1	93.6	94.2
	-	-	-	91.0	91.5	92.0	92.5	93.1	93.6	94.2

Source:

VOD = Village Organisation and Development.
Households per village: Gara

Cost Benefit Analysis (CBA) Study Estimate Jan 2005.

Table AN12.12.7

GVT - Rajasthan - Banswara: Village Gara: Household Crop Net Margin Assumptions.

Without \ With Project	Units	Assumptions			Benefits		
					Year 1 (Rs)	Year 2 (Rs)	Year 3 (Rs)
Development Activity: Crop Technology, SWC and WRD							
Before / Without Project Situation: Assumptions							
Households (HHs)	No	120					
Crop Adoption Assumptions		100%	100%	100%			
Kharif Crop Net Margin	Rs/HH				1,650.8	1,650.8	1,650.8
Rabi Crop Net Margin	Rs/HH				313.8	313.8	313.8
Total Without Project Benefits	Rs/HH				1,964.6	1,964.6	1,964.6
After / With Project Situation: Assumptions							
Households (HHs)	No	120					
Crop Adoption Assumptions		100%	100%	100%			
Kharif Crop Net Margin	Rs/HH				5,744.0	5,744.0	5,744.0
Rabi Crop Net Margin	Rs/HH				1,622.0	1,622.0	1,622.0
Total With Project Benefits	Rs/HH				7,366.0	7,366.0	7,366.0
Incremental Benefits	Rs/HH				5,401.4	5,401.4	5,401.4

Source:

Cost Benefit Analysis (CBA) Study Estimate Jan 2005.

Table AN12.12.7

GVT - Rajasthan - Banswara: Village Gara: Incremental Crop Benefit Stream (Rs'000).

Without \ With Project	Benefit Streams (Rs '000)									
	Year 1 1999/00	Year 2 2000/01	Year 3 2001/02	Year 4 2002/03	Year 5 2003/04	Year 6 2004/05	Year 7 2005/06	Year 8 2006/07	Year 9 2007/08	Year 10 2008/09
Development Activity: Crop Technology, SWC and WRD										
Before / Without Project Situation: Assumptions Households (HHs) Crop Adoption Assumptions										
Kharif Crop Net Margin	-	-	-	198.1	198.1	198.1	198.1	198.1	198.1	198.1
Rabi Crop Net Margin	-	-	-	37.7	37.7	37.7	37.7	37.7	37.7	37.7
Total Without Project Benefits	-	-	-	235.7	235.7	235.7	235.7	235.7	235.7	235.7
After / With Project Situation: Assumptions Households (HHs) Crop Adoption Assumptions										
Kharif Crop Net Margin	-	-	-	689.3	689.3	689.3	689.3	689.3	689.3	689.3
Rabi Crop Net Margin	-	-	-	194.6	194.6	194.6	194.6	194.6	194.6	194.6
Total With Project Benefits	-	-	-	883.9	883.9	883.9	883.9	883.9	883.9	883.9
Incremental Benefits	-	-	-	648.2	648.2	648.2	648.2	648.2	648.2	648.2

Source:

Cost Benefit Analysis (CBA) Study Estimate Jan 2005.

Table AN12.12.8

GVT - Rajasthan - Banswara: Village Gara: Household Livestock Net Margin Assumptions.

Without \ With Project Livestock	Units	Assumptions			Benefits		
					Year 1 (Rs)	Year 2 (Rs)	Year 3 (Rs)
Development Activity: Livestock							
Before / Without Project Situation: Assumptions							
Households (HHs)	No	120					
Annual Livestock Net Margin	Rs/HH						
Total Without Project Benefits					1,263.6	1,263.6	1,263.6
After / With Project Situation:							
Development Activity: Assumptions							
Households (HHs)	No	120					
Adoption Assumptions	Percent	55%	78%	100%			
Annual Livestock Net Margin	Rs/HH						
Total With Project Benefits					1,732.0	2,440.5	3,149.1
Incremental Benefits	Rs/HH				468.4	1,176.9	1,885.4

Source:

Cost Benefit Analysis (CBA) Study Estimate Jan 2005.

Table AN12.12.8

GVT - Rajasthan - Banswara: Village Gara: Incremental Livestock Benefit Stream (Rs'000).

Without \ With Project Livestock	Benefit Streams (Rs '000)									
	Year 1 1999/00	Year 2 2000/01	Year 3 2001/02	Year 4 2002/03	Year 5 2003/04	Year 6 2004/05	Year 7 2005/06	Year 8 2006/07	Year 9 2007/08	Year 10 2008/09
Development Activity: Livestock										
Before / Without Project Situation:										
Assumptions										
Households (HHs)										
Annual Livestock Net Margin										
Total Without Project Benefits	-	-	-	151.6	151.6	151.6	151.6	151.6	151.6	151.6
After / With Project Situation:										
Development Activity:										
Assumptions										
Households (HHs)										
Adoption Assumptions										
Annual Livestock Net Margin										
Total With Project Benefits	-	-	-	207.8	292.9	377.9	377.9	377.9	377.9	377.9
Incremental Benefits	-	-	-	56.2	141.2	226.3	226.3	226.3	226.3	226.3

Source:

Cost Benefit Analysis (CBA) Study Estimate Jan 2005.

Table AN12.12.9

GVT - Rajasthan - Banswara: Village Gara: Forestry Benefit Assumptions.

Without \ With Project Forestry	Units	Assumptions			Benefits		
					Year 1 (Rs)	Year 2 (Rs)	Year 3 (Rs)
Development Activity: Forestry							
Before / Without Project Situation: Assumptions							
Households (HHs)	No	120					
Annual Forestry Net Margin	Rs/HH				-	-	-
Total Without Project Benefits							
After / With Project Situation: Assumptions							
Households (HHs)	No	120					
Adoption Assumptions	Percent	55%	78%	100%			
Annual Forestry Net Margin	Rs/HH				49.5	70.2	90.0
Total With Project Benefits							
Incremental Benefits	Rs/HH				49.5	70.2	90.0

Source:

Cost Benefit Analysis (CBA) Study Estimate Jan 2005.

Table AN12.12.9

GVT - Rajasthan - Banswara: Village Gara: Incremental Forestry Benefit Stream (Rs'000).

Without \ With Project Forestry	Benefit Streams (Rs '000)									
	Year 1 1999/00	Year 2 2000/01	Year 3 2001/02	Year 4 2002/03	Year 5 2003/04	Year 6 2004/05	Year 7 2005/06	Year 8 2006/07	Year 9 2007/08	Year 10 2008/09
Development Activity: Forestry										
Before / Without Project Situation: Assumptions										
Households (HHs)										
Annual Forestry Net Margin										
Total Without Project Benefits	-	-	-	-	-	-	-	-	-	-
After / With Project Situation: Assumptions										
Households (HHs)										
Adoption Assumptions										
Annual Forestry Net Margin										
Total With Project Benefits	-	-	-	5.9	8.4	10.8	10.8	10.8	10.8	10.8
Incremental Benefits	-	-	-	5.9	8.4	10.8	10.8	10.8	10.8	10.8

Source:

Cost Benefit Analysis (CBA) Study Estimate Jan 2005.

Table AN12.12.10

GVT - Rajasthan - Banswara: Village Gara: Migration Support Benefit Assumptions.

Without \ With Project	Assumptions			Benefits		
				Year 1 (Rs)	Year 2 (Rs)	Year 3 (Rs)
Development Activity: Migration Support						
Before / Without Project Situation: Assumptions						
Economic Value per Day	Rs/day	25.0				
Days / Month / Household	No	18				
Economic Value per Month	Rs/month	450.0				
Months Migration / Year	Months	4.0				
Economic Value per Household	Rs/HH	1,800.0				
Households per Village	No	-				
Households per Village Migrating	Percent	45%				
Total Without Project Benefits	Rs/Village			-	-	-
After / With Project Situation: Assumptions						
Economic Value per Day \1	Rs/day	25.0	25%	31.3		
Days / Month / Household	No	18	30%	24.0		
Economic Value per Month	Rs/month	450.0		750.0		
Months Migration / Year	Months	4.0	-25%	3.0		
Economic Value per Household	Rs/HH	1,800.0		2,250.0		
Households per Village	No	-		-		
Households per Village Migrating	Percent	45%	-10%	41%		
Subtotal Migration Benefits	Rs/Village				-	-
Other Income	Sum (Rs'000)	-	-	-	-	-
Total With Project Benefits	Rs/Village				-	-
Incremental Benefits	Rs/Village				-	-

Source:

Cost Benefit Analysis (CBA) Study Estimate Jan 2005.

- 1\ Financial Wages (Rs/day):
 - Skill Labour - Rs 160
 - Casual Labour :
 - Male - Rs 40
 - Female - Rs 30

Table AN12.12.10

GVT - Rajasthan - Banswara: Village Gara: Incremental Migration Support Benefit Stream (Rs'000).

Without \ With Project	Benefit Streams (Rs '000)									
	Year 1 1999/00	Year 2 2000/01	Year 3 2001/02	Year 4 2002/03	Year 5 2003/04	Year 6 2004/05	Year 7 2005/06	Year 8 2006/07	Year 9 2007/08	Year 10 2008/09
Development Activity: Migration Support Before / Without Project Situation: Assumptions Economic Value per Day Days / Month / Household Economic Value per Month Months Migration / Year Economic Value per Household Households per Village Households per Village Migrating Total Without Project Benefits	-	-	-	-	-	-	-	-	-	-
After / With Project Situation: Assumptions Economic Value per Day \1 Days / Month / Household Economic Value per Month Months Migration / Year Economic Value per Household Households per Village Households per Village Migrating Subtotal Migration Benefits Other Income Total With Project Benefits Incremental Benefits	-	-	-	-	-	-	-	-	-	-

Source:

Cost Benefit Analysis (CBA) Study Estimate Jan 2005.

- 1\ Financial Wages (Rs/day):
 Skill Labour - Rs 160
 Casual Labour :
 Male - Rs 40
 Female - Rs 30

Table AN12.12.11 GVT - Rajasthan - Banswara: Village Gara: Weighted Household Crop Net Margin Summary (Rs/Household).

Item	WBR (%)	Before / Without Project			After / With Project			Increment		
		Khalif	Rabi	Total	Khalif	Rabi	Total	Khalif	Rabi	Total
Phase II										
Well Being Ranking - Very Poor										
Household Net Margin (Rs)	9.0%	834.6	102.5	937.1	1,849.8	1,067.8	2,917.6	1,015.2	965.3	1,980.5
Well Being Ranking - Poor										
Household Net Margin (Rs)	30.0%	637.7	-	637.7	4,803.0	220.7	5,023.7	4,165.3	220.7	4,386.0
Well Being Ranking - Moderate										
Household Net Margin (Rs)	46.0%	994.0	89.3	1,083.3	3,711.4	2,508.3	6,219.6	2,717.4	2,419.0	5,136.4
Well Being Ranking - Better Off										
Household Net Margin (Rs)	15.0%	6,180.9	1,756.7	7,937.5	16,195.9	2,039.3	18,235.2	10,015.0	282.7	10,297.7
Well Being Ranking - Weighted										
Household Net Margin (Rs)	100.0%	1,650.8	313.8	1,964.6	5,744.0	1,622.0	7,366.0	4,093.2	1,308.2	5,401.4
Phase I \1										
Well Being Ranking - Very Poor										
Household Net Margin (Rs)	9.0%	436.3	267.5	703.8	3,866.5	1,668.8	5,535.3	3,430.3	1,401.3	4,831.5
Well Being Ranking - Poor										
Household Net Margin (Rs)	30.0%	485.8	657.5	1,143.3	10,136.0	5,690.3	15,826.3	9,650.3	5,032.8	14,683.0
Well Being Ranking - Moderate										
Household Net Margin (Rs)	46.0%	986.3	3,385.0	4,371.3	9,457.5	5,195.0	14,652.5	8,471.3	1,810.0	10,281.3
Well Being Ranking - Better Off										
Household Net Margin (Rs)	15.0%	2,778.0	937.0	3,715.0	4,915.0	9,560.0	14,475.0	2,137.0	8,623.0	10,760.0
Well Being Ranking - Weighted										
Household Net Margin (Rs)	100.0%	1,055.4	1,919.0	2,974.3	8,476.5	5,681.0	14,157.4	7,421.1	3,762.0	11,183.1

Source: Study of Impact of WIRFP on Net Incomes of Target Households, Jan 2004.

WBR = GVT Household Well Being Ranking. Survey figures adjusted to Village Profile WBR.

\1 GVT - Madhya Pradesh - Phase I: Village Naganwat Choti: Weighted Household Crop Net Margin Summary.

Table AN12.12.12 GVT - Rajasthan - Banswara: Village Gara: Household Crop Net Margin Sensitivity Analysis.

Item	EIRR	Before / Without Project			After / With Project			Increment		
		Khalif	Rabi	Total	Khalif	Rabi	Total	Khalif	Rabi	Total
Development Activity: Crop Technology, SWC and WRD										
Weighted Net Margin (Phase II)										
Household Net Margin (Rs)		1,650.8	313.8	1,964.6	5,744.0	1,622.0	7,366.0	4,093.2	1,308.2	5,401.4
Incremental Benefit (Phase II / Phase I)										48%
Base Case Assumptions										
Household Net Margin (Rs)		1,650.8	313.8	1,964.6	5,744.0	1,622.0	7,366.0	4,093.2	1,308.2	5,401.4
Incremental Benefit (Phase II / Phase I)										48%
Sensitivity Increase (%)	0%									
Development Activity	8%									
Overall Village	4%									
Sensitivity Assumptions										
Household Net Margin (Rs)		1,650.8	313.8	1,964.6	6,720.5	1,897.7	8,618.2	5,069.7	1,584.0	6,653.6
Incremental Benefit (Phase II / Phase I)										59%
Sensitivity Increase (%)	0%									
Development Activity	46%									
Overall Village	12%									
Weighted Net Margin (Phase I)										
Household Net Margin (Rs)		1,055.4	1,919.0	2,974.3	8,476.5	5,681.0	14,157.4	7,421.1	3,762.0	11,183.1

Source: Cost Benefit Analysis (CBA) Study Estimate Jan 2005.

EIRR = Economic Internal Rate of Return (rate at which NPV equal to zero).

Table AN12.12.13 GVT - Rajasthan - Banswara: Village Gara: Weighted Household Livestock Net Margin Summary (Rs/Household).

Well Being Ranking	Weight (%)	Before / Without Project		After / With Project		Increment \1	
		Herd Value	Net Margin	Herd Value	Net Margin	Herd Value	Net Margin
Phase I - Well Being Ranking (WBR) \1							
Madhya Pradesh - WBR Weighted Data							
Very Poor	16.0%						
Average		580	(185.0)	5,650	412.5	474	597.5
Poor	63.0%						
Average		2,350	982.5	8,250	2,141.0	1,180	1,158.5
Moderate	18.0%						
Average		14,700	6,730.0	1,900	2,820.0	1,900	(3,910.0)
Better Off	3.0%						
Average		15,580	3,000.0	14,600	10,790.0	(196)	7,790.0
Phase I - WBR Weighted Data	100.0%	4,687	1,890.8	6,882	2,246.1	1,155	355.4
Phase II - Well Being Ranking (WBR)							
Very Poor	16.0%						
Average		5,756	149.2	10,970	1,446.4	1,043	1,297.2
Poor	63.0%						
Average		13,128	852.2	25,979	3,008.8	2,570	2,156.8
Moderate	18.0%						
Average		13,525	4,035.1	27,020	5,249.5	2,699	1,214.4
Better Off	3.0%						
Average		12,700	(781.7)	41,873	2,573.3	5,835	3,355.0
Phase II - WBR Weighted Data	100.0%	12,007	1,263.6	24,242	3,149.1	2,447	1,885.6

Source: Study of Impact of WIRFP on Net Incomes of Target Households, Jan 2004.

WBR = GVT Household Well Being Ranking.

Survey figures adjusted to Village Profile WBR.

\1 GVT - Madhya Pradesh - Phase I: Village Naganwat Choti: Weighted Household Livestock Net Margin Summary.

WIRFP - Phase II - Cost Benefit Analysis Study

Tables AN12.0 Individual Village Cost Benefit Analysis

Tables AN12.13 GVT - Rajasthan - Banswara: Village Merana.

Table AN12.13.1 GVT - Rajasthan - Banswara: Village Merana: Village Profile.

Table AN12.13.2 GVT - Rajasthan - Banswara: Village Merana: Cost Benefit Analysis Summary (Rs'000).

Table AN12.13.3 GVT - Rajasthan - Banswara: Village Merana: Cost Benefit Analysis Development Activity Summary A (Rs'000).

Table AN12.13.4 GVT - Rajasthan - Banswara: Village Merana: Cost Benefit Analysis Development Activity Summary B (Rs'000).

Table AN12.13.5 GVT - Rajasthan - Banswara: Village Merana: Costs - Financial (Rs'000).

GVT - Rajasthan - Banswara: Village Merana: Costs - Economic (Rs'000).

Table AN12.13.6 GVT - Rajasthan - Banswara: Village Merana: VOD Household Assumptions.

GVT - Rajasthan - Banswara: Village Merana: Incremental VOD Benefit Stream (Rs'000).

Table AN12.13.7 GVT - Rajasthan - Banswara: Village Merana: Household Crop Net Margin Assumptions.

GVT - Rajasthan - Banswara: Village Merana: Incremental Crop Benefit Stream (Rs'000).

Table AN12.13.8 GVT - Rajasthan - Banswara: Village Merana: Household Livestock Net Margin Assumptions.

GVT - Rajasthan - Banswara: Village Merana: Incremental Livestock Benefit Stream (Rs'000).

Table AN12.13.9 GVT - Rajasthan - Banswara: Village Merana: Forestry Benefit Assumptions.

GVT - Rajasthan - Banswara: Village Merana: Incremental Forestry Benefit Stream (Rs'000).

Table AN12.13.10 GVT - Rajasthan - Banswara: Village Merana: Migration Support Benefit Assumptions.

GVT - Rajasthan - Banswara: Village Merana: Incremental Migration Support Benefit Stream (Rs'000).

Table AN12.13.11 GVT - Rajasthan - Banswara: Village Merana: Weighted Household Crop Net Margin Summary (Rs/Household).

Table AN12.13.12 GVT - Rajasthan - Banswara: Village Merana: Household Crop Net Margin Sensitivity Analysis.

Table AN12.13.13 GVT - Rajasthan - Banswara: Village Merana: Weighted Household Livestock Net Margin Summary (Rs/Household).

Table AN12.13.1 GVT - Rajasthan - Banswara: Village Merana: Village Profile.

Village Profile \1			
A. Background			
Village Name	Merana		
District	Banswara		
State	Rajasthan		
B. Participatory Planning Process (PPP)			
Village entry	Jun-99		
PRA	Oct-99		
CPA	Oct-99		
C. Infrastructure			
Hand Pumps (no)	10		
Wells (no)	19		
Linked by Road	5 Kms		
Electrification	Yes		
School	Primary		
D. Demographic Data			
Households (no)	151		
Participating Households	147		
Population (Adults)	445		
Adults:			
Male	227		
Female	218		
Children:			
Boys	153		
Girls	179		
E. Well Being Ranking (No Households)			
Very Poor	4	3.2%	
Poor	33	26.6%	
Moderate	53	42.7%	
Better Off	34	27.4%	
Total	124	100.0%	
F. Land Resource (ha)			
Total Area			180
Revenue Land (unused)			25
Forest Area - Revenue			4
Pasture Land			18
Arable Land			133
G. Livestock			
Oxen			110
Cows			108
Buffalo			273
Goats			237
Poultry			488
H. Self Help Groups (No Households)			
1	Group 1		14
2	Group 2		17
3	Group 3		23
4	Group 4		31
5	Group 5		23
6	Group 6		23
7	Group 7		23
8	Group 8		14
9	Group 9		17
10	Group 10		14
11	Group 11		14
12	Group 12		31
13	Group 13		
	Total Memberhip		244

Source: GVT Banswara Coordination Office - Rajasthan.

\1 Subject to final adjustment following consolidation exercise prior to Annual Review Meeting (ARM) in Feb 2005.

Table AN12.13.2 GVT - Rajasthan - Banswara: Village Merana: Cost Benefit Analysis Summary (Rs'000).

Administration / Development Activity	EIRR \1	NPV \2		Year 1 1999/00	Year 2 2000/01	Year 3 2001/02	Year 4 2002/03	Year 5 2003/04	Year 6 2004/05	Year 7 2005/06	Year 8 2006/07	Year 9 2007/08	Year 10 2008/09
		(10%)	(%)										
A. Administration Costs													
Total A	N/A	(972)	-34%	35.9	241.3	227.1	238.6	249.5	250.3	223.6	22.4	22.4	22.4
B. Development Activity Component A													
1. PPGF													
Net Incremental Benefits	N/A	(113)	-4%	(6.8)	(9.7)	(34.9)	(30.1)	(40.3)	(21.9)	(21.7)	(3.9)	(3.9)	(3.9)
2. VOD													
Net Incremental Benefits	72%	337	12%	(0.7)	(22.6)	(42.0)	66.9	23.9	68.5	73.5	89.5	89.8	90.0
3/5. Crop Technology, SWC and WRD													
Net Incremental Benefits	50%	2,689	93%	(2.5)	(268.7)	(348.4)	(298.6)	713.3	697.2	692.2	782.0	782.0	782.0
6. Livestock													
Net Incremental Benefits	92%	894	31%	-	-	(51.7)	(22.1)	33.9	155.5	143.5	269.0	269.0	269.0
7. Forestry													
Net Incremental Benefits	21%	49	2%	-	(0.1)	(97.4)	(4.8)	13.8	26.5	26.3	30.6	30.6	30.6
8. Migration Support													
Net Incremental Benefits	N/A	-	0%	-	-	-	-	-	-	-	-	-	-
Summary													
Net Incremental Benefits	32%	2,884	100%	(45.8)	(542.5)	(801.4)	(527.4)	495.1	675.5	690.2	1,144.8	1,145.1	1,145.3
Sensitivity Analysis													
Analysis Period													
12 Years	28%	1,424											
20 Years (Base Case)	32%	2,884											
25 Years	32%	3,312											
30 Years	32%	3,555											
Costs - Administration													
Investment Costs Decreased by 20 percent	34%	3,078											
Costs - Administration and Development													
Recurrent Costs Increased by 20 percent	30%	2,721											
Benefits - Crop, SWC and WRD													
Crop Benefits Increased by 20 percent	36%	3,844											
Livestock Benefits Increased by 20 percent	32%	2,884											

Source: Cost Benefit Analysis (CBA) Study Estimate Jan 2005.

\1 EIRR = Economic Internal Rate of Return (rate at which NPV equal to zero).

\2 NPV = Net Present Value of net incremental benefits at 12% (indicative opportunity cost of capital for rural development projects in India).

N/A = Not analysed as EIRR negative.

Table AN12.13.3 GVT - Rajasthan - Banswara: Village Merana: Cost Benefit Analysis Development Activity Summary A (Rs'000).

Administration / Development Activity	EIRR ¹	NPV ²		Year 1 1999/00	Year 2 2000/01	Year 3 2001/02	Year 4 2002/03	Year 5 2003/04	Year 6 2004/05	Year 7 2005/06	Year 8 2006/07	Year 9 2007/08	Year 10 2008/09
		(10%)	(%)										
A. Administration Costs													
Investment				35.9	241.3	227.1	238.6	249.5	250.3	223.6	-	-	-
Recurrent				-	-	-	-	-	-	-	22.4	22.4	22.4
Total A	N/A	(972)	-34%	35.9	241.3	227.1	238.6	249.5	250.3	223.6	22.4	22.4	22.4
B. Development Intervention Component A													
1. PPGF													
Cost Stream													
Investment				6.8	9.5	34.5	28.8	38.3	18.9	18.3	-	-	-
Recurrent				-	0.2	0.4	1.3	2.0	2.9	3.4	3.9	3.9	3.9
Total Costs				6.8	9.7	34.9	30.1	40.3	21.9	21.7	3.9	3.9	3.9
Benefit Stream													
Before / Without Project				-	-	-	-	-	-	-	-	-	-
After / With Project				-	-	-	-	-	-	-	-	-	-
Incremental Benefits													
Net Incremental Benefits	N/A	(113)	-4%	(6.8)	(9.7)	(34.9)	(30.1)	(40.3)	(21.9)	(21.7)	(3.9)	(3.9)	(3.9)
2. VOD													
Cost Stream													
Investment				0.7	22.6	40.8	28.7	70.5	22.6	16.7	-	-	-
Recurrent				-	0.0	1.2	3.2	4.6	8.2	9.3	10.1	10.1	10.1
Total Costs				0.7	22.6	42.0	31.9	75.1	30.7	25.9	10.1	10.1	10.1
Benefit Stream													
Before / Without Project				-	-	-	-	-	-	-	-	-	-
After / With Project				-	-	-	98.8	99.0	99.2	99.4	99.7	99.9	100.1
Incremental Benefits							98.8	99.0	99.2	99.4	99.7	99.9	100.1
Net Incremental Benefits	72%	337	12%	(0.7)	(22.6)	(42.0)	66.9	23.9	68.5	73.5	89.5	89.8	90.0
3/5. Crop Technology, SWC and WRD													
Cost Stream													
Investment													
Crop Tecnology				2.5	16.3	8.6	29.1	58.3	15.8	23.1	-	-	-
Soil Water Conservation				-	242.9	242.9	170.0	-	-	-	-	-	-
Water Resource Development				-	9.5	64.6	27.0	46.0	96.3	79.1	-	-	-
Recurrent													
Crop Tecnology				-	0.1	0.5	0.7	1.4	2.9	3.3	3.8	3.8	3.8
Soil Water Conservation				-	-	30.4	60.7	82.0	82.0	82.0	82.0	82.0	82.0
Water Resource Development				-	-	1.4	11.1	15.2	22.1	36.5	48.4	48.4	48.4
Total Costs				2.5	268.7	348.4	298.6	202.9	219.0	224.0	134.2	134.2	134.2
Benefit Stream													
Before / Without Project				-	-	-	-	413.0	413.0	413.0	413.0	413.0	413.0
After / With Project				-	-	-	-	1,329.2	1,329.2	1,329.2	1,329.2	1,329.2	1,329.2
Incremental Benefits								916.2	916.2	916.2	916.2	916.2	916.2
Net Incremental Benefits	50%	2,689	93%	(2.5)	(268.7)	(348.4)	(298.6)	713.3	697.2	692.2	782.0	782.0	782.0

Source: Cost Benefit Analysis (CBA) Study Estimate Jan 2005.

¹ EIRR = Economic Internal Rate of Return (rate at which NPV equal to zero).

² NPV = Net Present Value of net incremental benefits at 12% (indicative opportunity cost of capital for rural development projects in India).

N/A = Not analysed as EIRR negative.

Table AN12.13.4 GVT - Rajasthan - Banswara: Village Merana: Cost Benefit Analysis Development Activity Summary B (Rs'000).

Administration / Development Activity	EIRR \1	NPV \2		Year 1 1999/00	Year 2 2000/01	Year 3 2001/02	Year 4 2002/03	Year 5 2003/04	Year 6 2004/05	Year 7 2005/06	Year 8 2006/07	Year 9 2007/08	Year 10 2008/09
		(10%)	(%)										
6. Livestock													
Cost Stream													
Investment				-	-	50.8	14.7	5.3	5.1	133.4	-	-	-
Recurrent				-	-	1.0	7.4	10.1	14.7	24.3	32.3	32.3	32.3
Total Costs				-	-	51.7	22.1	15.4	19.8	157.7	32.3	32.3	32.3
Benefit Stream													
Before / Without Project				-	-	-	-	258.5	258.5	258.5	258.5	258.5	258.5
After / With Project				-	-	-	-	307.9	433.8	559.8	559.8	559.8	559.8
Incremental Benefits				-	-	-	-	49.3	175.3	301.2	301.2	301.2	301.2
Net Incremental Benefits	92%	894	31%	-	-	(51.7)	(22.1)	33.9	155.5	143.5	269.0	269.0	269.0
7. Forestry													
Cost Stream													
Investment				-	0.1	97.3	19.4	8.9	5.0	4.7	-	-	-
Recurrent				-	-	0.0	9.7	11.7	12.6	13.1	13.5	13.5	13.5
Total Costs				-	0.1	97.4	29.1	20.6	17.6	17.8	13.5	13.5	13.5
Benefit Stream													
Before / Without Project				-	-	-	-	-	-	-	-	-	-
After / With Project				-	-	-	24.3	34.4	44.1	44.1	44.1	44.1	44.1
Incremental Benefits				-	-	-	24.3	34.4	44.1	44.1	44.1	44.1	44.1
Net Incremental Benefits	21%	49	2%	-	(0.1)	(97.4)	(4.8)	13.8	26.5	26.3	30.6	30.6	30.6
8. Migration Support													
Cost Stream													
Investment				-	-	-	-	-	-	-	-	-	-
Recurrent				-	-	-	-	-	-	-	-	-	-
Total Costs				-	-	-	-	-	-	-	-	-	-
Benefit Stream													
Before / Without Project				-	-	-	-	-	-	-	-	-	-
After / With Project				-	-	-	-	-	-	-	-	-	-
Incremental Benefits				-	-	-	-	-	-	-	-	-	-
Net Incremental Benefits	N/A	-	0%	-	-	-	-	-	-	-	-	-	-
Summary													
Cost Stream													
Investment				45.8	542.2	766.6	556.3	476.8	414.0	498.9	-	-	-
Recurrent				-	0.3	34.8	94.2	127.0	145.3	171.9	216.4	216.4	216.4
Total Costs				45.8	542.5	801.4	650.4	603.8	559.3	670.8	216.4	216.4	216.4
Benefit Stream													
Before / Without Project				-	-	-	-	671.5	671.5	671.5	671.5	671.5	671.5
After / With Project				-	-	-	123.1	1,770.4	1,906.3	2,032.5	2,032.7	2,032.9	2,033.2
Incremental Benefits				-	-	-	123.1	1,099.0	1,234.8	1,361.0	1,361.2	1,361.4	1,361.7
Net Incremental Benefits	32%	2,884	100%	(45.8)	(542.5)	(801.4)	(527.4)	495.1	675.5	690.2	1,144.8	1,145.1	1,145.3
EIRR													

Source: Cost Benefit Analysis (CBA) Study Estimate Jan 2005.

Table AN12.13.5

GVT - Rajasthan - Banswara: Village Merana: Costs - Financial (Rs'000).

Cost Head / Subhead	1999/00	2000/01	2001/02	2002/03	2003/04	2004/05	2005/06	Total	
	Actual	Actual	Actual	Actual	Actual	Budget	Budget	(Rs'000)	(%)
A. Administration Costs									
GVT Bhopal (PHQ)	-	60.3	75.4	67.3	52.8	66.8	61.1	383.7	
DFIDI Consultancy	35.9	71.4	26.9	63.2	47.4	54.7	39.2	338.6	
Rajasthan Coordination Office	-	128.5	147.0	127.6	171.7	150.5	143.8	869.1	
Total (A)	35.9	260.2	249.4	258.1	271.9	272.0	244.1	1,591.5	40%
B. Development Costs									
Component A									
1. PPGF	7.6	10.6	38.3	32.0	42.6	21.1	20.4	172.5	4%
2. VOD	0.7	25.1	45.4	31.9	78.3	25.1	18.5	225.0	6%
3. Crop Technology	2.8	18.1	9.6	32.4	64.8	17.5	25.7	170.8	4%
4. SWC	-	359.8	359.8	251.8	-	-	-	971.4	24%
5. WRD	-	14.1	95.7	40.0	68.1	142.7	117.3	477.9	12%
6. Livestock	-	-	56.4	16.3	5.9	5.7	148.2	232.5	6%
7. Forestry	-	0.1	108.2	21.5	9.9	5.6	5.2	150.5	4%
8. Migration Support	-	-	-	-	-	-	-	-	0%
Subtotal	11.1	427.8	713.4	425.9	269.7	217.6	335.2	2,400.7	60%
Other Development Costs									
Subtotal	-	-	-	-	-	-	-	-	
Total B	11.1	427.8	713.4	425.9	269.7	217.6	335.2	2,400.7	60%
Total A + B	47.0	688.0	962.7	684.0	541.6	489.6	579.3	3,992.2	100%
GVT	10.6	608.3	890.9	600.4	459.2	388.3	489.2	3,447.1	86%
DFIDI	35.9	71.4	26.9	63.2	47.4	54.7	39.2	338.6	8%
Community	0.2	5.6	25.9	11.9	21.9	26.3	22.3	113.9	3%
Government	0.3	2.7	19.0	8.5	13.1	20.3	28.6	92.6	2%

Source:

GVT Banswara Coordination Office - Rajasthan.

DFIDI = Department for International Development (India).

PPGF = Participatory Planning and Group Formation.

VOD = Village Organisation and Development.

SWC = Soil and Water Conservation.

WRD = Water Resource Development.

Table AN12.13.5

GVT - Rajasthan - Banswara: Village Merana: Costs - Economic (Rs'000).

Cost Head / Subhead	Conversion Factors		1999/00 Actual	2000/01 Actual	2001/02 Actual	2002/03 Actual	2003/04 Actual	2004/05 Budget	2005/06 Budget	Totals	
	CF	SCF								(Rs'000)	(%)
A. Administration Costs											
GVT Bhopal (PHQ)	0.90	1.00	-	54.2	67.9	60.6	47.5	60.1	55.0	345.4	10%
DFIDI Consultancy	1.00	1.00	35.9	71.4	26.9	63.2	47.4	54.7	39.2	338.6	10%
Rajasthan Coordination Office	0.90	1.00	-	115.7	132.3	114.8	154.5	135.5	129.4	782.2	24%
Total (A)			35.9	241.3	227.1	238.6	249.5	250.3	223.6	1,466.2	44%
B. Development Costs											
Component A											
1. PPGF	0.90	1.00	6.8	9.5	34.5	28.8	38.3	18.9	18.3	155.2	5%
2. VOD	0.90	1.00	0.7	22.6	40.8	28.7	70.5	22.6	16.7	202.5	6%
3. Crop Technology	0.90	1.00	2.5	16.3	8.6	29.1	58.3	15.8	23.1	153.8	5%
4. SWC	0.90	0.75	-	242.9	242.9	170.0	-	-	-	655.7	20%
5. WRD	0.90	0.75	-	9.5	64.6	27.0	46.0	96.3	79.1	322.6	10%
6. Livestock	0.90	1.00	-	-	50.8	14.7	5.3	5.1	133.4	209.3	6%
7. Forestry	0.90	1.00	-	0.1	97.3	19.4	8.9	5.0	4.7	135.5	4%
8. Migration Support	0.90	1.00	-	-	-	-	-	-	-	-	0%
Subtotal			10.0	300.9	539.5	317.7	227.4	163.8	275.3	1,834.5	56%
Other Development Costs											
Subtotal	0.90	1.00	-	-	-	-	-	-	-	-	0%
Total B			10.0	300.9	539.5	317.7	227.4	163.8	275.3	1,834.5	56%
Total A + B			45.8	542.2	766.6	556.3	476.8	414.0	498.9	3,300.7	100%
GVT			-	-	-	-	-	-	-	N/A	
DFIDI			-	-	-	-	-	-	-	N/A	
Community			-	-	-	-	-	-	-	N/A	
Government			-	-	-	-	-	-	-	N/A	

Source:

Cost Benefit Analysis (CBA) Study Estimate Jan 2005.

DFIDI = Department for International Development (India).

PPGF = Participatory Planning and Group Formation.

VOD = Village Organisation and Development.

SWC = Soil and Water Conservation.

WRD = Water Resource Development.

Table AN12.13.6

GVT - Rajasthan - Banswara: Village Merana: VOD Household Assumptions.

Without \ With Project Village Organisation and Development	Units	Assumptions			Benefits		
					Year 1 (Rs)	Year 2 (Rs)	Year 3 (Rs)
Development Activity: Village Organisation and Development							
Before / Without Project Situation:							
A. Self Help Groups (SHGs)							
Assumption	Sum	Zero	Zero	Zero	-	-	-
B. Drudgery Reduction							
Assumption	Sum	Zero	Zero	Zero			
Total Without Project Benefits					-	-	-
After / With Project Situation:							
A. Self Help Groups (SHGs)							
Assumptions							
Average Household Savings	Rs	942.9					
Households (HHs)	No	147					
Present Group Deposits	Rs'000	138.6					
Annual Savings Increase	%	3%			138.6	142.8	147.0
Deposits to Loans to Members	%	50%					
SHG Interest Income	% / Year	10%					
Assumed Benefit	Rs'000				6.9	7.1	7.4
B. Drudgery Reduction							
Assumptions							
Hours Saved / Day / Household	No	1.0					
Number of Days / Year / Household	No	200					
Days / Year / Household (8hrs/day)	No	25.0					
Households / Village	No	147					
Day Equivalent / Village	No	3,675					
Economic Value per Day	(Rs/day)	25					
Assumed Benefit	Rs'000				91.9	91.9	91.9
Total With Project Benefits	Rs'000				98.8	99.0	99.2
Incremental Benefits	Rs'000				98.8	99.0	99.2

Source:

VOD = Village Organisation and Development.
Households per village: Merana

Cost Benefit Analysis (CBA) Study Estimate Jan 2005.

Table AN12.13.6

GVT - Rajasthan - Banswara: Village Merana: Incremental VOD Benefit Stream (Rs'000).

Without \ With Project Village Organisation and Development	Benefit Streams (Rs '000)									
	Year 1 1999/00	Year 2 2000/01	Year 3 2001/02	Year 4 2002/03	Year 5 2003/04	Year 6 2004/05	Year 7 2005/06	Year 8 2006/07	Year 9 2007/08	Year 10 2008/09
Development Activity: Village Organisation and Development										
Before / Without Project Situation:										
A. Self Help Groups (SHGs) Assumption										
B. Drudgery Reduction Assumption										
Total Without Project Benefits	-	-	-	-	-	-	-	-	-	-
After / With Project Situation:										
A. Self Help Groups (SHGs) Assumptions										
Average Household Savings										
Households (HHs)										
Present Group Deposits										
Annual Savings Increase	-	-	-	138.6	142.8	147.0	151.5	156.0	160.7	165.5
Deposits to Loans to Members										
SHG Interest Income										
Assumed Benefit	-	-	-	6.9	7.1	7.4	7.6	7.8	8.0	8.3
B. Drudgery Reduction Assumptions										
Hours Saved / Day / Household										
Number of Days / Year / Household										
Days / Year / Household (8hrs/day)										
Households / Village										
Day Equivalent / Village										
Economic Value per Day										
Assumed Benefit	-	-	-	91.9	91.9	91.9	91.9	91.9	91.9	91.9
Total With Project Benefits	-	-	-	98.8	99.0	99.2	99.4	99.7	99.9	100.1
Incremental Benefits	-	-	-	98.8	99.0	99.2	99.4	99.7	99.9	100.1

Source:

VOD = Village Organisation and Development.
Households per village: Merana

Cost Benefit Analysis (CBA) Study Estimate Jan 2005.

Table AN12.13.7

GVT - Rajasthan - Banswara: Village Merana: Household Crop Net Margin Assumptions.

Without \ With Project Crop Technology, SWC and WRD	Units	Assumptions			Benefits		
					Year 1 (Rs)	Year 2 (Rs)	Year 3 (Rs)
Development Activity: Crop Technology, SWC and WRD							
Before / Without Project Situation: Assumptions							
Households (HHs)	No	147					
Crop Adoption Assumptions		100%	100%	100%			
Kharif Crop Net Margin	Rs/HH				2,293.5	2,293.5	2,293.5
Rabi Crop Net Margin	Rs/HH				515.8	515.8	515.8
Total Without Project Benefits	Rs/HH				2,809.2	2,809.2	2,809.2
After / With Project Situation: Assumptions							
Households (HHs)	No	147					
Crop Adoption Assumptions		100%	100%	100%			
Kharif Crop Net Margin	Rs/HH				7,321.1	7,321.1	7,321.1
Rabi Crop Net Margin	Rs/HH				1,720.8	1,720.8	1,720.8
Total With Project Benefits	Rs/HH				9,041.8	9,041.8	9,041.8
Incremental Benefits	Rs/HH				6,232.6	6,232.6	6,232.6

Source:

Cost Benefit Analysis (CBA) Study Estimate Jan 2005.

Table AN12.13.7

GVT - Rajasthan - Banswara: Village Merana: Incremental Crop Benefit Stream (Rs'000).

Without \ With Project Crop Technology, SWC and WRD	Benefit Streams (Rs '000)									
	Year 1 1999/00	Year 2 2000/01	Year 3 2001/02	Year 4 2002/03	Year 5 2003/04	Year 6 2004/05	Year 7 2005/06	Year 8 2006/07	Year 9 2007/08	Year 10 2008/09
Development Activity: Crop Technology, SWC and WRD										
Before / Without Project Situation: Assumptions Households (HHs) Crop Adoption Assumptions										
Kharif Crop Net Margin	-	-	-	-	337.1	337.1	337.1	337.1	337.1	337.1
Rabi Crop Net Margin	-	-	-	-	75.8	75.8	75.8	75.8	75.8	75.8
Total Without Project Benefits	-	-	-	-	413.0	413.0	413.0	413.0	413.0	413.0
After / With Project Situation: Assumptions Households (HHs) Crop Adoption Assumptions										
Kharif Crop Net Margin	-	-	-	-	1,076.2	1,076.2	1,076.2	1,076.2	1,076.2	1,076.2
Rabi Crop Net Margin	-	-	-	-	253.0	253.0	253.0	253.0	253.0	253.0
Total With Project Benefits	-	-	-	-	1,329.2	1,329.2	1,329.2	1,329.2	1,329.2	1,329.2
Incremental Benefits	-	-	-	-	916.2	916.2	916.2	916.2	916.2	916.2

Source:

Cost Benefit Analysis (CBA) Study Estimate Jan 2005.

Table AN12.13.8

GVT - Rajasthan - Banswara: Village Merana: Household Livestock Net Margin Assumptions.

Without \ With Project Kharif \ Rabi Livestock	Units	Assumptions			Benefits		
					Year 1 (Rs)	Year 2 (Rs)	Year 3 (Rs)
Development Activity: Livestock							
Before / Without Project Situation: Assumptions							
Households (HHs)	No	147					
Annual Livestock Net Margin	Rs/HH						
Total Without Project Benefits					1,758.6	1,758.6	1,758.6
After / With Project Situation:							
Development Activity: Assumptions							
Households (HHs)	No	147					
Adoption Assumptions	Percent	55%	78%	100%			
Annual Livestock Net Margin	Rs/HH						
Total With Project Benefits					2,094.3	2,951.1	3,807.9
Incremental Benefits	Rs/HH				335.7	1,192.5	2,049.2

Source:

Cost Benefit Analysis (CBA) Study Estimate Jan 2005.

Table AN12.13.8

GVT - Rajasthan - Banswara: Village Merana: Incremental Livestock Benefit Stream (Rs'000).

Without \ With Project Kharif \ Rabi Livestock	Benefit Streams (Rs '000)									
	Year 1 1999/00	Year 2 2000/01	Year 3 2001/02	Year 4 2002/03	Year 5 2003/04	Year 6 2004/05	Year 7 2005/06	Year 8 2006/07	Year 9 2007/08	Year 10 2008/09
Development Activity: Livestock										
Before / Without Project Situation:										
Assumptions										
Households (HHs)										
Annual Livestock Net Margin										
Total Without Project Benefits	-	-	-	-	258.5	258.5	258.5	258.5	258.5	258.5
After / With Project Situation:										
Development Activity:										
Assumptions										
Households (HHs)										
Adoption Assumptions										
Annual Livestock Net Margin										
Total With Project Benefits	-	-	-	-	307.9	433.8	559.8	559.8	559.8	559.8
Incremental Benefits	-	-	-	49.3	175.3	301.2	301.2	301.2	301.2	301.2

Source:

Cost Benefit Analysis (CBA) Study Estimate Jan 2005.

Table AN12.13.9

GVT - Rajasthan - Banswara: Village Merana: Forestry Benefit Assumptions.

Without \ With Project Kharif \ Rabi Forestry	Units	Assumptions			Benefits		
					Year 1 (Rs)	Year 2 (Rs)	Year 3 (Rs)
Development Activity: Forestry							
Before / Without Project Situation: Assumptions							
Households (HHs)	No	147					
Annual Forestry Net Margin	Rs/HH				-	-	-
Total Without Project Benefits							
After / With Project Situation: Assumptions							
Households (HHs)	No	147					
Adoption Assumptions	Percent	55%	78%	100%			
Annual Forestry Net Margin	Rs/HH						
Total With Project Benefits					165.0	234.0	300.0
Incremental Benefits	Rs/HH				165.0	234.0	300.0

Source:

Cost Benefit Analysis (CBA) Study Estimate Jan 2005.

Table AN12.13.9

GVT - Rajasthan - Banswara: Village Merana: Incremental Forestry Benefit Stream (Rs'000).

Without \ With Project Kharif \ Rabi Forestry	Benefit Streams (Rs '000)									
	Year 1 1999/00	Year 2 2000/01	Year 3 2001/02	Year 4 2002/03	Year 5 2003/04	Year 6 2004/05	Year 7 2005/06	Year 8 2006/07	Year 9 2007/08	Year 10 2008/09
Development Activity: Forestry										
Before / Without Project Situation: Assumptions										
Households (HHs)										
Annual Forestry Net Margin										
Total Without Project Benefits	-	-	-	-	-	-	-	-	-	-
After / With Project Situation: Assumptions										
Households (HHs)										
Adoption Assumptions										
Annual Forestry Net Margin										
Total With Project Benefits	-	-	-	24.3	34.4	44.1	44.1	44.1	44.1	44.1
Incremental Benefits	-	-	-	24.3	34.4	44.1	44.1	44.1	44.1	44.1

Source:

Cost Benefit Analysis (CBA) Study Estimate Jan 2005.

Table AN12.13.10

GVT - Rajasthan - Banswara: Village Merana: Migration Support Benefit Assumptions.

Without \ With Project	Assumptions			Benefits		
				Year 1 (Rs)	Year 2 (Rs)	Year 3 (Rs)
Development Activity: Migration Support						
Before / Without Project Situation: Assumptions						
Economic Value per Day	Rs/day	25.0				
Days / Month / Household	No	18				
Economic Value per Month	Rs/month	450.0				
Months Migration / Year	Months	4.0				
Economic Value per Household	Rs/HH	1,800.0				
Households per Village	No	-				
Households per Village Migrating	Percent	45%				
Total Without Project Benefits	Rs/Village			-	-	-
After / With Project Situation: Assumptions						
Economic Value per Day \1	Rs/day	25.0	25%	31.3		
Days / Month / Household	No	18	30%	24.0		
Economic Value per Month	Rs/month	450.0		750.0		
Months Migration / Year	Months	4.0	-25%	3.0		
Economic Value per Household	Rs/HH	1,800.0		2,250.0		
Households per Village	No	-		-		
Households per Village Migrating	Percent	45%	-10%	41%		
Subtotal Migration Benefits	Rs/Village				-	-
Other Income	Sum (Rs'000)	-	-	-	-	-
Total With Project Benefits	Rs/Village				-	-
Incremental Benefits	Rs/Village				-	-

Source:

Cost Benefit Analysis (CBA) Study Estimate Jan 2005.

- 1\ Financial Wages (Rs/day):
 Skill Labour - Rs 160
 Casual Labour :
 Male - Rs 40
 Female - Rs 30

Table AN12.13.10

GVT - Rajasthan - Banswara: Village Merana: Incremental Migration Support Benefit Stream (Rs'000).

Without \ With Project	Benefit Streams (Rs '000)									
	Year 1 1999/00	Year 2 2000/01	Year 3 2001/02	Year 4 2002/03	Year 5 2003/04	Year 6 2004/05	Year 7 2005/06	Year 8 2006/07	Year 9 2007/08	Year 10 2008/09
Development Activity: Migration Support Before / Without Project Situation: Assumptions Economic Value per Day Days / Month / Household Economic Value per Month Months Migration / Year Economic Value per Household Households per Village Households per Village Migrating Total Without Project Benefits	-	-	-	-	-	-	-	-	-	-
After / With Project Situation: Assumptions Economic Value per Day \1 Days / Month / Household Economic Value per Month Months Migration / Year Economic Value per Household Households per Village Households per Village Migrating Subtotal Migration Benefits Other Income Total With Project Benefits Incremental Benefits	-	-	-	-	-	-	-	-	-	-

Source:

Cost Benefit Analysis (CBA) Study Estimate Jan 2005.

- 1\ Financial Wages (Rs/day):
 Skill Labour - Rs 160
 Casual Labour :
 Male - Rs 40
 Female - Rs 30

Table AN12.13.11 GVT - Rajasthan - Banswara: Village Merana: Weighted Household Crop Net Margin Summary (Rs/Household).

Item	WBR (%)	Before / Without Project			After / With Project			Increment		
		Khalif	Rabi	Total	Khalif	Rabi	Total	Khalif	Rabi	Total
Phase II										
Well Being Ranking - Very Poor										
Household Net Margin (Rs)	3.0%	834.6	102.5	937.1	1,849.8	1,067.8	2,917.6	1,015.2	965.3	1,980.5
Well Being Ranking - Poor										
Household Net Margin (Rs)	27.0%	637.7	-	637.7	4,803.0	220.7	5,023.7	4,165.3	220.7	4,386.0
Well Being Ranking - Poor										
Household Net Margin (Rs)	43.0%	994.0	89.3	1,083.3	3,711.4	2,508.3	6,219.6	2,717.4	2,419.0	5,136.4
Well Being Ranking - Better Off										
Household Net Margin (Rs)	27.0%	6,180.9	1,756.7	7,937.5	16,195.9	2,039.3	18,235.2	10,015.0	282.7	10,297.7
Well Being Ranking - Weighted										
Household Net Margin (Rs)	100%	2,293.5	515.8	2,809.2	7,321.1	1,720.8	9,041.8	5,027.6	1,205.0	6,232.6
Phase I \1										
Well Being Ranking - Very Poor										
Household Net Margin (Rs)	3.0%	436.3	267.5	703.8	3,866.5	1,668.8	5,535.3	3,430.3	1,401.3	4,831.5
Well Being Ranking - Poor										
Household Net Margin (Rs)	27.0%	485.8	657.5	1,143.3	10,136.0	5,690.3	15,826.3	9,650.3	5,032.8	14,683.0
Well Being Ranking - Poor										
Household Net Margin (Rs)	43.0%	986.3	3,385.0	4,371.3	9,457.5	5,195.0	14,652.5	8,471.3	1,810.0	10,281.3
Well Being Ranking - Better Off										
Household Net Margin (Rs)	27.0%	2,778.0	937.0	3,715.0	4,915.0	9,560.0	14,475.0	2,137.0	8,623.0	10,760.0
Well Being Ranking - Weighted										
Household Net Margin (Rs)	100%	1,318.4	1,894.1	3,212.5	8,246.5	6,401.5	14,648.0	6,928.1	4,507.4	11,435.5

Source: Study of Impact of WIRFP on Net Incomes of Target Households, Jan 2004.

WBR = GVT Household Well Being Ranking. Survey figures adjusted to Village Profile WBR.

\1 GVT - Madhya Pradesh - Phase I: Village Naganwat Choti: Weighted Household Livestock Net Margin Summary.

Table AN12.13.12 GVT - Rajasthan - Banswara: Village Merana: Household Crop Net Margin Sensitivity Analysis.

Item	EIRR	Before / Without Project			After / With Project			Increment		
		Khalif	Rabi	Total	Khalif	Rabi	Total	Khalif	Rabi	Total
Development Activity:										
Crop Technology, SWC and WRD										
Weighted Net Margin (Phase II)										
Household Net Margin (Rs)		2,293.5	515.8	2,809.2	7,321.1	1,720.8	9,041.8	5,027.6	1,205.0	6,232.6
Incremental Benefit (Phase II / Phase I)										55%
Base Case Assumptions										
Household Net Margin (Rs)		2,293.5	515.8	2,809.2	7,321.1	1,720.8	9,041.8	5,027.6	1,205.0	6,232.6
Incremental Benefit (Phase II / Phase I)										55%
Sensitivity Increase (%)	0%									
Development Activity	50%									
Overall Village	32%									
Sensitivity Assumptions										
Household Net Margin (Rs)		2,293.5	515.8	2,809.2	7,321.1	1,720.8	9,041.8	5,027.6	1,205.0	6,232.6
Incremental Benefit (Phase II / Phase I)										55%
Sensitivity Increase (%)	0%									
Development Activity	50%									
Overall Village	32%									
Weighted Net Margin (Phase I)										
Household Net Margin (Rs)		1,318.4	1,894.1	3,212.5	8,246.5	6,401.5	14,648.0	6,928.1	4,507.4	11,435.5

Source: Cost Benefit Analysis (CBA) Study Estimate Jan 2005.

EIRR = Economic Internal Rate of Return (rate at which NPV equal to zero).

Table AN12.13.13 GVT - Rajasthan - Banswara: Village Merana: Weighted Household Livestock Net Margin Summary (Rs/Household).

Well Being Ranking	Weight (%)	Before / Without Project		After / With Project		Increment \1	
		Herd Value	Net Margin	Herd Value	Net Margin	Herd Value	Net Margin
Phase I - Well Being Ranking (WBR) \1							
Madhya Pradesh - WBR Weighted Data							
Very Poor	3.0%						
Average		580	(185.0)	5,650	412.5	474	597.5
Poor	27.0%						
Average		2,350	982.5	8,250	2,141.0	1,180	1,158.5
Moderate	43.0%						
Average		14,700	6,730.0	1,900	2,820.0	1,900	(3,910.0)
Better Off	27.0%						
Average		15,580	3,000.0	14,600	10,790.0	(196)	7,790.0
Phase I - WBR Weighted Data	100.0%	11,180	3,963.6	7,156	4,716.3	1,097	752.7
Phase II - Well Being Ranking (WBR)							
Very Poor	3.0%						
Average		5,756	149.2	10,970	1,446.4	1,043	1,297.2
Poor	27.0%						
Average		13,128	852.2	25,979	3,008.8	2,570	2,156.8
Moderate	43.0%						
Average		13,525	4,035.1	27,020	5,249.5	2,699	1,214.4
Better Off	27.0%						
Average		12,700	(781.7)	41,873	2,573.3	5,835	3,355.0
Phase II - WBR Weighted Data	100.0%	12,962	1,758.6	30,268	3,807.9	3,461	2,049.3

Source: Study of Impact of WIRFP on Net Incomes of Target Households, Jan 2004.

WBR = GVT Household Well Being Ranking.

Survey figures adjusted to Village Profile WBR.

\1 GVT - Madhya Pradesh - Phase I: Village Naganwat Choti: Weighted Household Livestock Net Margin Summary.

WIRFP - Phase II - Cost Benefit Analysis Study

Tables AN12.0 Individual Village Cost Benefit Analysis

Tables AN12.14 GVT - Rajasthan - Banswara: Village Sundripada.

- Table AN12.14.1 GVT - Rajasthan - Banswara: Village Sundripada: Village Profile.
- Table AN12.14.2 GVT - Rajasthan - Banswara: Village Sundripada: Cost Benefit Analysis Summary (Rs'000).
- Table AN12.14.3 GVT - Rajasthan - Banswara: Village Sundripada: Cost Benefit Analysis Development Activity Summary A (Rs'000).
- Table AN12.14.4 GVT - Rajasthan - Banswara: Village Sundripada: Cost Benefit Analysis Development Activity Summary B (Rs'000).
- Table AN12.14.5 GVT - Rajasthan - Banswara: Village Sundripada: Costs Financial (Rs'000).
GVT - Rajasthan - Banswara: Village Sundripada: Costs Economic (Rs'000).
- Table AN12.14.6 GVT - Rajasthan - Banswara: Village Sundripada: VOD Household Assumptions.
GVT - Rajasthan - Banswara: Village Sundripada: Incremental VOD Benefit Stream (Rs'000).
- Table AN12.14.7 GVT - Rajasthan - Banswara: Village Sundripada: Household Crop Net Margin Assumptions.
GVT - Rajasthan - Banswara: Village Sundripada: Incremental Crop Benefit Stream (Rs'000).
- Table AN12.14.8 GVT - Rajasthan - Banswara: Village Sundripada: Household Livestock Net Margin Assumptions.
GVT - Rajasthan - Banswara: Village Sundripada: Incremental Livestock Benefit Stream (Rs'000).
- Table AN12.14.9 GVT - Rajasthan - Banswara: Village Sundripada: Forestry Benefit Assumptions.
GVT - Rajasthan - Banswara: Village Sundripada: Incremental Forestry Benefit Stream (Rs'000).
- Table AN12.14.10 GVT - Rajasthan - Banswara: Village Sundripada: Migration Support Benefit Assumptions.
GVT - Rajasthan - Banswara: Village Sundripada: Incremental Migration Support Benefit Stream (Rs'000).
- Table AN12.14.11 GVT - Rajasthan - Banswara: Village Sundripada: Weighted Household Crop Net Margin Summary (Rs/Household).
- Table AN12.14.12 GVT - Rajasthan - Banswara: Village Sundripada: Household Crop Net Margin Sensitivity Analysis.
- Table AN12.14.13 GVT - Rajasthan - Banswara: Village Sundripada: Weighted Household Livestock Net Margin Summary (Rs/Household).

Table AN12.14.1 GVT - Rajasthan - Banswara: Village Sundripada: Village Profile.

Village Profile \1			
A. Background			
Village Name	Sundripada		
District	Banswara		
State	Rajasthan		
B. Participatory Planning Process (PPP)			
Village entry	Jan-00		
PRA	Sep-00		
CPA	Sep-00		
C. Infrastructure			
Hand Pumps (no)	8		
Wells (no)	16		
Linked by Road	3 Km		
Electrification	Yes		
School	Primary		
D. Demographic Data			
Households (no)	87		
Participating Households	78		
Population (Adults)	522		
Adults:			
Male	128		
Female	138		
Children:			
Boys	146		
Girls	110		
E. Well Being Ranking (No Households)			
Very Poor	4	4.7%	
Poor	16	18.6%	
Moderate	29	33.7%	
Better Off	37	43.0%	
Total	86	100%	
F. Land Resource (ha)			
Total Area			214
Revenue Land (unused)			20
Forest Area - Revenue			92
Pasture Land			13
Arable Land			89
G. Livestock			
Oxen			187
Cows			179
Buffalo			N/A
Goats			361
Poultry			N/A
H. Self Help Groups (Membership)			
1	Group 1		15
2	Group 2		22
3	Group 3		18
4	Group 4		18
5	Group 5		20
6	Group 6		20
7	Group 7		20
	Total Memberhip		133

Source: GVT Banswara Coordination Office - Rajasthan.

\1 Subject to final adjustment following consolidation exercise prior to Annual Review Meeting (ARM) in Feb 2005.

Table AN12.14.2 GVT - Rajasthan - Banswara: Village Sundripada: Cost Benefit Analysis Summary (Rs'000).

Administration Costs / Development Activity	EIRR \1	NPV \2		Year 1 1999/00	Year 2 2000/01	Year 3 2001/02	Year 4 2002/03	Year 5 2003/04	Year 6 2004/05	Year 7 2005/06	Year 8 2006/07	Year 9 2007/08	Year 10 2008/09
		(10%)	(%)										
A. Administration Costs													
Total A	N/A	(972)	687%	35.9	241.3	227.1	238.6	249.5	250.3	223.6	22.4	22.4	22.4
B. Development Activity Component A													
1. PPGF													
Net Incremental Benefits	N/A	(146)	103%	-	(12.3)	(32.1)	(45.4)	(48.8)	(45.4)	(39.5)	(5.3)	(5.3)	(5.3)
2. VOD													
Net Incremental Benefits	26%	96	-68%	-	(10.9)	(90.8)	(2.7)	29.8	27.7	26.5	44.0	44.1	44.2
3/5. Crop Technology, SWC and WRD													
Net Incremental Benefits	19%	375	-265%	-	-	(107.6)	(83.3)	(523.0)	(515.9)	(39.7)	372.0	372.0	372.0
6. Livestock													
Net Incremental Benefits	77%	482	-341%	-	(3.3)	(29.0)	(23.8)	19.5	99.0	34.5	152.6	152.6	152.6
7. Forestry													
Net Incremental Benefits	40%	23	-16%	-	-	(7.6)	(1.8)	3.8	1.3	3.3	8.6	8.6	8.6
8. Migration Support													
Net Incremental Benefits	N/A	-	0%	-	-	-	-	-	-	-	-	-	-
Summary													
Net Incremental Benefits	11%	(141)	100%	(35.9)	(267.8)	(494.3)	(395.6)	(768.0)	(683.6)	(238.4)	549.5	549.6	549.8
Sensitivity Analysis													
Analysis Period													
12 Years	-1%	(842)											
20 Years (Base Case)	11%	(141)											
25 Years	12%	64											
30 Years	13%	181											
Costs - Administration													
Investment Costs Decreased by 20 percent	11%	(141)											
Costs - Administration and Development													
Recurrent Costs Increased by 20 percent	8%	(503)											
Benefits - Crop, SWC and WRD													
Crop Benefits Increased by 20 percent	14%	335											
Livestock Benefits Increased by 20 percent	11%	(141)											

Source: Cost Benefit Analysis (CBA) Study Estimate Jan 2005.

\1 EIRR = Economic Internal Rate of Return (rate at which NPV equal to zero).

\2 NPV = Net Present Value of net incremental benefits at 12% (indicative opportunity cost of capital for rural development projects in India).

N/A = Not analysed as EIRR negative.

Table AN12.14.3 GVT - Rajasthan - Banswara: Village Sundripada: Cost Benefit Analysis Development Activity Summary A (Rs'000).

Administration Costs / Development Activity	EIRR ¹	NPV ²		Year 1 1999/00	Year 2 2000/01	Year 3 2001/02	Year 4 2002/03	Year 5 2003/04	Year 6 2004/05	Year 7 2005/06	Year 8 2006/07	Year 9 2007/08	Year 10 2008/09
		(10%)	(%)										
A. Administration Costs													
Investment				35.9	241.3	227.1	238.6	249.5	250.3	223.6	-	-	-
Recurrent				-	-	-	-	-	-	-	22.4	22.4	22.4
Total A	N/A	(972)	687%	35.9	241.3	227.1	238.6	249.5	250.3	223.6	22.4	22.4	22.4
B. Development Intervention Component A													
1. PPGF													
Cost Stream													
Investment				-	12.3	31.8	44.3	46.5	42.0	35.1	-	-	-
Recurrent				-	-	0.3	1.1	2.2	3.4	4.4	5.3	5.3	5.3
Total Costs				-	12.3	32.1	45.4	48.8	45.4	39.5	5.3	5.3	5.3
Benefit Stream													
Before / Without Project				-	-	-	-	-	-	-	-	-	-
After / With Project				-	-	-	-	-	-	-	-	-	-
Incremental Benefits				-	-	-	-	-	-	-	-	-	-
Net Incremental Benefits	N/A	(146)	103%	-	(12.3)	(32.1)	(45.4)	(48.8)	(45.4)	(39.5)	(5.3)	(5.3)	(5.3)
2. VOD													
Cost Stream													
Investment				-	10.9	90.3	51.5	16.4	17.9	18.3	-	-	-
Recurrent				-	-	0.5	5.1	7.6	8.5	9.3	10.3	10.3	10.3
Total Costs				-	10.9	90.8	56.5	24.1	26.3	27.6	10.3	10.3	10.3
Benefit Stream													
Before / Without Project				-	-	-	-	-	-	-	-	-	-
After / With Project				-	-	-	53.8	53.9	54.0	54.1	54.2	54.4	54.5
Incremental Benefits				-	-	-	53.8	53.9	54.0	54.1	54.2	54.4	54.5
Net Incremental Benefits	26%	96	-68%	-	(10.9)	(90.8)	(2.7)	29.8	27.7	26.5	44.0	44.1	44.2
3/5. Crop Technology, SWC and WRD													
Cost Stream													
Investment													
Crop Technology				-	-	35.2	32.9	52.0	11.3	10.3	-	-	-
Soil Water Conservation				-	-	-	-	384.2	370.4	375.8	-	-	-
Water Resource Development				-	-	72.3	38.6	68.5	56.2	85.7	-	-	-
Recurrent													
Crop Technology				-	-	-	0.9	1.7	3.0	3.3	3.5	3.5	3.5
Soil Water Conservation				-	-	-	-	-	48.0	94.3	141.3	141.3	141.3
Water Resource Development				-	-	-	10.9	16.6	26.9	35.3	48.2	48.2	48.2
Total Costs				-	-	107.6	83.3	523.0	515.9	604.7	193.0	193.0	193.0
Benefit Stream													
Before / Without Project				-	-	-	-	-	-	315.4	315.4	315.4	315.4
After / With Project				-	-	-	-	-	-	880.5	880.5	880.5	880.5
Incremental Benefits				-	-	-	-	-	-	565.0	565.0	565.0	565.0
Net Incremental Benefits	19%	375	-265%	-	-	(107.6)	(83.3)	(523.0)	(515.9)	(39.7)	372.0	372.0	372.0

Source: Cost Benefit Analysis (CBA) Study Estimate Jan 2005.

¹ EIRR = Economic Internal Rate of Return (rate at which NPV equal to zero).

² NPV = Net Present Value of net incremental benefits at 12% (indicative opportunity cost of capital for rural development projects in India).

N/A = Not analysed as EIRR negative.

Table AN12.14.4 GVT - Rajasthan - Banswara: Village Sundripada: Cost Benefit Analysis Development Activity Summary B (Rs'000).

Administration Costs / Development Activity	EIRR \1	NPV \2		Year 1 1999/00	Year 2 2000/01	Year 3 2001/02	Year 4 2002/03	Year 5 2003/04	Year 6 2004/05	Year 7 2005/06	Year 8 2006/07	Year 9 2007/08	Year 10 2008/09
		(10%)	(%)										
6. Livestock													
Cost Stream													
Investment				-	3.3	29.0	16.5	27.9	4.7	126.6	-	-	-
Recurrent				-	-	-	7.2	11.1	17.9	23.6	32.1	32.1	32.1
Total Costs				-	3.3	29.0	23.8	38.9	22.6	150.2	32.1	32.1	32.1
Benefit Stream													
Before / Without Project				-	-	-	-	95.7	95.7	95.7	95.7	95.7	95.7
After / With Project				-	-	-	-	154.2	217.3	280.4	280.4	280.4	280.4
Incremental Benefits				-	-	-	-	58.5	121.6	184.7	184.7	184.7	184.7
Net Incremental Benefits	77%	482	-341%	-	(3.3)	(29.0)	(23.8)	19.5	99.0	34.5	152.6	152.6	152.6
7. Forestry													
Cost Stream													
Investment				-	-	7.6	7.6	4.0	8.8	5.9	-	-	-
Recurrent				-	-	-	0.8	1.5	1.9	2.8	3.4	3.4	3.4
Total Costs				-	-	7.6	8.4	5.6	10.7	8.7	3.4	3.4	3.4
Benefit Stream													
Before / Without Project				-	-	-	-	-	-	-	-	-	-
After / With Project				-	-	-	6.6	9.4	12.0	12.0	12.0	12.0	12.0
Incremental Benefits				-	-	-	6.6	9.4	12.0	12.0	12.0	12.0	12.0
Net Incremental Benefits	40%	23	-16%	-	-	(7.6)	(1.8)	3.8	1.3	3.3	8.6	8.6	8.6
8. Migration Support													
Cost Stream													
Investment				-	-	-	-	-	-	-	-	-	-
Recurrent				-	-	-	-	-	-	-	-	-	-
Total Costs				-	-	-	-	-	-	-	-	-	-
Benefit Stream													
Before / Without Project				-	-	-	-	-	-	-	-	-	-
After / With Project				-	-	-	-	-	-	-	-	-	-
Incremental Benefits				-	-	-	-	-	-	-	-	-	-
Net Incremental Benefits	N/A	-	0%	-	-	-	-	-	-	-	-	-	-
Summary													
Cost Stream													
Investment				35.9	267.8	493.4	430.1	849.0	761.6	881.2	-	-	-
Recurrent				-	-	0.9	25.9	40.8	109.6	173.1	266.5	266.5	266.5
Total Costs				35.9	267.8	494.3	456.0	889.8	871.2	1,054.2	266.5	266.5	266.5
Benefit Stream													
Before / Without Project				-	-	-	-	95.7	95.7	411.2	411.2	411.2	411.2
After / With Project				-	-	-	60.4	217.5	283.3	1,227.0	1,227.1	1,227.3	1,227.4
Incremental Benefits				-	-	-	60.4	121.7	187.6	815.8	816.0	816.1	816.2
Net Incremental Benefits	11%	(141)	100%	(35.9)	(267.8)	(494.3)	(395.6)	(768.0)	(683.6)	(238.4)	549.5	549.6	549.8

Source: Cost Benefit Analysis (CBA) Study Estimate Jan 2005.

Table AN12.14.5

GVT - Rajasthan - Banswara: Village Sundripada: Costs Financial (Rs'000).

Cost Head / Subhead	1999/00	2000/01	2001/02	2002/03	2003/04	2004/05	2005/06	Totals	
	Actual	Actual	Actual	Actual	Actual	Budget	Budget	(Rs'000)	(%)
A. Administration Costs									
GVT Bhopal (PHQ)	-	60.3	75.4	67.3	52.8	66.8	61.1	383.7	8%
DFIDI Consultancy	35.9	71.4	26.9	63.2	47.4	54.7	39.2	338.6	7%
Rajasthan Coordination Office	-	128.5	147.0	127.6	171.7	150.5	143.8	869.1	19%
Total A	35.9	260.2	249.4	258.1	271.9	272.0	244.1	1,591.5	34%
B. Development Costs									
Component A									
1. PPGF	-	13.7	35.4	49.3	51.7	46.7	39.0	235.7	5%
2. VOD	-	12.1	100.3	57.2	18.2	19.9	20.3	228.0	5%
3. Crop Technology	-	-	39.2	36.6	57.7	12.6	11.4	157.5	3%
4. SWC	-	-	-	-	569.1	548.8	556.7	1,674.6	36%
5. WRD	-	-	107.2	57.2	101.5	83.2	126.9	476.0	10%
6. Livestock	-	3.6	32.3	18.4	30.9	5.2	140.7	231.1	5%
7. Forestry	-	-	8.4	8.5	4.5	9.8	6.5	37.6	1%
8. Migration Support	-	-	-	-	-	-	-	-	0%
Subtotal	-	29.4	322.7	227.0	833.8	726.1	901.6	3,040.6	66%
Other Development Costs									
Subtotal	-	-	-	-	-	-	-	-	-
Total B	-	29.4	322.7	227.0	833.8	726.1	901.6	3,040.6	66%
Total A + B	35.9	289.6	572.0	485.1	1,105.7	998.1	1,145.6	4,632.1	100%
GVT	-	216.5	490.2	391.4	804.3	706.2	845.0	3,453.6	75%
DFIDI	35.9	71.4	26.9	63.2	47.4	54.7	39.2	338.6	7%
Community	-	0.5	25.5	14.4	233.6	220.4	234.4	728.8	16%
Government	-	1.2	29.4	16.0	20.4	16.9	27.1	111.0	2%

Source:

GVT Banswara Coordination Office - Rajasthan.

DFIDI = Department for International Development (India).

PPGF = Participatory Planning and Group Formation.

VOD = Village Organisation and Development.

SWC = Soil and Water Conservation.

WRD = Water Resource Development.

Table AN12.14.5

GVT - Rajasthan - Banswara: Village Sundripada: Costs Economic (Rs'000).

Cost Head / Subhead	Conversion Factors		1999/00 Actual	2000/01 Actual	2001/02 Actual	2002/03 Actual	2003/04 Actual	2004/05 Budget	2005/06 Budget	Totals	
	CF	SCF								(Rs'000)	(%)
A. Administration Costs											
GVT Bhopal (PHQ)	0.90	1.00	-	54.2	67.9	60.6	47.5	60.1	55.0	345.4	9%
DFIDI Consultancy	1.00	1.00	35.9	71.4	26.9	63.2	47.4	54.7	39.2	338.6	9%
Rajasthan Coordination Office	0.90	1.00	-	115.7	132.3	114.8	154.5	135.5	129.4	782.2	21%
Total A			35.9	241.3	227.1	238.6	249.5	250.3	223.6	1,466.2	39%
B. Development Costs											
Component A											
1. PPGF	0.90	1.00	-	12.3	31.8	44.3	46.5	42.0	35.1	212.1	6%
2. VOD	0.90	1.00	-	10.9	90.3	51.5	16.4	17.9	18.3	205.2	6%
3. Crop Technology	0.90	1.00	-	-	35.2	32.9	52.0	11.3	10.3	141.8	4%
4. SWC	0.90	0.75	-	-	-	-	384.2	370.4	375.8	1,130.4	30%
5. WRD	0.90	0.75	-	-	72.3	38.6	68.5	56.2	85.7	321.3	9%
6. Livestock	0.90	1.00	-	3.3	29.0	16.5	27.9	4.7	126.6	208.0	6%
7. Forestry	0.90	1.00	-	-	7.6	7.6	4.0	8.8	5.9	33.9	1%
8. Migration Support	0.90	1.00	-	-	-	-	-	-	-	-	0%
Subtotal			-	26.5	266.3	191.5	599.5	511.3	657.6	2,252.6	61%
Other Development Costs											
Subtotal	0.90	1.00	-	-	-	-	-	-	-	-	0%
Total B			-	26.5	266.3	191.5	599.5	511.3	657.6	2,252.6	61%
Total A + B			35.9	267.8	493.4	430.1	849.0	761.6	881.2	3,718.8	100%
GVT			-	-	-	-	-	-	-	N/A	
DFIDI			-	-	-	-	-	-	-	N/A	
Community			-	-	-	-	-	-	-	N/A	
Government			-	-	-	-	-	-	-	N/A	

Source:

Cost Benefit Analysis (CBA) Study Estimate Jan 2005.

DFIDI = Department for International Development (India).
PPGF = Participatory Planning and Group Formation.
VOD = Village Organisation and Development.
SWC = Soil and Water Conservation.
WRD = Water Resource Development.

Table AN12.14.6

GVT - Rajasthan - Banswara: Village Sundripada: VOD Household Assumptions.

Without \ With Project	Units	Assumptions			Benefits		
					Year 1 (Rs)	Year 2 (Rs)	Year 3 (Rs)
Development Activity: Village Organisation and Development							
Before / Without Project Situation:							
A. Self Help Groups (SHGs)							
Assumption	Sum	Zero	Zero	Zero	-	-	-
B. Drudgery Reduction							
Assumption	Sum	Zero	Zero	Zero			
Total Without Project Benefits					-	-	-
After / With Project Situation:							
A. Self Help Groups (SHGs)							
Assumptions							
Average Household Savings	Rs	943.8					
Households (HHs)	No	80					
Present Group Deposits	Rs'000	75.5					
Annual Savings Increase	%	3%			75.5	77.8	80.1
Deposits on Loan to Members	%	25%					
SHG Interest Income	% / Year	20%					
Assumed Benefit	Rs'000				3.8	3.9	4.0
B. Drudgery Reduction							
Assumptions							
Hours Saved / Day / Household	No	1.0					
Number of Days / Year / Household	No	200					
Days / Year / Household (8hrs/day)	No	25.0					
Households / Village	No	80					
Day Equivalent / Village	No	2,000					
Economic Value per Day	(Rs/day)	25					
Assumed Benefit	Rs'000				50.0	50.0	50.0
Total With Project Benefits	Rs'000				53.8	53.9	54.0
Incremental Benefits	Rs'000				53.8	53.9	54.0

Source:

VOD = Village Organisation and Development.
Households per village: Sundripada

Cost Benefit Analysis (CBA) Study Estimate Jan 2005.

Table AN12.14.6

GVT - Rajasthan - Banswara: Village Sundripada: Incremental VOD Benefit Stream (Rs'000).

Without \ With Project	Benefit Streams (Rs '000)									
	Year 1 1999/00	Year 2 2000/01	Year 3 2001/02	Year 4 2002/03	Year 5 2003/04	Year 6 2004/05	Year 7 2005/06	Year 8 2006/07	Year 9 2007/08	Year 10 2008/09
Development Activity: Village Organisation and Development Before / Without Project Situation: A. Self Help Groups (SHGs) Assumption B. Drudgery Reduction Assumption Total Without Project Benefits	-	-	-	-	-	-	-	-	-	-
After / With Project Situation: A. Self Help Groups (SHGs) Assumptions Average Household Savings Households (HHs) Present Group Deposits Annual Savings Increase Deposits on Loan to Members SHG Interest Income Assumed Benefit B. Drudgery Reduction Assumptions Hours Saved / Day / Household Number of Days / Year / Household Days / Year / Household (8hrs/day) Households / Village Day Equivalent / Village Economic Value per Day Assumed Benefit Total With Project Benefits Incremental Benefits	-	-	-	75.5	77.8	80.1	82.5	85.0	87.5	90.2
	-	-	-	3.8	3.9	4.0	4.1	4.2	4.4	4.5
	-	-	-	50.0	50.0	50.0	50.0	50.0	50.0	50.0
	-	-	-	53.8	53.9	54.0	54.1	54.2	54.4	54.5
	-	-	-	53.8	53.9	54.0	54.1	54.2	54.4	54.5

Source:

VOD = Village Organisation and Development.
Households per village: Sundripada

Cost Benefit Analysis (CBA) Study Estimate Jan 2005.

Table AN12.14.7

GVT - Rajasthan - Banswara: Village Sundripada: Household Crop Net Margin Assumptions.

Without \ With Project	Units	Assumptions			Benefits		
					Year 1 (Rs)	Year 2 (Rs)	Year 3 (Rs)
Development Activity: Crop Technology, SWC and WRD							
Before / Without Project Situation: Assumptions							
Households (HHs)	No	80					
Crop Adoption Assumptions		100%	100%	100%			
Kharif Crop Net Margin	Rs/HH				3,152.2	3,152.2	3,152.2
Rabi Crop Net Margin	Rs/HH				790.8	790.8	790.8
Total Without Project Benefits	Rs/HH				3,943.1	3,943.1	3,943.1
After / With Project Situation: Assumptions							
Households (HHs)	No	80					
Crop Adoption Assumptions		100%	100%	100%			
Kharif Crop Net Margin	Rs/HH				9,183.1	9,183.1	9,183.1
Rabi Crop Net Margin	Rs/HH				1,822.8	1,822.8	1,822.8
Total With Project Benefits	Rs/HH				11,005.9	11,005.9	11,005.9
Incremental Benefits	Rs/HH				7,062.9	7,062.9	7,062.9

Source:

Cost Benefit Analysis (CBA) Study Estimate Jan 2005.

Table AN12.14.7

GVT - Rajasthan - Banswara: Village Sundripada: Incremental Crop Benefit Stream (Rs'000).

Without \ With Project	Benefit Streams (Rs '000)									
	Year 1 1999/00	Year 2 2000/01	Year 3 2001/02	Year 4 2002/03	Year 5 2003/04	Year 6 2004/05	Year 7 2005/06	Year 8 2006/07	Year 9 2007/08	Year 10 2008/09
Development Activity: Crop Technology, SWC and WRD										
Before / Without Project Situation:										
Assumptions										
Households (HHs)										
Crop Adoption Assumptions										
Kharif Crop Net Margin	-	-	-	-	-	-	252.2	252.2	252.2	252.2
Rabi Crop Net Margin	-	-	-	-	-	-	63.3	63.3	63.3	63.3
Total Without Project Benefits	-	-	-	-	-	-	315.4	315.4	315.4	315.4
After / With Project Situation:										
Assumptions										
Households (HHs)										
Crop Adoption Assumptions										
Kharif Crop Net Margin	-	-	-	-	-	-	734.6	734.6	734.6	734.6
Rabi Crop Net Margin	-	-	-	-	-	-	145.8	145.8	145.8	145.8
Total With Project Benefits	-	-	-	-	-	-	880.5	880.5	880.5	880.5
Incremental Benefits	-	-	-	-	-	-	565.0	565.0	565.0	565.0

Source:

Cost Benefit Analysis (CBA) Study Estimate Jan 2005.

Table AN12.14.8

GVT - Rajasthan - Banswara: Village Sundripada: Household Livestock Net Margin Assumption

Without \ With Project Livestock	Units	Assumptions			Benefits		
					Year 1 (Rs)	Year 2 (Rs)	Year 3 (Rs)
Development Activity: Livestock							
Before / Without Project Situation: Assumptions							
Households (HHs)	No	80					
Annual Livestock Net Margin	Rs/HH						
Total Without Project Benefits					1,196.7	1,196.7	1,196.7
After / With Project Situation:							
Development Activity: Assumptions							
Households (HHs)	No	80					
Adoption Assumptions	Percent	55%	78%	100%			
Annual Livestock Net Margin	Rs/HH						
Total With Project Benefits					1,927.9	2,716.6	3,505.3
Incremental Benefits	Rs/HH				731.2	1,519.9	2,308.6

Source:

Cost Benefit Analysis (CBA) Study Estimate Jan 2005.

Table AN12.14.8

GVT - Rajasthan - Banswara: Village Sundripada: Incremental Livestock Benefit Stream (Rs'000).

Without \ With Project Livestock	Benefit Streams (Rs '000)									
	Year 1 1999/00	Year 2 2000/01	Year 3 2001/02	Year 4 2002/03	Year 5 2003/04	Year 6 2004/05	Year 7 2005/06	Year 8 2006/07	Year 9 2007/08	Year 10 2008/09
Development Activity: Livestock										
Before / Without Project Situation:										
Assumptions										
Households (HHs)										
Annual Livestock Net Margin										
Total Without Project Benefits	-	-	-	-	95.7	95.7	95.7	95.7	95.7	95.7
After / With Project Situation:										
Development Activity:										
Assumptions										
Households (HHs)										
Adoption Assumptions										
Annual Livestock Net Margin										
Total With Project Benefits	-	-	-	-	154.2	217.3	280.4	280.4	280.4	280.4
Incremental Benefits	-	-	-	-	58.5	121.6	184.7	184.7	184.7	184.7

Source:

Cost Benefit Analysis (CBA) Study Estimate Jan 2005.

Table AN12.14.9

GVT - Rajasthan - Banswara: Village Sundripada: Forestry Benefit Assumptions.

Without \ With Project Forestry	Units	Assumptions			Benefits		
					Year 1 (Rs)	Year 2 (Rs)	Year 3 (Rs)
Development Activity: Forestry							
Before / Without Project Situation: Assumptions							
Households (HHs)	No	80					
Annual Forestry Net Margin	Rs/HH				-	-	-
Total Without Project Benefits							
After / With Project Situation: Assumptions							
Households (HHs)	No	80					
Adoption Assumptions	Percent	55%	78%	100%			
Annual Forestry Net Margin	Rs/HH				82.5	117.0	150.0
Total With Project Benefits							
Incremental Benefits	Rs/HH				82.5	117.0	150.0

Source:

Cost Benefit Analysis (CBA) Study Estimate Jan 2005.

Table AN12.14.9

GVT - Rajasthan - Banswara: Village Sundripada: Incremental Forestry Benefit Stream (Rs'000).

Without \ With Project Forestry	Benefit Streams (Rs '000)									
	Year 1 1999/00	Year 2 2000/01	Year 3 2001/02	Year 4 2002/03	Year 5 2003/04	Year 6 2004/05	Year 7 2005/06	Year 8 2006/07	Year 9 2007/08	Year 10 2008/09
Development Activity: Forestry										
Before / Without Project Situation: Assumptions										
Households (HHs)										
Annual Forestry Net Margin										
Total Without Project Benefits	-	-	-	-	-	-	-	-	-	-
After / With Project Situation: Assumptions										
Households (HHs)										
Adoption Assumptions										
Annual Forestry Net Margin										
Total With Project Benefits	-	-	-	6.6	9.4	12.0	12.0	12.0	12.0	12.0
Incremental Benefits	-	-	-	6.6	9.4	12.0	12.0	12.0	12.0	12.0

Source:

Cost Benefit Analysis (CBA) Study Estimate Jan 2005.

Table AN12.14.10

GVT - Rajasthan - Banswara: Village Sundripada: Migration Support Benefit Assumptions.

Without \ With Project	Assumptions			Benefits		
				Year 1 (Rs)	Year 2 (Rs)	Year 3 (Rs)
Development Activity: Migration Support						
Before / Without Project Situation:						
Assumptions						
Economic Value per Day	Rs/day	25.0				
Days / Month / Household	No	18				
Economic Value per Month	Rs/month	450.0				
Months Migration / Year	Months	4.0				
Economic Value per Household	Rs/HH	1,800.0				
Households per Village	No	-				
Households per Village Migrating	Percent	45%				
Total Without Project Benefits	Rs/Village			-	-	-
After / With Project Situation:						
Assumptions						
Economic Value per Day \1	Rs/day	25.0	25%	31.3		
Days / Month / Household	No	18	30%	24.0		
Economic Value per Month	Rs/month	450.0		750.0		
Months Migration / Year	Months	4.0	-25%	3.0		
Economic Value per Household	Rs/HH	1,800.0		2,250.0		
Households per Village	No	-		-		
Households per Village Migrating	Percent	45%	-10%	41%		
Subtotal Migration Benefits	Rs/Village				-	-
Other Income	Sum (Rs'000)	-	-	-	-	-
Total With Project Benefits	Rs/Village				-	-
Incremental Benefits	Rs/Village				-	-

Source:

Cost Benefit Analysis (CBA) Study Estimate Jan 2005.

- 1\ Financial Wages (Rs/day):
 Skill Labour - Rs 160
 Casual Labour :
 Male - Rs 40
 Female - Rs 30

Table AN12.14.10

GVT - Rajasthan - Banswara: Village Sundripada: Incremental Migration Support Benefit Stream (Rs'000).

Without \ With Project	Benefit Streams (Rs '000)									
	Year 1 1999/00	Year 2 2000/01	Year 3 2001/02	Year 4 2002/03	Year 5 2003/04	Year 6 2004/05	Year 7 2005/06	Year 8 2006/07	Year 9 2007/08	Year 10 2008/09
Development Activity: Migration Support Before / Without Project Situation: Assumptions Economic Value per Day Days / Month / Household Economic Value per Month Months Migration / Year Economic Value per Household Households per Village Households per Village Migrating Total Without Project Benefits	-	-	-	-	-	-	-	-	-	-
After / With Project Situation: Assumptions Economic Value per Day \1 Days / Month / Household Economic Value per Month Months Migration / Year Economic Value per Household Households per Village Households per Village Migrating Subtotal Migration Benefits Other Income Total With Project Benefits Incremental Benefits	-	-	-	-	-	-	-	-	-	-

Source:

Cost Benefit Analysis (CBA) Study Estimate Jan 2005.

- 1\ Financial Wages (Rs/day):
 Skill Labour - Rs 160
 Casual Labour :
 Male - Rs 40
 Female - Rs 30

Table AN12.14.11 GVT - Rajasthan - Banswara: Village Sundripada: Weighted Household Crop Net Margin Summary (Rs/Household).

Item	WBR (%)	Before / Without Project			After / With Project			Increment		
		Khalif	Rabi	Total	Khalif	Rabi	Total	Khalif	Rabi	Total
Phase II										
Well Being Ranking - Very Poor										
Household Net Margin (Rs)	5.0%	834.6	102.5	937.1	1,849.8	1,067.8	2,917.6	1,015.2	965.3	1,980.5
Well Being Ranking - Poor										
Household Net Margin (Rs)	18.0%	637.7	-	637.7	4,803.0	220.7	5,023.7	4,165.3	220.7	4,386.0
Well Being Ranking - Moderate										
Household Net Margin (Rs)	34.0%	994.0	89.3	1,083.3	3,711.4	2,508.3	6,219.6	2,717.4	2,419.0	5,136.4
Well Being Ranking - Better Off										
Household Net Margin (Rs)	43.0%	6,180.9	1,756.7	7,937.5	16,195.9	2,039.3	18,235.2	10,015.0	282.7	10,297.7
Well Being Ranking - Weighted										
Household Net Margin (Rs)	100.0%	3,152.2	790.8	3,943.1	9,183.1	1,822.8	11,005.9	6,030.9	1,032.0	7,062.9
Phase I \1										
Well Being Ranking - Very Poor										
Household Net Margin (Rs)	5.0%	436.3	267.5	703.8	3,866.5	1,668.8	5,535.3	3,430.3	1,401.3	4,831.5
Well Being Ranking - Very Poor										
Household Net Margin (Rs)	18.0%	485.8	657.5	1,143.3	10,136.0	5,690.3	15,826.3	9,650.3	5,032.8	14,683.0
Well Being Ranking - Poor										
Household Net Margin (Rs)	34.0%	986.3	3,385.0	4,371.3	9,457.5	5,195.0	14,652.5	8,471.3	1,810.0	10,281.3
Well Being Ranking - Better Off										
Household Net Margin (Rs)	43.0%	2,778.0	937.0	3,715.0	4,915.0	9,560.0	14,475.0	2,137.0	8,623.0	10,760.0
Well Being Ranking - Weighted										
Household Net Margin (Rs)	100.0%	1,639.1	1,685.5	3,324.6	7,346.8	6,984.8	14,331.6	5,707.7	5,299.2	11,006.9

Source: Study of Impact of WIRFP on Net Incomes of Target Households, Jan 2004.

WBR = GVT Household Well Being Ranking. Survey figures adjusted to Village Profile WBR.

\1 GVT - Madhya Pradesh - Phase I: Village Naganwat Choti: Weighted Household Crop Net Margin Summary.

Table AN12.14.12 GVT - Rajasthan - Banswara: Village Sundripada: Household Crop Net Margin Sensitivity Analysis.

Item	EIRR	Before / Without Project			After / With Project			Increment		
		Khalif	Rabi	Total	Khalif	Rabi	Total	Khalif	Rabi	Total
Development Activity:										
Crop Technology, SWC and WRD										
Weighted Net Margin (Phase II)										
Household Net Margin (Rs)		3,152.2	790.8	3,943.1	9,183.1	1,822.8	11,005.9	6,030.9	1,032.0	7,062.9
Incremental Benefit (Phase II / Phase I)										64%
Base Case Assumptions										
Household Net Margin (Rs)		3,152.2	790.8	3,943.1	9,183.1	1,822.8	11,005.9	6,030.9	1,032.0	7,062.9
Incremental Benefit (Phase II / Phase I)										64%
Sensitivity Increase (%)	0%									
Development Activity	19%									
Overall Village	11%									
Sensitivity Assumptions										
Household Net Margin (Rs)		3,152.2	790.8	3,943.1	9,642.3	1,914.0	11,556.2	6,490.0	1,123.1	7,613.2
Incremental Benefit (Phase II / Phase I)										69%
Sensitivity Increase (%)	0%									
Development Activity	21%									
Overall Village	12%									
Weighted Net Margin (Phase I)										
Household Net Margin (Rs)		1,639.1	1,685.5	3,324.6	7,346.8	6,984.8	14,331.6	5,707.7	5,299.2	11,006.9

Source: Cost Benefit Analysis (CBA) Study Estimate Jan 2005.

EIRR = Economic Internal Rate of Return (rate at which NPV equal to zero).

Table AN12.14.13 GVT - Rajasthan - Banswara: Village Sundripada: Weighted Household Livestock Net Margin Summary (Rs/Household).

Well Being Ranking	Weight (%)	Before / Without Project		After / With Project		Increment \1	
		Herd Value	Net Margin	Herd Value	Net Margin	Herd Value	Net Margin
Phase I - Well Being Ranking (WBR) \1							
Madhya Pradesh - WBR Weighted Data							
Very Poor	5.0%						
Average		580	(185.0)	5,650	412.5	474	597.5
Poor	18.0%						
Average		2,350	982.5	8,250	2,141.0	1,180	1,158.5
Moderate	34.0%						
Average		14,700	6,730.0	1,900	2,820.0	1,900	(3,910.0)
Better Off	43.0%						
Average		15,580	3,000.0	14,600	10,790.0	(196)	7,790.0
Phase I - WBR Weighted Data	100.0%	12,149	3,745.8	8,692	6,004.5	798	2,258.7
Phase II - Well Being Ranking (WBR)							
Very Poor	5.0%						
Average		5,756	149.2	10,970	1,446.4	1,043	1,297.2
Poor	18.0%						
Average		13,128	852.2	25,979	3,008.8	2,570	2,156.8
Moderate	34.0%						
Average		13,525	4,035.1	27,020	5,249.5	2,699	1,214.4
Better Off	43.0%						
Average		12,700	(781.7)	41,873	2,573.3	5,835	3,355.0
Phase II - WBR Weighted Data	100.0%	12,710	1,196.7	32,417	3,505.3	3,941	2,308.6

Source: Study of Impact of WIRFP on Net Incomes of Target Households, Jan 2004.

WBR = GVT Household Well Being Ranking.

Survey figures adjusted to Village Profile WBR.

\1 GVT - Madhya Pradesh - Phase I: Village Naganwat Choti: Weighted Household Livestock Net Margin Summary.

WIRFP - Phase II - Cost Benefit Analysis Study

Tables AN12.0 Individual Village Cost Benefit Analysis

Tables AN12.15 IFFDC - Rajasthan - Pratapgarh: Village Chhayana.

Table AN12.15.1 IFFDC - Rajasthan - Pratapgarh: Village Chhayana: Village Profile.

Table AN12.15.2 IFFDC - Rajasthan - Pratapgarh: Village Chhayana: Cost Benefit Analysis Summary (Rs'000).

Table AN12.15.3 IFFDC - Rajasthan - Pratapgarh: Village Chhayana: Cost Benefit Analysis Development Activity Summary A (Rs'000).

Table AN12.15.4 IFFDC - Rajasthan - Pratapgarh: Village Chhayana: Cost Benefit Analysis Development Activity Summary B (Rs'000).

Table AN12.15.5 IFFDC - Rajasthan - Pratapgarh: Village Chhayana: Costs - Financial (Rs'000).
IFFDC - Rajasthan - Pratapgarh: Village Chhayana: Costs - Economic (Rs'000).

Table AN12.15.6 IFFDC - Rajasthan - Pratapgarh: Village Chhayana: VOD Household Assumptions.
IFFDC - Rajasthan - Pratapgarh: Village Chhayana: Incremental VOD Benefit Stream (Rs'000).

Table AN12.15.7 IFFDC - Rajasthan - Pratapgarh: Village Chhayana: Household Crop Net Margin Assumptions.
IFFDC - Rajasthan - Pratapgarh: Village Chhayana: Incremental Crop Benefit Stream (Rs'000).

Table AN12.15.8 IFFDC - Rajasthan - Pratapgarh: Village Chhayana: Household Livestock Net Margin Assumptions.
IFFDC - Rajasthan - Pratapgarh: Village Chhayana: Incremental Livestock Benefit Stream (Rs'000).

Table AN12.15.9 IFFDC - Rajasthan - Pratapgarh: Village Chhayana: Forestry Benefit Assumptions.
IFFDC - Rajasthan - Pratapgarh: Village Chhayana: Incremental Forestry Benefit Stream (Rs'000).

Table AN12.15.10 IFFDC - Rajasthan - Pratapgarh: Village Chhayana: Migration Support Benefit Assumptions.
IFFDC - Rajasthan - Pratapgarh: Village Chhayana: Incremental Migration Support Benefit Stream (Rs'000).

Table AN12.15.11 IFFDC - Rajasthan - Pratapgarh: Village Chhayana: Weighted Household Crop Net Margin Summary (Rs/Household).

Table AN12.15.12 IFFDC - Rajasthan - Pratapgarh: Village Chhayana: Weighted Household Crop Net Margin Sensitivity Analysis (Rs/Household).

Table AN12.15.13 IFFDC - Rajasthan - Pratapgarh: Village Chhayana: Weighted Household Livestock Net Margin Summary (Rs/Household).

Table AN12.15.1 IFFDC - Rajasthan - Pratapgarh: Village Chhayon: Village Profile.

Village Profile \1			
A. Background			
Village Name	Chhayon		
District	Pratapgarh		
State	Rajasthan		
Participatory Planning Process (PPP)			
Village entry	Oct-99		
PRA	Dec-00		
CPA	Dec-00		
B. Infrastructure			
Hand Pumps (no)	8		
Wells (no)	25		
Linked by Road	1 km		
Electrification	Yes		
School	Primary		
C. Demographic Data			
Households (no)	104		
Participating Households	60		
Population (Adults)	642		
Adults:			
Male	260		
Female	382		
Children:			
Boys	N/A		
Girls	N/A		
D. Well Being Ranking (No Households)			
Very Poor	31	29.8%	
Poor	32	30.8%	
Moderate	27	26.0%	
Better Off	14	13.5%	
Total	104	100%	
E. Land Resource (ha)			
Total Area		448	
Revenue Land (unused)		38	
Forest Area - Revenue		149	
Pasture Land		-	
Arable Land		132	
		319	
F. Livestock			
Oxen	N/A		
Cows	N/A		
Buffalo	N/A		
Goats	N/A		
Poultry	N/A		
G. Self Help Groups (No Households)			
1	Group 1	12	
2	Group 2	16	
3	Group 3	12	
4	Group 4	13	
5	Group 5	9	
6	Group 6	9	
	Total Memberhip	71	

Source: IFFDC Pratapgarh Coordination Office - Rajasthan.

\1 Subject to final adjustment following consolidation exercise prior to Annual Review Meeting (ARM) in Feb 2005.

Table AN12.15.2 IFFDC - Rajasthan - Pratapgarh: Village Chhayana: Cost Benefit Analysis Summary (Rs'000).

Administration Costs / Development Activity	EIRR ¹	NPV ²		Year 1 1999/00	Year 2 2000/01	Year 3 2001/02	Year 4 2002/03	Year 5 2003/04	Year 6 2004/05	Year 7 2005/06	Year 8 2006/07	Year 9 2007/08	Year 10 2008/09
		(10%)	(%)										
A. Administration Costs													
Total A	N/A	(1,449)	60%	237.1	209.8	199.3	366.6	388.0	389.3	373.8	37.4	37.4	37.4
B. Development Intervention Component A													
1. PPGF													
Net Incremental Benefits	N/A	(42)	2%	(6.7)	(3.5)	(9.9)	(16.0)	(6.6)	(7.3)	(9.7)	(1.4)	(1.4)	(1.4)
2. VOD													
Net Incremental Benefits	13%	7	0%	-	-	(11.2)	(17.3)	35.1	7.3	(248.7)	38.5	39.2	39.9
3/5. Crop Technology, SWC and WRD													
Net Incremental Benefits	N/A	(1,300)	54%	-	(0.9)	(349.8)	(735.7)	(634.8)	(152.1)	(156.6)	(25.6)	(25.6)	(25.6)
6. Livestock													
Net Incremental Benefits	77%	348	-14%	-	(7.6)	(4.2)	(23.1)	(13.7)	61.2	96.7	104.8	104.8	104.8
7. Forestry													
Net Incremental Benefits	28%	27	-1%	-	(8.0)	(2.0)	(7.2)	(9.9)	9.7	8.5	12.5	12.5	12.5
8. Migration Support													
Net Incremental Benefits	N/A	-	0%	-	-	-	-	-	-	-	-	-	-
Summary													
Net Incremental Benefits	N/A	(2,408)	100%	(243.8)	(229.8)	(576.4)	(1,165.9)	(1,017.9)	(470.6)	(683.6)	91.4	92.1	92.9
Sensitivity Analysis													
Analysis Period													
12 Years	N/A	(2,527)											
20 Years (Base Case)	N/A	(2,408)											
25 Years	N/A	(2,374)											
30 Years	N/A	(2,354)											
Costs - Administration													
Investment Costs Decreased by 20 percent	N/A	(2,118)											
Costs - Administration and Development													
Recurrent Costs Increased by 20 percent	N/A	(2,703)											
Benefits - Crops, SWC and WRD													
Crop Benefits Increased by 20 percent	N/A	(2,130)											
Livestock Benefits Increased by 20 percent	N/A	(2,272)											

Source: Cost Benefit Analysis (CBA) Study Estimate Jan 2005.

¹ EIRR = Economic Internal Rate of Return (rate at which NPV equal to zero).

² NPV = Net Present Value of net incremental benefits at 12% (indicative opportunity cost of capital for rural development projects in India).

N/A = Not analysed as EIRR negative.

Table AN12.15.3 IFFDC - Rajasthan - Pratapgarh: Village Chhayan: Cost Benefit Analysis Development Activity Summary A (Rs'000).

Administration Costs / Development Activity	EIRR ¹	NPV ²		Year 1 1999/00	Year 2 2000/01	Year 3 2001/02	Year 4 2002/03	Year 5 2003/04	Year 6 2004/05	Year 7 2005/06	Year 8 2006/07	Year 9 2007/08	Year 10 2008/09
		(10%)	(%)										
A. Administration Costs													
Investment				237.1	209.8	199.3	366.6	388.0	389.3	373.8	-	-	-
Recurrent				-	-	-	-	-	-	-	37.4	37.4	37.4
Total A	N/A	(1,449)	60%	237.1	209.8	199.3	366.6	388.0	389.3	373.8	37.4	37.4	37.4
B. Development Intervention Component A													
1. PPGF													
Cost Stream													
Investment				6.7	3.3	9.6	15.5	5.7	6.3	8.6	-	-	-
Recurrent				-	0.2	0.3	0.5	0.9	1.0	1.2	1.4	1.4	1.4
Total Costs				6.7	3.5	9.9	16.0	6.6	7.3	9.7	1.4	1.4	1.4
Benefit Stream													
Before / Without Project				-	-	-	-	-	-	-	-	-	-
After / With Project				-	-	-	-	-	-	-	-	-	-
Incremental Benefits				-	-	-	-	-	-	-	-	-	-
Net Incremental Benefits	N/A	(42)	2%	(6.7)	(3.5)	(9.9)	(16.0)	(6.6)	(7.3)	(9.7)	(1.4)	(1.4)	(1.4)
2. VOD													
Cost Stream													
Investment				-	-	11.2	75.3	19.8	47.3	301.5	-	-	-
Recurrent				-	-	-	0.6	4.3	5.3	7.7	22.7	22.7	22.7
Total Costs				-	-	11.2	75.8	24.1	52.6	309.2	22.7	22.7	22.7
Benefit Stream													
Before / Without Project				-	-	-	-	-	-	-	-	-	-
After / With Project				-	-	-	58.6	59.2	59.8	60.5	61.2	61.9	62.6
Incremental Benefits				-	-	-	58.6	59.2	59.8	60.5	61.2	61.9	62.6
Net Incremental Benefits	13%	7	0%	-	-	(11.2)	(17.3)	35.1	7.3	(248.7)	38.5	39.2	39.9
3/5. Crop Technology, SWC and WRD													
Cost Stream													
Investment													
Crop Technology				-	0.9	1.1	7.8	45.6	14.9	16.2	-	-	-
Soil Water Conservation				-	-	33.1	42.8	29.0	13.5	16.9	-	-	-
Water Resource Development				-	-	315.6	633.5	685.7	141.8	118.1	-	-	-
Recurrent													
Crop Technology				-	-	0.0	0.1	0.2	1.4	1.8	2.2	2.2	2.2
Soil Water Conservation				-	-	-	4.1	9.5	13.1	14.8	16.9	16.9	16.9
Water Resource Development				-	-	-	47.3	142.4	245.2	266.5	284.2	284.2	284.2
Total Costs				-	0.9	349.8	735.7	912.4	429.8	434.2	303.3	303.3	303.3
Benefit Stream													
Before / Without Project				-	-	-	-	107.5	107.5	107.5	107.5	107.5	107.5
After / With Project				-	-	-	-	385.2	385.2	385.2	385.2	385.2	385.2
Incremental Benefits				-	-	-	-	277.7	277.7	277.7	277.7	277.7	277.7
Net Incremental Benefits	N/A	(1,300)	54%	-	(0.9)	(349.8)	(735.7)	(634.8)	(152.1)	(156.6)	(25.6)	(25.6)	(25.6)

Source: Cost Benefit Analysis (CBA) Study Estimate Jan 2005.

¹ EIRR = Economic Internal Rate of Return (rate at which NPV equal to zero).

² NPV = Net Present Value of net incremental benefits at 12% (indicative opportunity cost of capital for rural development projects in India).

N/A = Not analysed as EIRR negative.

Table AN12.15.4 IFFDC - Rajasthan - Pratapgarh: Village Chhayan: Cost Benefit Analysis Development Activity Summary B (Rs'000).

Administration Costs / Development Activity	EIRR \1	NPV \2		Year 1 1999/00	Year 2 2000/01	Year 3 2001/02	Year 4 2002/03	Year 5 2003/04	Year 6 2004/05	Year 7 2005/06	Year 8 2006/07	Year 9 2007/08	Year 10 2008/09
		(10%)	(%)										
6. Livestock													
Cost Stream													
Investment				-	7.6	3.5	22.0	38.5	2.3	9.0	-	-	-
Recurrent				-	-	0.8	1.1	3.3	7.2	7.4	8.3	8.3	8.3
Total Costs				-	7.6	4.2	23.1	41.8	9.4	16.4	8.3	8.3	8.3
Benefit Stream													
Before / Without Project				-	-	-	-	75.8	75.8	75.8	75.8	75.8	75.8
After / With Project				-	-	-	-	103.9	146.4	188.9	188.9	188.9	188.9
Incremental Benefits				-	-	-	-	28.1	70.6	113.1	113.1	113.1	113.1
Net Incremental Benefits	77%	348	-14%	-	(7.6)	(4.2)	(23.1)	(13.7)	61.2	96.7	104.8	104.8	104.8
7. Forestry													
Cost Stream													
Investment				-	8.0	1.2	16.2	21.4	3.6	4.5	-	-	-
Recurrent				-	-	0.8	0.9	2.5	4.7	5.0	5.5	5.5	5.5
Total Costs				-	8.0	2.0	17.1	23.9	8.3	9.5	5.5	5.5	5.5
Benefit Stream													
Before / Without Project				-	-	-	-	-	-	-	-	-	-
After / With Project				-	-	-	9.9	14.0	18.0	18.0	18.0	18.0	18.0
Incremental Benefits				-	-	-	9.9	14.0	18.0	18.0	18.0	18.0	18.0
Net Incremental Benefits	28%	27	-1%	-	(8.0)	(2.0)	(7.2)	(9.9)	9.7	8.5	12.5	12.5	12.5
8. Migration Support													
Cost Stream													
Investment				-	-	-	-	-	-	-	-	-	-
Recurrent				-	-	-	-	-	-	-	-	-	-
Total Costs				-	-	-	-	-	-	-	-	-	-
Benefit Stream													
Before / Without Project				-	-	-	-	-	-	-	-	-	-
After / With Project				-	-	-	-	-	-	-	-	-	-
Incremental Benefits				-	-	-	-	-	-	-	-	-	-
Net Incremental Benefits	N/A	-	0%	-	-	-	-	-	-	-	-	-	-
Summary													
Cost Stream													
Investment				243.8	229.6	574.5	1,179.8	1,233.7	618.8	848.6	-	-	-
Recurrent				-	0.2	1.8	54.6	163.2	277.9	304.3	378.6	378.6	378.6
Total Costs				243.8	229.8	576.4	1,234.4	1,396.9	896.7	1,152.9	378.6	378.6	378.6
Benefit Stream													
Before / Without Project				-	-	-	-	183.4	183.4	183.4	183.4	183.4	183.4
After / With Project				-	-	-	68.5	562.4	609.5	652.7	653.4	654.1	654.8
Incremental Benefits				-	-	-	68.5	379.0	426.1	469.3	470.0	470.7	471.5
Net Incremental Benefits	N/A	(2,408)	100%	(243.8)	(229.8)	(576.4)	(1,165.9)	(1,017.9)	(470.6)	(683.6)	91.4	92.1	92.9

Source: Cost Benefit Analysis (CBA) Study Estimate Jan 2005.

Table AN12.15.5

IFFDC - Rajasthan - Pratapgarh: Village Chhayan: Costs - Financial (Rs'000).

Cost Head / Subhead	1999/00	2000/01	2001/02	2002/03	2003/04	2004/05	2005/06	Total	
	Actual	Actual	Actual	Actual	Actual	Budget	Budget	(Rs'000)	(%)
A. Administration Costs									
IFFDC Head Quarters	106.0	46.3	47.3	84.7	53.8	47.2	47.2	432.5	7%
DFIDI	35.9	71.4	26.9	63.2	47.4	54.7	39.2	338.6	5%
Pratapgarh Coordination Office	117.6	107.5	144.2	252.5	324.6	324.6	324.6	1,595.6	26%
Total A	259.5	225.1	218.4	400.3	425.8	426.5	411.0	2,366.7	38%
B. Development Costs									
Component A									
1. PPG	7.4	3.7	10.7	17.3	6.4	7.0	9.5	62.0	1%
2. VOD	-	-	12.4	83.6	22.0	52.5	335.0	505.5	8%
3. Crop	-	1.0	1.2	8.7	50.7	16.5	18.0	96.1	2%
4. SWC	-	-	49.0	63.4	42.9	20.0	25.0	200.3	3%
5. WRD	-	-	467.6	938.6	1,015.9	210.0	175.0	2,807.0	45%
6. Livestock	-	8.5	3.9	24.5	42.8	2.5	10.0	92.1	1%
7. Forestry	-	8.9	1.4	18.0	23.7	4.0	5.0	61.0	1%
8. Migration Support	-	-	-	-	-	-	-	-	0%
Subtotal	7.4	22.1	546.1	1,154.0	1,204.4	312.5	577.5	3,824.0	62%
Other Development Costs									
Subtotal	-	-	-	-	-	-	-	-	0%
Total B	7.4	22.1	546.1	1,154.0	1,204.4	312.5	577.5	3,824.0	62%
Total A + B	266.9	247.2	764.5	1,554.3	1,630.2	739.0	988.5	6,190.7	100%

Source:

IFFDC Pratapgarh Coordination Office - Rajasthan.

DFIDI = Department for International Development (India).

PPG = Participatory Planning and Group Formation.

VOD = Village Organisation and Development.

SWC = Soil and Water Conservation.

WRD = Water Resource Development.

Table AN12.15.5

IFFDC - Rajasthan - Pratapgarh: Village Chhayon: Costs - Economic (Rs'000).

Cost Head / Subhead	Conversion Factors		1999/00	2000/01	2001/02	2002/03	2003/04	2004/05	2005/06	Total	
	CF	SCF	Actual	Actual	Actual	Actual	Actual	Budget	Budget	(Rs'000)	(%)
A. Administration Costs											
IFFDC Head Quarters	0.90	1.00	95.4	41.6	42.5	76.2	48.4	42.5	42.5	389.2	8%
DFIDI	1.00	1.00	35.9	71.4	26.9	63.2	47.4	54.7	39.2	338.6	7%
Pratapgarh Coordination Office	0.90	1.00	105.9	96.7	129.8	227.2	292.1	292.1	292.1	1,436.0	29%
Total A			237.1	209.8	199.3	366.6	388.0	389.3	373.8	2,163.9	44%
B. Development Costs											
Component A											
1. PPG	0.90	1.00	6.7	3.3	9.6	15.5	5.7	6.3	8.6	55.8	1%
2. VOD	0.90	1.00	-	-	11.2	75.3	19.8	47.3	301.5	454.9	9%
3. Crop	0.90	1.00	-	0.9	1.1	7.8	45.6	14.9	16.2	86.5	2%
4. SWC	0.90	0.75	-	-	33.1	42.8	29.0	13.5	16.9	135.2	3%
5. WRD	0.90	0.75	-	-	315.6	633.5	685.7	141.8	118.1	1,894.7	38%
6. Livestock	0.90	1.00	-	7.6	3.5	22.0	38.5	2.3	9.0	82.9	2%
7. Forestry	0.90	1.00	-	8.0	1.2	16.2	21.4	3.6	4.5	54.9	1%
8. Migration Support	0.90	1.00	-	-	-	-	-	-	-	-	0%
Subtotal			6.7	19.9	375.3	813.2	845.7	229.5	474.8	2,764.9	56%
Other Development Costs											
Subtotal	0.90	1.00	-	-	-	-	-	-	-	-	0%
Total B			6.7	19.9	375.3	813.2	845.7	229.5	474.8	2,764.9	56%
Total A + B			243.8	229.6	574.5	1,179.8	1,233.7	618.8	848.6	4,928.8	100%

Source:

Cost Benefit Analysis (CBA) Study Estimate Jan 2005.

DFIDI = Department for International Development (India).

PPG = Participatory Planning and Group Formation.

VOD = Village Organisation and Development.

SWC = Soil and Water Conservation.

WRD = Water Resource Development.

Table AN12.15.6

IFFDC - Rajasthan - Pratapgarh: Village Chhayan: VOD Household Assumptions.

Without \ With Project	Units	Assumptions			Benefits		
					Year 1 (Rs)	Year 2 (Rs)	Year 3 (Rs)
Development Activity: Village Organisation and Development							
Before / Without Project Situation:							
A. Self Help Groups (SHGs)							
Assumption	Sum	Zero	Zero	Zero	-	-	-
B. Drudgery Reduction							
Assumption	Sum	Zero	Zero	Zero			
Total Without Project Benefits					-	-	-
After / With Project Situation:							
A. Self Help Groups (SHGs)							
Assumptions							
Average Saving / Household	Rs	2,463					
Households / Village	No	60					
Present Group Deposits	Rs'000	147.8			147.8	152.2	156.8
Annual Savings Increase	%	3%					
Deposit on Loan to Members	%	95%					
SHG Interest Income	% / Year	15%					
Assumed Benefit	Rs'000				21.1	21.7	22.3
B. Drudgery Reduction							
Assumptions							
Hours Saved / Day / Household	No	1.0					
Number of Days / Year / Household	No	200					
Days / Year / Household (8hrs/day)	No	25.0					
Households / Village	No	60					
Day Equivalent / Village	No	1,500					
Economic Value per Day	(Rs/day)	25					
Assumed Benefit	Rs'000				37.5	37.5	37.5
Total With Project Benefits	Rs'000				58.6	59.2	59.8
Incremental Benefits	Rs'000				58.6	59.2	59.8

Source:

VOD = Village Organisation and Development.
Participating households per village: Moti Kheri

Cost Benefit Analysis (CBA) Study Estimate Jan 2005.

Table AN12.15.6

IFFDC - Rajasthan - Pratappgarh: Village Chhayon: Incremental VOD Benefit Stream (Rs'000).

Without \ With Project	Benefit Streams (Rs '000)									
	Year 1 1999/00	Year 2 2000/01	Year 3 2001/02	Year 4 2002/03	Year 5 2003/04	Year 6 2004/05	Year 7 2005/06	Year 8 2006/07	Year 9 2007/08	Year 10 2008/09
Development Activity: Village Organisation and Development Before / Without Project Situation: A. Self Help Groups (SHGs) Assumption B. Drudgery Reduction Assumption Total Without Project Benefits	-	-	-	-	-	-	-	-	-	-
After / With Project Situation: A. Self Help Groups (SHGs) Assumptions Average Saving / Household Households / Village Present Group Deposits Annual Savings Increase Deposit on Loan to Members SHG Interest Income Assumed Benefit B. Drudgery Reduction Assumptions Hours Saved / Day / Household Number of Days / Year / Household Days / Year / Household (8hrs/day) Households / Village Day Equivalent / Village Economic Value per Day Assumed Benefit Total With Project Benefits Incremental Benefits	-	-	-	147.8	152.2	156.8	161.5	166.4	171.3	176.5
	-	-	-	21.1	21.7	22.3	23.0	23.7	24.4	25.1
	-	-	-	37.5	37.5	37.5	37.5	37.5	37.5	37.5
	-	-	-	58.6	59.2	59.8	60.5	61.2	61.9	62.6
	-	-	-	58.6	59.2	59.8	60.5	61.2	61.9	62.6

Source:

VOD = Village Organisation and Development.
Participating households per village: Moti Kheri

Cost Benefit Analysis (CBA) Study Estimate Jan 2005.

Table AN12.15.7

IFFDC - Rajasthan - Pratapgarh: Village Chhayan: Household Crop Net Margin Assumptions.

Without \ With Project	Units	Assumptions			Benefits		
					Year 1 (Rs/HH)	Year 2 (Rs/HH)	Year 3 (Rs/HH)
Development Activity: Crop Technology, SWC and WRD							
Before / Without Project Situation:							
Assumptions							
Households (HHs)	No	60					
Crop Adoption Assumptions		100%	100%	100%			
Kharif Crop Net Margin	Rs/HH				1,510.0	1,510.0	1,510.0
Rabi Crop Net Margin	Rs/HH				282.3	282.3	282.3
Total Without Project Benefits	Rs/HH				1,792.3	1,792.3	1,792.3
After / With Project Situation:							
Assumptions							
Households (HHs)	No	60					
Crop Adoption Assumptions		100%	100%	100%			
Kharif Crop Net Margin	Rs/HH				5,114.3	5,114.3	5,114.3
Rabi Crop Net Margin	Rs/HH				1,306.0	1,306.0	1,306.0
Total With Project Benefits	Rs/HH				6,420.3	6,420.3	6,420.3
Incremental Benefits	Rs/HH				4,627.9	4,627.9	4,627.9

Source:

Cost Benefit Analysis (CBA) Study Estimate Jan 2005.

Table AN12.15.7

IFFDC - Rajasthan - Pratappgarh: Village Chhayana: Incremental Crop Benefit Stream (Rs'000).

Without \ With Project	Benefit Streams (Rs '000)									
	Year 1 1999/00	Year 2 2000/01	Year 3 2001/02	Year 4 2002/03	Year 5 2003/04	Year 6 2004/05	Year 7 2005/06	Year 8 2006/07	Year 9 2007/08	Year 10 2008/09
Development Activity: Crop Technology, SWC and WRD										
Before / Without Project Situation:										
Assumptions										
Households (HHs)										
Crop Adoption Assumptions										
Kharif Crop Net Margin	-	-	-	-	90.6	90.6	90.6	90.6	90.6	90.6
Rabi Crop Net Margin	-	-	-	-	16.9	16.9	16.9	16.9	16.9	16.9
Total Without Project Benefits	-	-	-	-	107.5	107.5	107.5	107.5	107.5	107.5
After / With Project Situation:										
Assumptions										
Households (HHs)										
Crop Adoption Assumptions										
Kharif Crop Net Margin	-	-	-	-	306.9	306.9	306.9	306.9	306.9	306.9
Rabi Crop Net Margin	-	-	-	-	78.4	78.4	78.4	78.4	78.4	78.4
Total With Project Benefits	-	-	-	-	385.2	385.2	385.2	385.2	385.2	385.2
Incremental Benefits	-	-	-	-	277.7	277.7	277.7	277.7	277.7	277.7

Source:

Cost Benefit Analysis (CBA) Study Estimate Jan 2005.

Table AN12.15.8

IFFDC - Rajasthan - Pratapgarh: Village Chhayan: Household Livestock Net Margin Assumption

Without \ With Project Livestock	Units	Assumptions			Benefits		
					Year 1 (Rs)	Year 2 (Rs)	Year 3 (Rs)
Development Activity: Livestock							
Before / Without Project Situation: Assumptions							
Households (HHs)	No	60					
Annual Livestock Net Margin	Rs/HH						
Total Without Project Benefits					1,263.6	1,263.6	1,263.6
After / With Project Situation:							
Development Activity: Assumptions							
Households (HHs)	No	60					
Adoption Assumptions	Percent	55%	78%	100%			
Annual Livestock Net Margin	Rs/HH						
Total With Project Benefits					1,732.0	2,440.5	3,149.1
Incremental Benefits	Rs/HH				468.4	1,176.9	1,885.4

Source:

Cost Benefit Analysis (CBA) Study Estimate Jan 2005.

Table AN12.15.8

IFFDC - Rajasthan - Pratappgarh: Village Chhayan: Incremental Livestock Benefit Stream (Rs'000).

Without \ With Project Livestock	Benefit Streams (Rs '000)									
	Year 1 1999/00	Year 2 2000/01	Year 3 2001/02	Year 4 2002/03	Year 5 2003/04	Year 6 2004/05	Year 7 2005/06	Year 8 2006/07	Year 9 2007/08	Year 10 2008/09
Development Activity: Livestock										
Before / Without Project Situation:										
Assumptions										
Households (HHs)										
Annual Livestock Net Margin										
Total Without Project Benefits	-	-	-	-	75.8	75.8	75.8	75.8	75.8	75.8
After / With Project Situation:										
Development Activity:										
Assumptions										
Households (HHs)										
Adoption Assumptions										
Annual Livestock Net Margin										
Total With Project Benefits	-	-	-	-	103.9	146.4	188.9	188.9	188.9	188.9
Incremental Benefits	-	-	-	28.1	70.6	113.1	113.1	113.1	113.1	113.1

Source:

Cost Benefit Analysis (CBA) Study Estimate Jan 2005.

Table AN12.15.9

IFFDC - Rajasthan - Pratapgarh: Village Chhayan: Forestry Benefit Assumptions.

Without \ With Project Forestry	Units	Assumptions			Benefits		
					Year 1 (Rs)	Year 2 (Rs)	Year 3 (Rs)
Development Activity: Forestry							
Before / Without Project Situation:							
Assumptions							
Households (HHs)	No	60					
Annual Forestry Net Margin	Rs/HH						
Total Without Project Benefits					-	-	-
After / With Project Situation:							
Assumptions							
Households (HHs)	No	60					
Adoption Assumptions	Percent	55%	78%	100%			
Annual Forestry Net Margin	Rs/HH						
Total With Project Benefits					165.0	234.0	300.0
Incremental Benefits	Rs/HH				165.0	234.0	300.0

Source:

Cost Benefit Analysis (CBA) Study Estimate Jan 2005.

Table AN12.15.9

IFFDC - Rajasthan - Pratappgarh: Village Chhayan: Incremental Forestry Benefit Stream (Rs'000).

Without \ With Project Forestry	Benefit Streams (Rs '000)									
	Year 1 1999/00	Year 2 2000/01	Year 3 2001/02	Year 4 2002/03	Year 5 2003/04	Year 6 2004/05	Year 7 2005/06	Year 8 2006/07	Year 9 2007/08	Year 10 2008/09
Development Activity: Forestry										
Before / Without Project Situation: Assumptions										
Households (HHs)										
Annual Forestry Net Margin										
Total Without Project Benefits	-	-	-	-	-	-	-	-	-	-
After / With Project Situation: Assumptions										
Households (HHs)										
Adoption Assumptions										
Annual Forestry Net Margin										
Total With Project Benefits	-	-	-	9.9	14.0	18.0	18.0	18.0	18.0	18.0
Incremental Benefits	-	-	-	9.9	14.0	18.0	18.0	18.0	18.0	18.0

Source:

Cost Benefit Analysis (CBA) Study Estimate Jan 2005.

Table AN12.15.10

IFFDC - Rajasthan - Pratapgarh: Village Chhayan: Migration Support Benefit Assumptions.

Without \ With Project	Assumptions			Benefits		
				Year 1 (Rs)	Year 2 (Rs)	Year 3 (Rs)
Development Activity: Migration Support						
Before / Without Project Situation: Assumptions						
Economic Value per Day	Rs/day	25.0				
Days / Month / Household	No	-				
Economic Value per Month	Rs/month	-				
Months Migration / Year	Months	4.0				
Economic Value per Household	Rs/HH	-				
Households per Village	No	60				
Households per Village Migrating	Percent	45%				
Total Without Project Benefits	Rs/Village			-	-	-
After / With Project Situation: Assumptions						
Economic Value per Day \1	Rs/day	25.0	30%	32.5		
Days / Month / Household	No	-	30%	-		
Economic Value per Month	Rs/month	-		-		
Months Migration / Year	Months	4.0	-20%	3.2		
Economic Value per Household	Rs/HH	-		-		
Households per Village	No	60		60		
Households per Village Migrating	Percent	45%	-20%	36%		
Subtotal Migration Income	Rs/Village				-	-
Other Income	Sum (Rs)	-	-	-	-	-
Total With Project Benefits	Rs/Village				-	-
Incremental Benefits	Rs/Village				-	-

Source:

Cost Benefit Analysis (CBA) Study Estimate Jan 2005.

- 1\ Financial Wages (Rs/day):
 - Skill Labour - Rs 160
 - Casual Labour :
 - Male - Rs 40
 - Female - Rs 30

Table AN12.15.10

IFFDC - Rajasthan - Pratappgarh: Village Chhayan: Incremental Migration Support Benefit Stream (Rs'000).

Without \ With Project	Benefit Streams (Rs '000)									
	Year 1 1999/00	Year 2 2000/01	Year 3 2001/02	Year 4 2002/03	Year 5 2003/04	Year 6 2004/05	Year 7 2005/06	Year 8 2006/07	Year 9 2007/08	Year 10 2008/09
Development Activity: Migration Support Before / Without Project Situation: Assumptions Economic Value per Day Days / Month / Household Economic Value per Month Months Migration / Year Economic Value per Household Households per Village Households per Village Migrating Total Without Project Benefits	-	-	-	-	-	-	-	-	-	-
After / With Project Situation: Assumptions Economic Value per Day \1 Days / Month / Household Economic Value per Month Months Migration / Year Economic Value per Household Households per Village Households per Village Migrating Subtotal Migration Income Other Income Total With Project Benefits Incremental Benefits	-	-	-	-	-	-	-	-	-	-

Source:

Cost Benefit Analysis (CBA) Study Estimate Jan 2005.

- 1\ Financial Wages (Rs/day):
 Skill Labour - Rs 160
 Casual Labour :
 Male - Rs 40
 Female - Rs 30

Table AN12.15.11 IFFDC - Rajasthan - Pratapgarh: Village Chhayana: Weighted Household Crop Net Margin Summary (Rs/Household).

Item	WBR (%)	Before / Without Project			After / With Project			Increment		
		Khalif	Rabi	Total	Khalif	Rabi	Total	Khalif	Rabi	Total
Phase II										
Well Being Ranking - Very Poor Household Net Margin (Rs)	30.0%	834.6	102.5	937.1	1,849.8	1,067.8	2,917.6	1,015.2	965.3	1,980.5
Well Being Ranking - Very Poor Household Net Margin (Rs)	31.0%	637.7	-	637.7	4,803.0	220.7	5,023.7	4,165.3	220.7	4,386.0
Well Being Ranking - Poor Household Net Margin (Rs)	26.0%	994.0	89.3	1,083.3	3,711.4	2,508.3	6,219.6	2,717.4	2,419.0	5,136.4
Well Being Ranking - Better Off Household Net Margin (Rs)	13.0%	6,180.9	1,756.7	7,937.5	16,195.9	2,039.3	18,235.2	10,015.0	282.7	10,297.7
Well Being Ranking - Weighted Household Net Margin (Rs)	100%	1,510.0	282.3	1,792.3	5,114.3	1,306.0	6,420.3	3,604.3	1,023.7	4,627.9
Phase I \1										
Well Being Ranking - Very Poor Household Net Margin (Rs)	30.0%	436.3	267.5	703.8	3,866.5	1,668.8	5,535.3	3,430.3	1,401.3	4,831.5
Well Being Ranking - Very Poor Household Net Margin (Rs)	31.0%	485.8	657.5	1,143.3	10,136.0	5,690.3	15,826.3	9,650.3	5,032.8	14,683.0
Well Being Ranking - Poor Household Net Margin (Rs)	26.0%	986.3	3,385.0	4,371.3	9,457.5	5,195.0	14,652.5	8,471.3	1,810.0	10,281.3
Well Being Ranking - Better Off Household Net Margin (Rs)	13.0%	2,778.0	937.0	3,715.0	4,915.0	9,560.0	14,475.0	2,137.0	8,623.0	10,760.0
Well Being Ranking - Weighted Household Net Margin (Rs)	100%	899.0	1,286.0	2,185.0	7,400.0	4,858.1	12,258.1	6,501.0	3,572.1	10,073.1

Source: IFFDC Pratapgarh Coordination Office - Rajasthan.

WBR = IFFDC Household Well Being Ranking. Survey figures adjusted to Village Profile WBR.

\1 GVT - Madhya Pradesh - Phase I: Village Naganwat Choti: Weighted Household Crop Net Margin Summary.

Table AN12.15.12 IFFDC - Rajasthan - Pratapgarh: Village Chhayan: Weighted Household Crop Net Margin Sensitivity Analysis (Rs/Household).

Item	EIRR	Before / Without Project			After / With Project			Increment		
		Khalif	Rabi	Total	Khalif	Rabi	Total	Khalif	Rabi	Total
Development Activity:										
Crop Technology, SWC and WRD										
Weighted Net Margin (Phase II)										
Household Net Margin (Rs)		1,510.0	282.3	1,792.3	5,114.3	1,306.0	6,420.3	3,604.3	1,023.7	4,627.9
Incremental Benefit (Phase II / Phase I)										46%
Base Case Assumptions										
Household Net Margin (Rs)		1,510.0	282.3	1,792.3	5,114.3	1,306.0	6,420.3	3,604.3	1,023.7	4,627.9
Incremental Benefit (Phase II / Phase I)										46%
Sensitivity Increase (%)	0%									
Development Activity										
Overall Village										
Sensitivity Assumptions										
Household Net Margin (Rs)		1,510.0	282.3	1,792.3	13,808.5	3,526.2	17,334.7	12,298.5	3,243.9	15,542.4
Incremental Benefit (Phase II / Phase I)										154%
Sensitivity Increase (%)	0%									
Development Activity										
Overall Village										
Weighted Net Margin (Phase I)										
Household Net Margin (Rs)		899.0	1,286.0	2,185.0	7,400.0	4,858.1	12,258.1	6,501.0	3,572.1	10,073.1

Source: IFFDC Pratapgarh Coordination Office - Rajasthan.

EIRR = Economic Internal Rate of Return (rate at which NPV equal to zero).

Table AN12.15.13 IFFDC - Rajasthan - Pratapgarh: Village Chhayana: Weighted Household Livestock Net Margin Summary (Rs/Household).

Well Being Ranking	Weight (%)	Before / Without Project		After / With Project		Increment \1	
		Herd Value	Net Margin	Herd Value	Net Margin	Herd Value	Net Margin
Phase I - Well Being Ranking (WBR) \1							
Madhya Pradesh - WBR Weighted Data							
Very Poor	16.0%						
Average		580	(185.0)	5,650	412.5	474	597.5
Poor	63.0%						
Average		2,350	982.5	8,250	2,141.0	1,180	1,158.5
Moderate	18.0%						
Average		14,700	6,730.0	1,900	2,820.0	1,900	(3,910.0)
Better Off	3.0%						
Average		15,580	3,000.0	14,600	10,790.0	(196)	7,790.0
Phase I - WBR Weighted Data	100.0%	4,687	1,890.8	6,882	2,246.1	1,155	355.4
Phase II - Well Being Ranking (WBR)							
Very Poor	16.0%						
Average		5,756	149.2	10,970	1,446.4	1,043	1,297.2
Poor	63.0%						
Average		13,128	852.2	25,979	3,008.8	2,570	2,156.8
Moderate	18.0%						
Average		13,525	4,035.1	27,020	5,249.5	2,699	1,214.4
Better Off	3.0%						
Average		12,700	(781.7)	41,873	2,573.3	5,835	3,355.0
Phase II - WBR Weighted Data	100.0%	12,007	1,263.6	24,242	3,149.1	2,447	1,885.6

Source: Subject to final adjustment following consolidation exercise prior to Annual Review Meeting (ARM) in Feb 2005.

WBR = IFFDC Household Well Being Ranking.

Survey figures adjusted to Village Profile WBR.

\1 GVT - Madhya Pradesh - Phase I: Village Naganwat Choti: Weighted Household Livestock Net Margin Summary.

WIRFP - Phase II - Cost Benefit Analysis Study

Tables AN12.0 Individual Village Cost Benefit Analysis

Tables AN12.0 IFFDC - Rajasthan - Pratapgarh: Village Chhota Mayanga.

- Table AN12.16.1 IFFDC - Rajasthan - Pratapgarh: Village Chhota Mayanga: Village Profile.
- Table AN12.16.2 IFFDC - Rajasthan - Pratapgarh: Village Chhota Mayanga: Cost Benefit Analysis Summary (Rs'000).
- Table AN12.16.3 IFFDC - Rajasthan - Pratapgarh: Village Chhota Mayanga: Cost Benefit Analysis Development Activity Summary A (Rs'000).
- Table AN12.16.4 IFFDC - Rajasthan - Pratapgarh: Village Chhota Mayanga: Cost Benefit Analysis Development Activity Summary B (Rs'000).
- Table AN12.16.5 IFFDC - Rajasthan - Pratapgarh: Village Chhota Mayanga: Costs - Financial (Rs'000).
IFFDC - Rajasthan - Pratapgarh: Village Chhota Mayanga: Costs - Economic (Rs'000).
- Table AN12.16.6 IFFDC - Rajasthan - Pratapgarh: Village Chhota Mayanga: VOD Household Assumptions.
IFFDC - Rajasthan - Pratapgarh: Village Chhota Mayanga: Incremental VOD Benefit Stream (Rs'000).
- Table AN12.16.7 IFFDC - Rajasthan - Pratapgarh: Village Chhota Mayanga: Household Crop Net Margin Assumptions.
IFFDC - Rajasthan - Pratapgarh: Village Chhota Mayanga: Incremental Crop Benefit Stream (Rs'000).
- Table AN12.16.8 IFFDC - Rajasthan - Pratapgarh: Village Chhota Mayanga: Household Livestock Net Margin Assumptions.
IFFDC - Rajasthan - Pratapgarh: Village Chhota Mayanga: Incremental Livestock Benefit Stream (Rs'000).
- Table AN12.16.9 IFFDC - Rajasthan - Pratapgarh: Village Chhota Mayanga: Forestry Benefit Assumptions.
IFFDC - Rajasthan - Pratapgarh: Village Chhota Mayanga: Incremental Forestry Benefit Stream (Rs'000).
- Table AN12.16.10 IFFDC - Rajasthan - Pratapgarh: Village Chhota Mayanga: Migration Support Benefit Assumptions.
IFFDC - Rajasthan - Pratapgarh: Village Chhota Mayanga: Incremental Migration Support Benefit Stream (Rs'000).
- Table AN12.16.11 IFFDC - Rajasthan - Pratapgarh: Village Chhota Mayanga: Weighted Household Crop Net Margin Summary (Rs/Household).
- Table AN12.16.12 IFFDC - Rajasthan - Pratapgarh: Village Chhota Mayanga: Weighted Household Crop Net Margin Sensitivity Analysis (Rs/Household).
- Table AN12.16.13 IFFDC - Rajasthan - Pratapgarh: Village Chhota Mayanga: Weighted Household Livestock Net Margin Summary (Rs/Household).

Table AN12.16.1 IFFDC - Rajasthan - Pratapgarh: Village Chhota Mayanga: Village Profile.

Village Profile \1					
A. Background			E. Well Being Ranking (No Households)		
Village Name	Chhota Mayanga		Very Poor	5	20.8%
District	Pratapgarh		Poor	10	41.7%
State	Rajasthan		Moderate	4	16.7%
			Better Off	5	20.8%
			Total	24	100%
B. Participatory Planning Process (PPP)			F. Land Resource (ha)		
Village entry	Oct-00		Total Area		104
PRA	Jan-01		Revenue Land (unused)		38
CPA	Jan-01		Forest Area - Revenue		17
			Pasture Land		11
C. Infrastructure			Arable Land		38
Hand Pumps (no)	2				104
Wells (no)	12		G. Livestock		
Linked by Road	1.5 km		Oxen	N/A	
Electrification	Yes		Cows	N/A	
School	Primary		Buffalo	N/A	
			Goats	N/A	
			Poultry	N/A	
D. Demographic Data			H. Self Help Groups (No Households)		
Households (no)	49		1 Group 1	17	
Participating Households	31		2 Group 2	17	
Population (Adults)	225		3 Group 3	17	
Adults:			4 Group 4	-	
Male	124		Total Memberhip	51	
Female	101				
Children:					
Boys	N/A				
Girls	N/A				

Source: IFFDC Pratapgarh Coordination Office - Rajasthan.

\1 Subject to final adjustment following consolidation exercise prior to Annual Review Meeting (ARM) in Feb 2005.

Table AN12.16.2 IFFDC - Rajasthan - Pratapgarh: Village Chhota Mayanga: Cost Benefit Analysis Summary (Rs'000).

Administration Costs / Development Activity	EIRR ¹	NPV ²		Year 1 1999/00	Year 2 2000/01	Year 3 2001/02	Year 4 2002/03	Year 5 2003/04	Year 6 2004/05	Year 7 2005/06	Year 8 2006/07	Year 9 2007/08	Year 10 2008/09
		(10%)	(%)										
A. Administration Costs													
Total A	N/A	(1,449)	87%	237.1	209.8	199.3	366.6	388.0	389.3	373.8	37.4	37.4	37.4
B. Development Intervention Component A													
1. PPGF													
Net Incremental Benefits	N/A	(19)	1%	-	(1.2)	(4.3)	(10.9)	(0.6)	(6.3)	(6.4)	(0.7)	(0.7)	(0.7)
2. VOD													
Net Incremental Benefits	23%	26	-2%	-	(4.5)	(15.6)	19.1	27.6	20.2	(158.2)	25.1	25.3	25.5
3/5. Crop Technology, SWC and WRD													
Net Incremental Benefits	-5%	(517)	31%	-	(47.1)	(107.0)	(365.3)	(501.1)	(41.3)	(52.6)	54.3	54.3	54.3
6. Livestock													
Net Incremental Benefits	104%	272	-16%	-	-	(2.5)	(10.2)	(6.6)	14.4	43.1	88.7	88.7	88.7
7. Forestry													
Net Incremental Benefits	50%	27	-2%	-	(4.3)	(0.9)	0.2	1.0	7.4	7.3	8.1	8.1	8.1
8. Migration Support													
Net Incremental Benefits	N/A	-	0%	-	-	-	-	-	-	-	-	-	-
Summary													
Net Incremental Benefits	N/A	(1,660)	100%	(237.1)	(266.9)	(329.6)	(733.7)	(867.8)	(394.8)	(540.7)	138.2	138.4	138.6
Sensitivity Analysis													
Analysis Period													
12 Years	N/A	(1,837)											
20 Years (Base Case)	N/A	(1,660)											
25 Years	-2%	(1,608)											
30 Years	0%	(1,579)											
Costs - Administration													
Investment Costs Decreased by 20 percent	-4%	(1,370)											
Costs - Administration and Development													
Recurrent Costs Increased by 20 percent	N/A	(1,853)											
Benefits - Crop, SWC and WRD													
Crop Benefits Increased by 20 percent	-2%	(1,397)											
Livestock Benefits Increased by 20 percent	-4%	(1,563)											

Source: Cost Benefit Analysis (CBA) Study Estimate Jan 2005.

¹ EIRR = Economic Internal Rate of Return (rate at which NPV equal to zero).

² NPV = Net Present Value of net incremental benefits at 12% (indicative opportunity cost of capital for rural development projects in India).

N/A = Not analysed as EIRR negative.

Table AN12.16.3 IFFDC - Rajasthan - Pratapgarh: Village Chhota Mayanga: Cost Benefit Analysis Development Activity Summary A (Rs'000).

Administration Costs / Development Activity	EIRR ¹	NPV ²		Year 1 1999/00	Year 2 2000/01	Year 3 2001/02	Year 4 2002/03	Year 5 2003/04	Year 6 2004/05	Year 7 2005/06	Year 8 2006/07	Year 9 2007/08	Year 10 2008/09
		(10%)	(%)										
A. Administration Costs													
Investment				237.1	209.8	199.3	366.6	388.0	389.3	373.8	-	-	-
Recurrent				-	-	-	-	-	-	-	37.4	37.4	37.4
Total A	N/A	(1,449)	87%	237.1	209.8	199.3	366.6	388.0	389.3	373.8	37.4	37.4	37.4
B. Development Intervention Component A													
1. PPGF													
Cost Stream													
Investment				-	1.2	4.3	10.7	0.2	5.9	5.9	-	-	-
Recurrent				-	-	0.0	0.1	0.4	0.4	0.6	0.7	0.7	0.7
Total Costs				-	1.2	4.3	10.9	0.6	6.3	6.4	0.7	0.7	0.7
Benefit Stream													
Before / Without Project				-	-	-	-	-	-	-	-	-	-
After / With Project				-	-	-	-	-	-	-	-	-	-
Incremental Benefits				-	-	-	-	-	-	-	-	-	-
Net Incremental Benefits	N/A	(19)	1%	-	(1.2)	(4.3)	(10.9)	(0.6)	(6.3)	(6.4)	(0.7)	(0.7)	(0.7)
2. VOD													
Cost Stream													
Investment				-	4.5	15.4	16.8	7.7	14.9	192.8	-	-	-
Recurrent				-	-	0.2	1.0	1.8	2.2	3.0	12.6	12.6	12.6
Total Costs				-	4.5	15.6	17.8	9.6	17.1	195.7	12.6	12.6	12.6
Benefit Stream													
Before / Without Project				-	-	-	-	-	-	-	-	-	-
After / With Project				-	-	-	36.9	37.1	37.3	37.5	37.7	37.9	38.1
Incremental Benefits				-	-	-	36.9	37.1	37.3	37.5	37.7	37.9	38.1
Net Incremental Benefits	23%	26	-2%	-	(4.5)	(15.6)	19.1	27.6	20.2	(158.2)	25.1	25.3	25.5
3/5. Crop Technology, SWC and WRD													
Cost Stream													
Investment													
Crop Technology				-	0.5	2.3	3.1	45.6	17.6	12.2	-	-	-
Soil Water Conservation				-	41.6	23.6	84.9	-	16.9	16.9	-	-	-
Water Resource Development				-	5.1	75.1	257.1	640.3	94.5	94.5	-	-	-
Recurrent													
Crop Technology				-	-	0.0	0.1	0.1	1.3	1.7	2.0	2.0	2.0
Soil Water Conservation				-	-	5.2	8.2	18.8	18.8	20.9	23.0	23.0	23.0
Water Resource Development				-	-	0.8	12.0	50.6	146.6	160.8	175.0	175.0	175.0
Total Costs				-	47.1	107.0	365.3	755.5	295.6	306.9	200.0	200.0	200.0
Benefit Stream													
Before / Without Project				-	-	-	-	109.6	109.6	109.6	109.6	109.6	109.6
After / With Project				-	-	-	-	363.9	363.9	363.9	363.9	363.9	363.9
Incremental Benefits				-	-	-	-	254.3	254.3	254.3	254.3	254.3	254.3
Net Incremental Benefits	-5%	(517)	31%	-	(47.1)	(107.0)	(365.3)	(501.1)	(41.3)	(52.6)	54.3	54.3	54.3

Source: Cost Benefit Analysis (CBA) Study Estimate Jan 2005.

¹ EIRR = Economic Internal Rate of Return (rate at which NPV equal to zero).

² NPV = Net Present Value of net incremental benefits at 12% (indicative opportunity cost of capital for rural development projects in India).

N/A = Not analysed as EIRR negative.

Table AN12.16.4 IFFDC - Rajasthan - Pratapgarh: Village Chhota Mayanga: Cost Benefit Analysis Development Activity Summary B (Rs'000).

Administration Costs / Development Activity	EIRR \1	NPV \2		Year 1 1999/00	Year 2 2000/01	Year 3 2001/02	Year 4 2002/03	Year 5 2003/04	Year 6 2004/05	Year 7 2005/06	Year 8 2006/07	Year 9 2007/08	Year 10 2008/09
		(10%)	(%)										
6. Livestock													
Cost Stream													
Investment				-	-	2.5	10.0	5.3	6.8	12.2	-	-	-
Recurrent				-	-	-	0.3	1.3	1.8	2.5	3.7	3.7	3.7
Total Costs				-	-	2.5	10.2	6.6	8.5	14.6	3.7	3.7	3.7
Benefit Stream													
Before / Without Project				-	-	-	-	-	61.9	61.9	61.9	61.9	61.9
After / With Project				-	-	-	-	-	84.9	119.6	154.3	154.3	154.3
Incremental Benefits				-	-	-	-	-	22.9	57.7	92.4	92.4	92.4
Net Incremental Benefits	104%	272	-16%	-	-	(2.5)	(10.2)	(6.6)	14.4	43.1	88.7	88.7	88.7
7. Forestry													
Cost Stream													
Investment				-	4.3	0.5	4.7	5.7	0.9	0.9	-	-	-
Recurrent				-	-	0.4	0.5	1.0	1.5	1.6	1.7	1.7	1.7
Total Costs				-	4.3	0.9	5.2	6.7	2.4	2.5	1.7	1.7	1.7
Benefit Stream													
Before / Without Project				-	-	-	-	-	-	-	-	-	-
After / With Project				-	-	-	5.4	7.6	9.8	9.8	9.8	9.8	9.8
Incremental Benefits				-	-	-	5.4	7.6	9.8	9.8	9.8	9.8	9.8
Net Incremental Benefits	50%	27	-2%	-	(4.3)	(0.9)	0.2	1.0	7.4	7.3	8.1	8.1	8.1
8. Migration Support													
Cost Stream													
Investment				-	-	-	-	-	-	-	-	-	-
Recurrent				-	-	-	-	-	-	-	-	-	-
Total Costs				-	-	-	-	-	-	-	-	-	-
Benefit Stream													
Before / Without Project				-	-	-	-	-	-	-	-	-	-
After / With Project				-	-	-	-	-	-	-	-	-	-
Incremental Benefits				-	-	-	-	-	-	-	-	-	-
Net Incremental Benefits	N/A	-	0%	-	-	-	-	-	-	-	-	-	-
EIRR													
Summary													
Cost Stream													
Investment				237.1	266.9	322.9	753.9	1,093.0	546.6	709.0	-	-	-
Recurrent				-	-	6.7	22.1	73.9	172.6	191.0	256.1	256.1	256.1
Total Costs				237.1	266.9	329.6	776.0	1,166.9	719.2	900.0	256.1	256.1	256.1
Benefit Stream													
Before / Without Project				-	-	-	-	109.6	171.5	171.5	171.5	171.5	171.5
After / With Project				-	-	-	42.3	408.7	495.9	530.8	565.7	566.0	566.2
Incremental Benefits				-	-	-	42.3	299.1	324.4	359.3	394.2	394.5	394.7
Net Incremental Benefits	N/A	(1,660)	100%	(237.1)	(266.9)	(329.6)	(733.7)	(867.8)	(394.8)	(540.7)	138.2	138.4	138.6

Source: Cost Benefit Analysis (CBA) Study Estimate Jan 2005.

Table AN12.16.5

IFFDC - Rajasthan - Pratapgarh: Village Chhota Mayanga: Costs - Economic (Rs'000).

Cost Head / Subhead	Conversion Factors		1999/00	2000/01	2001/02	2002/03	2003/04	2004/05	2005/06	Total	
	CF	SCF	Actual	Actual	Actual	Actual	Actual	Budget	Budget	(Rs'000)	(%)
A. Administration Costs											
IFFDC Head Quarters	0.90	1.00	95.4	41.6	42.5	76.2	48.4	42.5	42.5	389.2	10%
DFIDI	1.00	1.00	35.9	71.4	26.9	63.2	47.4	54.7	39.2	338.6	9%
Pratapgarh Coordination Office	0.90	1.00	105.9	96.7	129.8	227.2	292.1	292.1	292.1	1,436.0	37%
Total A			237.1	209.8	199.3	366.6	388.0	389.3	373.8	2,163.9	55%
Percent											
B. Development Costs											
Component A											
1. PPG	0.90	1.00	-	1.2	4.3	10.7	0.2	5.9	5.9	28.2	1%
2. VOD	0.90	1.00	-	4.5	15.4	16.8	7.7	14.9	192.8	252.0	6%
3. Crop	0.90	1.00	-	0.5	2.3	3.1	45.6	17.6	12.2	81.2	2%
4. SWC	0.90	0.75	-	41.6	23.6	84.9	-	16.9	16.9	183.8	5%
5. WRD	0.90	0.75	-	5.1	75.1	257.1	640.3	94.5	94.5	1,166.6	30%
6. Livestock	0.90	1.00	-	-	2.5	10.0	5.3	6.8	12.2	36.8	1%
7. Forestry	0.90	1.00	-	4.3	0.5	4.7	5.7	0.9	0.9	17.0	0%
8. Migration Support	0.90	1.00	-	-	-	-	-	-	-	-	0%
Subtotal			-	57.2	123.7	387.3	705.0	157.3	335.2	1,765.6	45%
Other Development Costs											
Subtotal	0.90	1.00	-	-	-	-	-	-	-	-	0%
Total B			-	57.2	123.7	387.3	705.0	157.3	335.2	1,765.6	45%
Total A + B			237.1	266.9	322.9	753.9	1,093.0	546.6	709.0	3,929.5	100%

Source:

Cost Benefit Analysis (CBA) Study Estimate Jan 2005.

DFIDI = Department for International Development (India).
PPG = Participatory Planning and Group Formation.
VOD = Village Organisation and Development.
SWC = Soil and Water Conservation.
WRD = Water Resource Development.

Table AN12.16.6

IFFDC - Rajasthan - Pratapgarh: Village Chhota Mayanga: VOD Household Assumptions.

Without \ With Project	Units	Assumptions			Benefits		
					Year 1 (Rs)	Year 2 (Rs)	Year 3 (Rs)
Development Activity: Village Organisation and Development							
Before / Without Project Situation:							
A. Self Help Groups (SHGs)							
Assumption	Sum	Zero	Zero	Zero	-	-	-
B. Drudgery Reduction							
Assumption	Sum	Zero	Zero	Zero			
Total Without Project Benefits					-	-	-
After / With Project Situation:							
A. Self Help Groups (SHGs)							
Assumptions							
Average Saving / Household	Rs	1,429					
Households / Village	No	49					
Present Group Deposits	Rs'000	70.0			70.0	72.1	74.3
Annual Savings Increase	%	3%					
Deposits on Loan to Members	%	60%					
SHG Interest Income	% / Year	15%					
Assumed Benefit	Rs'000				6.3	6.5	6.7
B. Drudgery Reduction							
Assumptions							
Hours Saved / Day / Household	No	1.0					
Number of Days / Year / Household	No	200					
Days / Year / Household (8hrs/day)	No	25.0					
Households / Village	No	49					
Day Equivalent / Village	No	1,225					
Economic Value per Day	(Rs/day)	25					
Assumed Benefit	Rs'000				30.6	30.6	30.6
Total With Project Benefits	Rs'000				36.9	37.1	37.3
Incremental Benefits	Rs'000				36.9	37.1	37.3

Source:

VOD = Village Organisation and Development.
Participating households per village: C Mayanga

Cost Benefit Analysis (CBA) Study Estimate Jan 2005.

Table AN12.16.6

IFFDC - Rajasthan - Pratappgarh: Village Chhota Mayanga: Incremental VOD Benefit Stream (Rs'000).

Without \ With Project	Benefit Streams (Rs '000)									
	Year 1 1999/00	Year 2 2000/01	Year 3 2001/02	Year 4 2002/03	Year 5 2003/04	Year 6 2004/05	Year 7 2005/06	Year 8 2006/07	Year 9 2007/08	Year 10 2008/09
Development Activity: Village Organisation and Development Before / Without Project Situation: A. Self Help Groups (SHGs) Assumption B. Drudgery Reduction Assumption Total Without Project Benefits	-	-	-	-	-	-	-	-	-	-
After / With Project Situation: A. Self Help Groups (SHGs) Assumptions Average Saving / Household Households / Village Present Group Deposits Annual Savings Increase Deposits on Loan to Members SHG Interest Income Assumed Benefit B. Drudgery Reduction Assumptions Hours Saved / Day / Household Number of Days / Year / Household Days / Year / Household (8hrs/day) Households / Village Day Equivalent / Village Economic Value per Day Assumed Benefit Total With Project Benefits Incremental Benefits	-	-	-	70.0	72.1	74.3	76.5	78.8	81.1	83.6
	-	-	-	6.3	6.5	6.7	6.9	7.1	7.3	7.5
	-	-	-	30.6	30.6	30.6	30.6	30.6	30.6	30.6
	-	-	-	36.9	37.1	37.3	37.5	37.7	37.9	38.1
	-	-	-	36.9	37.1	37.3	37.5	37.7	37.9	38.1

Source:

VOD = Village Organisation and Development.
Participating households per village: C Mayanga

Cost Benefit Analysis (CBA) Study Estimate Jan 2005.

Table AN12.16.7

IFFDC - Rajasthan - Pratapgarh: Village Chhota Mayanga: Household Crop Net Margin Assump

Without \ With Project Crop Technology, SWC and WRD	Units	Assumptions			Benefits		
					Year 1 (Rs/HH)	Year 2 (Rs/HH)	Year 3 (Rs/HH)
Development Activity: Crop Technology, SWC and WRD							
Before / Without Project Situation:							
Assumptions							
Households (HHs)	No	49					
Crop Adoption Assumptions		100%	100%	100%			
Kharif Crop Net Margin	Rs/HH				1,848.2	1,848.2	1,848.2
Rabi Crop Net Margin	Rs/HH				388.0	388.0	388.0
Total Without Project Benefits	Rs/HH				2,236.3	2,236.3	2,236.3
After / With Project Situation:							
Assumptions							
Households (HHs)	No	49					
Crop Adoption Assumptions		100%	100%	100%			
Kharif Crop Net Margin	Rs/HH				6,275.8	6,275.8	6,275.8
Rabi Crop Net Margin	Rs/HH				1,151.2	1,151.2	1,151.2
Total With Project Benefits	Rs/HH				7,427.0	7,427.0	7,427.0
Incremental Benefits	Rs/HH				5,190.7	5,190.7	5,190.7

Source:

Cost Benefit Analysis (CBA) Study Estimate Jan 2005.

Table AN12.16.7

IFFDC - Rajasthan - Pratappgarh: Village Chhota Mayanga: Incremental Crop Benefit Stream (Rs'000).

Without \ With Project Crop Technology, SWC and WRD	Benefit Streams (Rs '000)									
	Year 1 1999/00	Year 2 2000/01	Year 3 2001/02	Year 4 2002/03	Year 5 2003/04	Year 6 2004/05	Year 7 2005/06	Year 8 2006/07	Year 9 2007/08	Year 10 2008/09
Development Activity: Crop Technology, SWC and WRD										
Before / Without Project Situation:										
Assumptions										
Households (HHs)										
Crop Adoption Assumptions										
Kharif Crop Net Margin	-	-	-	-	90.6	90.6	90.6	90.6	90.6	90.6
Rabi Crop Net Margin	-	-	-	-	19.0	19.0	19.0	19.0	19.0	19.0
Total Without Project Benefits	-	-	-	-	109.6	109.6	109.6	109.6	109.6	109.6
After / With Project Situation:										
Assumptions										
Households (HHs)										
Crop Adoption Assumptions										
Kharif Crop Net Margin	-	-	-	-	307.5	307.5	307.5	307.5	307.5	307.5
Rabi Crop Net Margin	-	-	-	-	56.4	56.4	56.4	56.4	56.4	56.4
Total With Project Benefits	-	-	-	-	363.9	363.9	363.9	363.9	363.9	363.9
Incremental Benefits	-	-	-	-	254.3	254.3	254.3	254.3	254.3	254.3

Source:

Cost Benefit Analysis (CBA) Study Estimate Jan 2005.

Table AN12.16.8

IFFDC - Rajasthan - Pratapgarh: Village Chhota Mayanga: Household Livestock Net Margin Ass

Without \ With Project Livestock	Units	Assumptions			Benefits		
					Year 1 (Rs)	Year 2 (Rs)	Year 3 (Rs)
Development Activity: Livestock							
Before / Without Project Situation: Assumptions							
Households (HHs)	No	49					
Annual Livestock Net Margin	Rs/HH						
Total Without Project Benefits					1,263.6	1,263.6	1,263.6
After / With Project Situation:							
Development Activity: Assumptions							
Households (HHs)	No	49					
Adoption Assumptions	Percent	55%	78%	100%			
Annual Livestock Net Margin	Rs/HH						
Total With Project Benefits					1,732.0	2,440.5	3,149.1
Incremental Benefits	Rs/HH				468.4	1,176.9	1,885.4

Source:

Cost Benefit Analysis (CBA) Study Estimate Jan 2005.

Table AN12.16.8

IFFDC - Rajasthan - Pratappgarh: Village Chhota Mayanga: Incremental Livestock Benefit Stream (Rs'000).

Without \ With Project Livestock	Benefit Streams (Rs '000)									
	Year 1 1999/00	Year 2 2000/01	Year 3 2001/02	Year 4 2002/03	Year 5 2003/04	Year 6 2004/05	Year 7 2005/06	Year 8 2006/07	Year 9 2007/08	Year 10 2008/09
Development Activity: Livestock										
Before / Without Project Situation:										
Assumptions										
Households (HHs)										
Annual Livestock Net Margin										
Total Without Project Benefits	-	-	-	-	-	61.9	61.9	61.9	61.9	61.9
After / With Project Situation:										
Development Activity:										
Assumptions										
Households (HHs)										
Adoption Assumptions										
Annual Livestock Net Margin										
Total With Project Benefits	-	-	-	-	-	84.9	119.6	154.3	154.3	154.3
Incremental Benefits	-	-	-	-	-	22.9	57.7	92.4	92.4	92.4

Source:

Cost Benefit Analysis (CBA) Study Estimate Jan 2005.

Table AN12.16.9

IFFDC - Rajasthan - Pratapgarh: Village Chhota Mayanga: Forestry Benefit Assumptions.

Without \ With Project Forestry	Units	Assumptions			Benefits		
					Year 1 (Rs)	Year 2 (Rs)	Year 3 (Rs)
Development Activity: Forestry							
Before / Without Project Situation: Assumptions							
Households (HHs)	No	49					
Annual Forestry Net Margin	Rs/HH				-	-	-
Total Without Project Benefits							
After / With Project Situation: Assumptions							
Households (HHs)	No	49					
Adoption Assumptions	Percent	55%	78%	100%			
Annual Forestry Net Margin	Rs/HH						
Total With Project Benefits					110.0	156.0	200.0
Incremental Benefits	Rs/HH				110.0	156.0	200.0

Source:

Cost Benefit Analysis (CBA) Study Estimate Jan 2005.

Table AN12.16.9

IFFDC - Rajasthan - Pratappgarh: Village Chhota Mayanga: Incremental Forestry Benefit Stream (Rs'000).

Without \ With Project Forestry	Benefit Streams (Rs '000)									
	Year 1 1999/00	Year 2 2000/01	Year 3 2001/02	Year 4 2002/03	Year 5 2003/04	Year 6 2004/05	Year 7 2005/06	Year 8 2006/07	Year 9 2007/08	Year 10 2008/09
Development Activity: Forestry										
Before / Without Project Situation: Assumptions										
Households (HHs)										
Annual Forestry Net Margin										
Total Without Project Benefits	-	-	-	-	-	-	-	-	-	-
After / With Project Situation: Assumptions										
Households (HHs)										
Adoption Assumptions										
Annual Forestry Net Margin										
Total With Project Benefits	-	-	-	5.4	7.6	9.8	9.8	9.8	9.8	9.8
Incremental Benefits	-	-	-	5.4	7.6	9.8	9.8	9.8	9.8	9.8

Source:

Cost Benefit Analysis (CBA) Study Estimate Jan 2005.

Table AN12.16.10

IFFDC - Rajasthan - Pratapgarh: Village Chhota Mayanga: Migration Support Benefit Assumptic

Without \ With Project	Assumptions			Benefits		
				Year 1 (Rs)	Year 2 (Rs)	Year 3 (Rs)
Development Activity: Migration Support						
Before / Without Project Situation:						
Assumptions						
Economic Value per Day	Rs/day	25.0				
Days / Month / Household	No	-				
Economic Value per Month	Rs/month	-				
Months Migration / Year	Months	4.0				
Economic Value per Household	Rs/HH	-				
Households per Village	No	49				
Households per Village Migrating	Percent	45%				
Total Without Project Benefits	Rs/Village			-	-	-
After / With Project Situation:						
Assumptions						
Economic Value per Day \1	Rs/day	25.0	30%	32.5		
Days / Month / Household	No	-	30%	-		
Economic Value per Month	Rs/month	-		-		
Months Migration / Year	Months	4.0	-20%	3.2		
Economic Value per Household	Rs/HH	-		-		
Households per Village	No	49		49		
Households per Village Migrating	Percent	45%	-20%	36%		
Subtotal Migration Income	Rs/Village				-	-
Other Income	Sum (Rs)	-	-	-	-	-
Total With Project Benefits	Rs/Village				-	-
Incremental Benefits	Rs/Village				-	-

Source:

Cost Benefit Analysis (CBA) Study Estimate Jan 2005.

- 1\ Financial Wages (Rs/day):
 Skill Labour - Rs 160
 Casual Labour :
 Male - Rs 40
 Female - Rs 30

Table AN12.16.10

IFFDC - Rajasthan - Pratappgarh: Village Chhota Mayanga: Incremental Migration Support Benefit Stream (Rs'000).

Without \ With Project	Benefit Streams (Rs '000)									
	Year 1 1999/00	Year 2 2000/01	Year 3 2001/02	Year 4 2002/03	Year 5 2003/04	Year 6 2004/05	Year 7 2005/06	Year 8 2006/07	Year 9 2007/08	Year 10 2008/09
Development Activity: Migration Support Before / Without Project Situation: Assumptions Economic Value per Day Days / Month / Household Economic Value per Month Months Migration / Year Economic Value per Household Households per Village Households per Village Migrating Total Without Project Benefits	-	-	-	-	-	-	-	-	-	-
After / With Project Situation: Assumptions Economic Value per Day \1 Days / Month / Household Economic Value per Month Months Migration / Year Economic Value per Household Households per Village Households per Village Migrating Subtotal Migration Income Other Income Total With Project Benefits Incremental Benefits	-	-	-	-	-	-	-	-	-	-

Source:

Cost Benefit Analysis (CBA) Study Estimate Jan 2005.

- 1\ Financial Wages (Rs/day):
 Skill Labour - Rs 160
 Casual Labour :
 Male - Rs 40
 Female - Rs 30

Table AN12.16.11 IFFDC - Rajasthan - Pratapgarh: Village Chhota Mayanga: Weighted Household Crop Net Margin Summary (Rs/Household).

Item	WBR (%)	Before / Without Project			After / With Project			Increment		
		Khalif	Rabi	Total	Khalif	Rabi	Total	Khalif	Rabi	Total
Phase II										
Well Being Ranking - Very Poor Household Net Margin (Rs)	21.0%	834.6	102.5	937.1	1,849.8	1,067.8	2,917.6	1,015.2	965.3	1,980.5
Well Being Ranking - Very Poor Household Net Margin (Rs)	42.0%	637.7	-	637.7	4,803.0	220.7	5,023.7	4,165.3	220.7	4,386.0
Well Being Ranking - Poor Household Net Margin (Rs)	17.0%	994.0	89.3	1,083.3	3,711.4	2,508.3	6,219.6	2,717.4	2,419.0	5,136.4
Well Being Ranking - Better Off Household Net Margin (Rs)	20.0%	6,180.9	1,756.7	7,937.5	16,195.9	2,039.3	18,235.2	10,015.0	282.7	10,297.7
Well Being Ranking - Weighted Household Net Margin (Rs)	100.0%	1,848.2	388.0	2,236.3	6,275.8	1,151.2	7,427.0	4,427.6	763.2	5,190.7
Phase I \1										
Well Being Ranking - Very Poor Household Net Margin (Rs)	10.5%	436.3	267.5	703.8	3,866.5	1,668.8	5,535.3	3,430.3	1,401.3	4,831.5
Well Being Ranking - Very Poor Household Net Margin (Rs)	10.5%	485.8	657.5	1,143.3	10,136.0	5,690.3	15,826.3	9,650.3	5,032.8	14,683.0
Well Being Ranking - Poor Household Net Margin (Rs)	50.0%	986.3	3,385.0	4,371.3	9,457.5	5,195.0	14,652.5	8,471.3	1,810.0	10,281.3
Well Being Ranking - Better Off Household Net Margin (Rs)	29.0%	2,778.0	937.0	3,715.0	4,915.0	9,560.0	14,475.0	2,137.0	8,623.0	10,760.0
Well Being Ranking - Weighted Household Net Margin (Rs)	100.0%	1,018.9	1,095.2	2,114.1	7,659.9	5,535.5	13,195.4	6,641.0	4,440.3	11,081.3

Table AN12.16.12 IFFDC - Rajasthan - Pratapgarh: Village Chhota Mayanga: Weighted Household Crop Net Margin Sensitivity Analysis (Rs/Household).

Item	EIRR	Before / Without Project			After / With Project			Increment		
		Khalif	Rabi	Total	Khalif	Rabi	Total	Khalif	Rabi	Total
Development Activity:										
Crop Technology, SWC and WRD										
Weighted Net Margin (Phase II)										
Household Net Margin (Rs)		1,848.2	388.0	2,236.3	6,275.8	1,151.2	7,427.0	4,427.6	763.2	5,190.7
Incremental Benefit (Phase II / Phase I)										47%
Base Case Assumptions										
Household Net Margin (Rs)		1,848.2	388.0	2,236.3	6,275.8	1,151.2	7,427.0	4,427.6	763.2	5,190.7
Incremental Benefit (Phase II / Phase I)										47%
Sensitivity Increase (%)	0%									
Development Activity	-5%									
Overall Village	N/A									
Sensitivity Assumptions										
Household Net Margin (Rs)		1,848.2	388.0	2,236.3	14,434.4	2,647.7	17,082.1	12,586.1	2,259.7	14,845.8
Incremental Benefit (Phase II / Phase I)										134%
Sensitivity Increase (%)	0%									
Development Activity	33%									
Overall Village	12%									
Weighted Net Margin (Phase I)										
Household Net Margin (Rs)		1,018.9	1,095.2	2,114.1	7,659.9	5,535.5	13,195.4	6,641.0	4,440.3	11,081.3

Source: IFFDC Pratapgarh Coordination Office - Rajasthan.

EIRR = Economic Internal Rate of Return (rate at which NPV equal to zero).

N/A = Not analysed as EIRR negative.

Table AN12.16.13 IFFDC - Rajasthan - Pratapgarh: Village Chhota Mayanga: Weighted Household Livestock Net Margin Summary (Rs/Household).

Well Being Ranking	Weight (%)	Before / Without Project		After / With Project		Increment \1	
		Herd Value	Net Margin	Herd Value	Net Margin	Herd Value	Net Margin
Phase I - Well Being Ranking (WBR) \1							
Madhya Pradesh - WBR Weighted Data							
Very Poor	16.0%						
Average		580	(185.0)	5,650	412.5	474	597.5
Poor	63.0%						
Average		2,350	982.5	8,250	2,141.0	1,180	1,158.5
Moderate	18.0%						
Average		14,700	6,730.0	1,900	2,820.0	1,900	(3,910.0)
Better Off	3.0%						
Average		15,580	3,000.0	14,600	10,790.0	(196)	7,790.0
Phase I - WBR Weighted Data	100.0%	4,687	1,890.8	6,882	2,246.1	1,155	355.4
Phase II - Well Being Ranking (WBR)							
Very Poor	16.0%						
Average		5,756	149.2	10,970	1,446.4	1,043	1,297.2
Poor	63.0%						
Average		13,128	852.2	25,979	3,008.8	2,570	2,156.8
Moderate	18.0%						
Average		13,525	4,035.1	27,020	5,249.5	2,699	1,214.4
Better Off	3.0%						
Average		12,700	(781.7)	41,873	2,573.3	5,835	3,355.0
Phase II - WBR Weighted Data	100.0%	12,007	1,263.6	24,242	3,149.1	2,447	1,885.6

Source: Study of Impact of WIRFP on Net Incomes of Target Households, Jan 2004.

WBR = IFFDC Household Well Being Ranking.

Survey figures adjusted to Village Profile WBR.

\1 GVT - Madhya Pradesh - Phase I: Village Naganwat Choti: Weighted Household Livestock Net Margin Summary.

WIRFP - Phase II - Cost Benefit Analysis Study

Tables AN12.0 Individual Village Cost Benefit Analysis

Tables AN12.17 IFFDC - Rajasthan - Pratapgarh: Village Dharis Kheri.

Table AN12.17.1 IFFDC - Rajasthan - Pratapgarh: Village Dharis Kheri: Village Profile.

Table AN12.17.2 IFFDC - Rajasthan - Pratapgarh: Village Dharis Kheri: Cost Benefit Analysis Summary (Rs'000).

Table AN12.17.3 IFFDC - Rajasthan - Pratapgarh: Village Dharis Kheri: Cost Benefit Analysis Development Activity Summary A (Rs'000).

Table AN12.17.4 IFFDC - Rajasthan - Pratapgarh: Village Dharis Kheri: Cost Benefit Analysis Development Activity Summary B (Rs'000).

Table AN12.17.5 IFFDC - Rajasthan - Pratapgarh: Village Dharis Kheri: Costs - Financial (Rs'000).
IFFDC - Rajasthan - Pratapgarh: Village Dharis Kheri: Costs - Economic (Rs'000).

Table AN12.17.6 IFFDC - Rajasthan - Pratapgarh: Village Dharis Kheri: VOD Household Assumptions.
IFFDC - Rajasthan - Pratapgarh: Village Dharis Kheri: Incremental VOD Benefit Stream (Rs'000).

Table AN12.17.7 IFFDC - Rajasthan - Pratapgarh: Village Dharis Kheri: Household Crop Net Margin Assumptions.
IFFDC - Rajasthan - Pratapgarh: Village Dharis Kheri: Incremental Crop Benefit Stream (Rs'000).

Table AN12.17.8 IFFDC - Rajasthan - Pratapgarh: Village Dharis Kheri: Household Livestock Net Margin Assumptions.
IFFDC - Rajasthan - Pratapgarh: Village Dharis Kheri: Incremental Livestock Benefit Stream (Rs'000).

Table AN12.17.9 IFFDC - Rajasthan - Pratapgarh: Village Dharis Kheri: Forestry Benefit Assumptions.
IFFDC - Rajasthan - Pratapgarh: Village Dharis Kheri: Incremental Forestry Benefit Stream (Rs'000).

Table AN12.17.10 IFFDC - Rajasthan - Pratapgarh: Village Dharis Kheri: Migration Support Benefit Assumptions.
IFFDC - Rajasthan - Pratapgarh: Village Dharis Kheri: Incremental Migration Support Benefit Stream (Rs'000).

Table AN12.17.11 IFFDC - Rajasthan - Pratapgarh: Village Dharis Kheri: Weighted Household Crop Net Margin Summary (Rs/Household).

Table AN12.17.12 IFFDC - Rajasthan - Pratapgarh: Village Dharis Kheri: Weighted Household Crop Net Margin Sensitivity Analysis (Rs/Household).

Table AN12.17.13 IFFDC - Rajasthan - Pratapgarh: Village Dharis Kheri: Weighted Household Livestock Net Margin Summary (Rs/Household).

Table AN12.17.1 IFFDC - Rajasthan - Pratapgarh: Village Dharis Kheri: Village Profile.

Village Profile \1			
A. Background			
Village Name	Dharis Kheri		
District	Pratapgarh		
State	Rajasthan		
B. Participatory Planning Process (PPP)			
Village entry	Oct-99		
PRA	Nov-00		
CPA	Nov-00		
C. Infrastructure			
Hand Pumps (no)	5		
Wells (no)	15		
Linked by Road	4 Kms		
Electrification	No		
School	Primary		
D. Demographic Data			
Households (no)	88		
Participating Households	67		
Population (Adults)	414		
Adults:			
Male	208		
Female	206		
Children:			
Boys	N/A		
Girls	N/A		
E. Well Being Ranking (No Households)			
Very Poor	33	35.9%	
Poor	20	21.7%	
Moderate	26	28.3%	
Better Off	13	14.1%	
Total	92	100%	
F. Land Resource (ha)			
Total Area	-		
Revenue Land (unused)	-		
Forest Area - Revenue	-		
Pasture Land	-		
Arable Land	-		
G. Livestock			
Oxen	200		
Cows	325		
Buffalo	90		
Goats	350		
Poultry	985		
H. Self Help Groups (No Households)			
1 Group 1	12		
2 Group 2	11		
3 Group 3	10		
4 Group 4	13		
5 Group 5	9		
6 Group 6	10		
7 Group 7	15		
8 Group 8	14		
Total Memberhip	94		

Source: IFFDC Pratapgarh Coordination Office - Rajasthan.

\1 Subject to final adjustment following consolidation exercise prior to Annual Review Meeting (ARM) in Feb 2005.

Table AN12.17.2 IFFDC - Rajasthan - Pratapgarh: Village Dharis Kheri: Cost Benefit Analysis Summary (Rs'000).

Administration Costs / Development Activity	EIRR \1	NPV \2		Year 1 1999/00	Year 2 2000/01	Year 3 2001/02	Year 4 2002/03	Year 5 2003/04	Year 6 2004/05	Year 7 2005/06	Year 8 2006/07	Year 9 2007/08	Year 10 2008/09
		(10%)	(%)										
A. Administration Costs													
Total A	N/A	(1,449)	129%	237.1	209.8	199.3	366.6	388.0	389.3	373.8	37.4	37.4	37.4
B. Development Activity Component A													
1. PPGF													
Net Incremental Benefits	N/A	(54)	5%	(3.6)	(27.6)	(9.9)	(11.5)	(5.6)	(5.0)	(8.7)	(1.6)	(1.6)	(1.6)
2. VOD													
Net Incremental Benefits	282%	58	-5%	-	(12.4)	37.6	45.1	(12.5)	(25.8)	(170.3)	37.2	37.4	37.7
3/5. Crop Technology, SWC and WRD													
Net Incremental Benefits	6%	(174)	16%	-	(16.0)	(255.2)	(242.7)	(29.9)	(39.8)	(116.2)	90.9	90.9	90.9
6. Livestock													
Net Incremental Benefits	80%	448	-40%	-	(8.4)	(22.6)	(6.4)	10.4	69.9	112.3	131.7	131.7	131.7
7. Forestry													
Net Incremental Benefits	34%	50	-5%	-	(4.3)	(1.7)	(24.7)	(6.4)	16.6	16.2	20.2	20.2	20.2
8. Migration Support													
Net Incremental Benefits	N/A	-	0%	-	-	-	-	-	-	-	-	-	-
Summary													
Net Incremental Benefits	1%	(1,121)	100%	(240.7)	(278.5)	(450.9)	(606.8)	(432.0)	(373.4)	(540.6)	241.0	241.2	241.4
Sensitivity Analysis													
Analysis Period													
12 Years	N/A	(1,429)											
20 Years (Base Case)	1%	(1,121)											
25 Years	3%	(1,031)											
30 Years	5%	(980)											
Costs - Administration													
Investment Costs Decreased by 7 20 percent	3%	(831)											
Costs - Administration and Development													
Recurrent Costs Increased by 20 percent	-1%	(1,278)											
Benefits - Crop, SWC and WRD													
Crop Benefits Increased by 20 percent	4%	(822)											
Livestock Benefits Increased by 20 percent	3%	(947)											

Source: Cost Benefit Analysis (CBA) Study Estimate Jan 2005.

\1 EIRR = Economic Internal Rate of Return (rate at which NPV equal to zero).

\2 NPV = Net Present Value of net incremental benefits at 12% (indicative opportunity cost of capital for rural development projects in India).

N/A = Not analysed as EIRR negative.

Table AN12.17.3 IFFDC - Rajasthan - Pratapgarh: Village Dharis Kheri: Cost Benefit Analysis Development Activity Summary A (Rs'000).

Administration Costs / Development Activity	EIRR ¹	NPV ²		Year 1 1999/00	Year 2 2000/01	Year 3 2001/02	Year 4 2002/03	Year 5 2003/04	Year 6 2004/05	Year 7 2005/06	Year 8 2006/07	Year 9 2007/08	Year 10 2008/09
		(10%)	(%)										
A. Administration Costs													
Investment				237.1	209.8	199.3	366.6	388.0	389.3	373.8	-	-	-
Recurrent				-	-	-	-	-	-	-	37.4	37.4	37.4
Total A	N/A	(1,449)	129%	237.1	209.8	199.3	366.6	388.0	389.3	373.8	37.4	37.4	37.4
B. Development Intervention Component A													
1. PPGF													
Cost Stream													
Investment				3.6	27.5	9.1	10.5	4.3	3.6	7.2	-	-	-
Recurrent				-	0.1	0.8	1.0	1.3	1.4	1.5	1.6	1.6	1.6
Total Costs				3.6	27.6	9.9	11.5	5.6	5.0	8.7	1.6	1.6	1.6
Benefit Stream													
Before / Without Project				-	-	-	-	-	-	-	-	-	-
After / With Project				-	-	-	-	-	-	-	-	-	-
Incremental Benefits				-	-	-	-	-	-	-	-	-	-
Net Incremental Benefits	N/A	(54)	5%	(3.6)	(27.6)	(9.9)	(11.5)	(5.6)	(5.0)	(8.7)	(1.6)	(1.6)	(1.6)
2. VOD													
Cost Stream													
Investment				-	12.4	18.1	9.9	67.2	77.4	218.3	-	-	-
Recurrent				-	-	0.6	1.5	2.0	5.4	9.3	20.2	20.2	20.2
Total Costs				-	12.4	18.7	11.5	69.2	82.8	227.5	20.2	20.2	20.2
Benefit Stream													
Before / Without Project				-	-	-	-	-	-	-	-	-	-
After / With Project				-	-	56.4	56.6	56.8	57.0	57.2	57.4	57.6	57.8
Incremental Benefits				-	-	56.4	56.6	56.8	57.0	57.2	57.4	57.6	57.8
Net Incremental Benefits	282%	58	-5%	-	(12.4)	37.6	45.1	(12.5)	(25.8)	(170.3)	37.2	37.4	37.7
3/5. Crop Technology, SWC and WRD													
Cost Stream													
Investment													
Crop Technology				-	0.6	2.6	7.1	51.0	27.9	61.4	-	-	-
Soil Water Conservation				-	-	42.0	6.2	17.2	30.4	37.1	-	-	-
Water Resource Development				-	15.4	208.2	190.5	123.7	121.5	135.0	-	-	-
Recurrent													
Crop Technology				-	-	0.0	0.1	0.3	1.5	2.2	3.8	3.8	3.8
Soil Water Conservation				-	-	-	5.2	6.0	8.2	12.0	16.6	16.6	16.6
Water Resource Development				-	-	2.3	33.5	62.1	80.7	98.9	119.1	119.1	119.1
Total Costs				-	16.0	255.2	242.7	260.3	270.2	346.6	139.5	139.5	139.5
Benefit Stream													
Before / Without Project				-	-	-	-	183.7	183.7	183.7	183.7	183.7	183.7
After / With Project				-	-	-	-	414.1	414.1	414.1	414.1	414.1	414.1
Incremental Benefits				-	-	-	-	230.4	230.4	230.4	230.4	230.4	230.4
Net Incremental Benefits	6%	(174)	16%	-	(16.0)	(255.2)	(242.7)	(29.9)	(39.8)	(116.2)	90.9	90.9	90.9

Source: Cost Benefit Analysis (CBA) Study Estimate Jan 2005.

¹ EIRR = Economic Internal Rate of Return (rate at which NPV equal to zero).

² NPV = Net Present Value of net incremental benefits at 12% (indicative opportunity cost of capital for rural development projects in India).

N/A = Not analysed as EIRR negative.

Table AN12.17.4 IFFDC - Rajasthan - Pratapgarh: Village Dharis Kheri: Cost Benefit Analysis Development Activity Summary B (Rs'000).

Administration Costs / Development Activity	EIRR \1	NPV \2		Year 1 1999/00	Year 2 2000/01	Year 3 2001/02	Year 4 2002/03	Year 5 2003/04	Year 6 2004/05	Year 7 2005/06	Year 8 2006/07	Year 9 2007/08	Year 10 2008/09
		(10%)	(%)										
6. Livestock													
Cost Stream													
Investment				-	8.4	21.7	3.4	17.9	10.8	21.6	-	-	-
Recurrent				-	-	0.8	3.0	3.4	5.1	6.2	8.4	8.4	8.4
Total Costs				-	8.4	22.6	6.4	21.3	15.9	27.8	8.4	8.4	8.4
Benefit Stream													
Before / Without Project				-	-	-	-	100.9	100.9	100.9	100.9	100.9	100.9
After / With Project				-	-	-	-	132.6	186.8	241.0	241.0	241.0	241.0
Incremental Benefits				-	-	-	-	31.6	85.9	140.1	140.1	140.1	140.1
Net Incremental Benefits	80%	448	-40%	-	(8.4)	(22.6)	(6.4)	10.4	69.9	112.3	131.7	131.7	131.7
7. Forestry													
Cost Stream													
Investment				-	4.3	1.3	39.5	23.8	4.5	4.5	-	-	-
Recurrent				-	-	0.4	0.6	4.5	6.9	7.3	7.8	7.8	7.8
Total Costs				-	4.3	1.7	40.1	28.3	11.4	11.8	7.8	7.8	7.8
Benefit Stream													
Before / Without Project				-	-	-	-	-	-	-	-	-	-
After / With Project				-	-	-	15.4	21.8	28.0	28.0	28.0	28.0	28.0
Incremental Benefits				-	-	-	15.4	21.8	28.0	28.0	28.0	28.0	28.0
Net Incremental Benefits	34%	50	-5%	-	(4.3)	(1.7)	(24.7)	(6.4)	16.6	16.2	20.2	20.2	20.2
8. Migration Support													
Cost Stream													
Investment				-	-	-	-	-	-	-	-	-	-
Recurrent				-	-	-	-	-	-	-	-	-	-
Total Costs				-	-	-	-	-	-	-	-	-	-
Benefit Stream													
Before / Without Project				-	-	-	-	-	-	-	-	-	-
After / With Project				-	-	-	-	-	-	-	-	-	-
Incremental Benefits				-	-	-	-	-	-	-	-	-	-
Net Incremental Benefits	N/A	-	0%	-	-	-	-	-	-	-	-	-	-
Summary													
Cost Stream													
Investment				240.7	278.4	502.3	633.8	693.1	665.4	858.9	-	-	-
Recurrent				-	0.1	5.0	45.0	79.6	109.2	137.4	214.9	214.9	214.9
Total Costs				240.7	278.5	507.3	678.7	772.6	774.6	996.2	214.9	214.9	214.9
Benefit Stream													
Before / Without Project				-	-	-	-	284.6	284.6	284.6	284.6	284.6	284.6
After / With Project				-	-	56.4	72.0	625.2	685.8	740.3	740.5	740.7	740.9
Incremental Benefits				-	-	56.4	72.0	340.6	401.2	455.6	455.9	456.1	456.3
Net Incremental Benefits	1%	(1,121)	100%	(240.7)	(278.5)	(450.9)	(606.8)	(432.0)	(373.4)	(540.6)	241.0	241.2	241.4

Source: Cost Benefit Analysis (CBA) Study Estimate Jan 2005.

Table AN12.17.5

IFFDC - Rajasthan - Pratapgarh: Village Dharis Kheri: Costs - Financial (Rs'000).

Cost Head / Subhead	1999/00	2000/01	2001/02	2002/03	2003/04	2004/05	2005/06	Total	
	Actual	Actual	Actual	Actual	Actual	Budget	Budget	(Rs'000)	(%)
A. Administration Costs									
IFFDC Head Quarters	106.0	46.3	47.3	84.7	53.8	47.2	47.2	432.5	9%
DFIDI	35.9	71.4	26.9	63.2	47.4	54.7	39.2	338.6	7%
Pratapgarh Coordination Office	117.6	107.5	144.2	252.5	324.6	324.6	324.6	1,595.6	35%
Total A	259.5	225.1	218.4	400.3	425.8	426.5	411.0	2,366.7	51%
B. Development Costs									
Component A									
1. PPG	4.0	30.5	10.1	11.6	4.8	4.0	8.0	73.1	2%
2. VOD	-	13.8	20.1	11.0	74.7	86.0	242.5	448.1	10%
3. Crop	-	0.7	2.9	7.9	56.6	31.0	68.2	167.4	4%
4. SWC	-	-	62.2	9.2	25.5	45.0	55.0	196.9	4%
5. WRD	-	22.8	308.5	282.2	183.3	180.0	200.0	1,176.8	26%
6. Livestock	-	9.4	24.1	3.8	19.9	12.0	24.0	93.2	2%
7. Forestry	-	4.8	1.4	43.9	26.4	5.0	5.0	86.5	2%
8. Migration Support	-	-	-	-	-	-	-	-	0%
Subtotal	4.0	82.0	429.4	369.7	391.2	363.0	602.7	2,241.9	49%
Other Development Costs									
Subtotal	-	-	-	-	-	-	-	-	0%
Total B	4.0	82.0	429.4	369.7	391.2	363.0	602.7	2,241.9	49%
Total A + B	263.5	307.1	647.8	770.0	817.0	789.5	1,013.7	4,608.7	100%

Source:

IFFDC Pratapgarh Coordination Office - Rajasthan.

DFIDI = Department for International Development (India).

PPG = Participatory Planning and Group Formation.

VOD = Village Organisation and Development.

SWC = Soil and Water Conservation.

WRD = Water Resource Development.

Table AN12.17.5

IFFDC - Rajasthan - Pratapgarh: Village Dharis Kheri: Costs - Economic (Rs'000).

Cost Head / Subhead	Conversion Factors		1999/00	2000/01	2001/02	2002/03	2003/04	2004/05	2005/06	Total	
	CF	SCF	Actual	Actual	Actual	Actual	Actual	Budget	Budget	(Rs'000)	(%)
A. Administration Costs											
IFFDC Head Quarters	0.90	1.00	95.4	41.6	42.5	76.2	48.4	42.5	42.5	389.2	10%
DFIDI	1.00	1.00	35.9	71.4	26.9	63.2	47.4	54.7	39.2	338.6	9%
Pratapgarh Coordination Office	0.90	1.00	105.9	96.7	129.8	227.2	292.1	292.1	292.1	1,436.0	37%
Total A			237.1	209.8	199.3	366.6	388.0	389.3	373.8	2,163.9	56%
B. Development Costs											
Component A											
1. PPG	0.90	1.00	3.6	27.5	9.1	10.5	4.3	3.6	7.2	65.8	2%
2. VOD	0.90	1.00	-	12.4	18.1	9.9	67.2	77.4	218.3	403.3	10%
3. Crop	0.90	1.00	-	0.6	2.6	7.1	51.0	27.9	61.4	150.6	4%
4. SWC	0.90	0.75	-	-	42.0	6.2	17.2	30.4	37.1	132.9	3%
5. WRD	0.90	0.75	-	15.4	208.2	190.5	123.7	121.5	135.0	794.3	21%
6. Livestock	0.90	1.00	-	8.4	21.7	3.4	17.9	10.8	21.6	83.9	2%
7. Forestry	0.90	1.00	-	4.3	1.3	39.5	23.8	4.5	4.5	77.9	2%
8. Migration Support	0.90	1.00	-	-	-	-	-	-	-	-	0%
Subtotal			3.6	68.6	303.1	267.1	305.1	276.1	485.1	1,708.7	44%
Other Development Costs											
Subtotal	0.90	1.00	-	-	-	-	-	-	-	-	0%
Total B			3.6	68.6	303.1	267.1	305.1	276.1	485.1	1,708.7	44%
Total A + B			240.7	278.4	502.3	633.8	693.1	665.4	858.9	3,872.6	100%

Source:

IFFDC Pratapgarh Coordination Office - Rajasthan.

DFIDI = Department for International Development (India).

PPG = Participatory Planning and Group Formation.

VOD = Village Organisation and Development.

SWC = Soil and Water Conservation.

WRD = Water Resource Development.

Table AN12.17.6

IFFDC - Rajasthan - Pratapgarh: Village Dharis Kheri: VOD Household Assumptions.

Without \ With Project	Units	Assumptions			Benefits		
					Year 1 (Rs)	Year 2 (Rs)	Year 3 (Rs)
Development Activity: Village Organisation and Development							
Before / Without Project Situation:							
A. Self Help Groups (SHGs)							
Assumption	Sum	Zero	Zero	Zero	-	-	-
B. Drudgery Reduction							
Assumption	Sum	Zero	Zero	Zero			
Total Without Project Benefits					-	-	-
After / With Project Situation:							
A. Self Help Groups (SHGs)							
Assumptions							
Average Saving / Household	Rs	1,137					
Households / Village	No	80					
Present Group Savings	Rs'000	91.0			91.0	93.7	96.5
Annual Savings Increase	%	3%					
Deposits on Loan to Members	%	35%					
SHG Interest Income	% / Year	20%					
Assumed Benefit	Rs'000				6.4	6.6	6.8
B. Drudgery Reduction							
Assumptions							
Hours Saved / Day / Household	No	1.0					
Number of Days / Year / Household	No	200					
Days / Year / Household (8hrs/day)	No	25.0					
Households / Village	No	80					
Day Equivalent / Village	No	2,000					
Economic Value per Day	(Rs/day)	25					
Assumed Benefit	Rs'000				50.0	50.0	50.0
Total With Project Benefits	Rs'000				56.4	56.6	56.8
Incremental Benefits	Rs'000				56.4	56.6	56.8

Source:

Cost Benefit Analysis (CBA) Study Estimate Jan 2005.

VOD = Village Organisation and Development.

Participating households per village: Dharis Kheri

80

Table AN12.17.6

IFFDC - Rajasthan - Pratappgarh: Village Dharis Kheri: Incremental VOD Benefit Stream (Rs'000).

Without \ With Project	Benefit Streams (Rs '000)									
	Year 1 1999/00	Year 2 2000/01	Year 3 2001/02	Year 4 2002/03	Year 5 2003/04	Year 6 2004/05	Year 7 2005/06	Year 8 2006/07	Year 9 2007/08	Year 10 2008/09
Development Activity: Village Organisation and Development Before / Without Project Situation: A. Self Help Groups (SHGs) Assumption B. Drudgery Reduction Assumption Total Without Project Benefits	-	-	-	-	-	-	-	-	-	-
After / With Project Situation: A. Self Help Groups (SHGs) Assumptions Average Saving / Household Households / Village Present Group Savings Annual Savings Increase Deposits on Loan to Members SHG Interest Income Assumed Benefit B. Drudgery Reduction Assumptions Hours Saved / Day / Household Number of Days / Year / Household Days / Year / Household (8hrs/day) Households / Village Day Equivalent / Village Economic Value per Day Assumed Benefit Total With Project Benefits Incremental Benefits	-	-	91.0	93.7	96.5	99.4	102.4	105.4	108.6	111.9
	-	-	6.4	6.6	6.8	7.0	7.2	7.4	7.6	7.8
	-	-	50.0	50.0	50.0	50.0	50.0	50.0	50.0	50.0
	-	-	56.4	56.6	56.8	57.0	57.2	57.4	57.6	57.8
	-	-	56.4	56.6	56.8	57.0	57.2	57.4	57.6	57.8

Source:

VOD = Village Organisation and Development.
Participating households per village: Dharis Kheri

Cost Benefit Analysis (CBA) Study Estimate Jan 2005.

Table AN12.17.7

IFFDC - Rajasthan - Pratapgarh: Village Dharis Kheri: Household Crop Net Margin Assumptions

Without \ With Project	Units	Assumptions			Benefits		
					Year 1 (Rs/HH)	Year 2 (Rs/HH)	Year 3 (Rs/HH)
Development Activity: Crop Technology, SWC and WRD							
Before / Without Project Situation:							
Assumptions							
Households (HHs)	No	80					
Crop Adoption Assumptions		100%	100%	100%			
Kharif Crop Net Margin	Rs/HH				1,584.4	1,584.4	1,584.4
Rabi Crop Net Margin	Rs/HH				711.7	711.7	711.7
Total Without Project Benefits	Rs/HH				2,296.1	2,296.1	2,296.1
After / With Project Situation:							
Assumptions							
Households (HHs)	No	80					
Crop Adoption Assumptions		100%	100%	100%			
Kharif Crop Net Margin	Rs/HH				3,747.3	3,747.3	3,747.3
Rabi Crop Net Margin	Rs/HH				1,428.6	1,428.6	1,428.6
Total With Project Benefits	Rs/HH				5,175.9	5,175.9	5,175.9
Incremental Benefits	Rs/HH				2,879.9	2,879.9	2,879.9

Source:

Cost Benefit Analysis (CBA) Study Estimate Jan 2005.

Table AN12.17.7

IFFDC - Rajasthan - Pratappgarh: Village Dharis Kheri: Incremental Crop Benefit Stream (Rs'000).

Without \ With Project	Benefit Streams (Rs '000)									
	Year 1 1999/00	Year 2 2000/01	Year 3 2001/02	Year 4 2002/03	Year 5 2003/04	Year 6 2004/05	Year 7 2005/06	Year 8 2006/07	Year 9 2007/08	Year 10 2008/09
Development Activity: Crop Technology, SWC and WRD										
Before / Without Project Situation: Assumptions										
Households (HHs)										
Crop Adoption Assumptions										
Kharif Crop Net Margin	-	-	-	-	126.8	126.8	126.8	126.8	126.8	126.8
Rabi Crop Net Margin	-	-	-	-	56.9	56.9	56.9	56.9	56.9	56.9
Total Without Project Benefits	-	-	-	-	183.7	183.7	183.7	183.7	183.7	183.7
After / With Project Situation: Assumptions										
Households (HHs)										
Crop Adoption Assumptions										
Kharif Crop Net Margin	-	-	-	-	299.8	299.8	299.8	299.8	299.8	299.8
Rabi Crop Net Margin	-	-	-	-	114.3	114.3	114.3	114.3	114.3	114.3
Total With Project Benefits	-	-	-	-	414.1	414.1	414.1	414.1	414.1	414.1
Incremental Benefits	-	-	-	-	230.4	230.4	230.4	230.4	230.4	230.4

Source:

Cost Benefit Analysis (CBA) Study Estimate Jan 2005.

Table AN12.17.8

IFFDC - Rajasthan - Pratapgarh: Village Dharis Kheri: Household Livestock Net Margin Assump

Without \ With Project Kharif \ Rabi Livestock	Units	Assumptions			Benefits		
					Year 1 (Rs)	Year 2 (Rs)	Year 3 (Rs)
Development Activity: Livestock							
Before / Without Project Situation: Assumptions							
Households (HHs)	No	80					
Annual Livestock Net Margin	Rs/HH						
Total Without Project Benefits					1,261.6	1,261.6	1,261.6
After / With Project Situation:							
Development Activity: Assumptions							
Households (HHs)	No	80					
Adoption Assumptions	Percent	55%	78%	100%			
Annual Livestock Net Margin	Rs/HH						
Total With Project Benefits					1,657.0	2,334.9	3,012.8
Incremental Benefits	Rs/HH				395.4	1,073.3	1,751.2

Source:

Cost Benefit Analysis (CBA) Study Estimate Jan 2005.

Table AN12.17.8

IFFDC - Rajasthan - Pratappgarh: Village Dharis Kheri: Incremental Livestock Benefit Stream (Rs'000).

Without \ With Project Kharif \ Rabi Livestock	Benefit Streams (Rs '000)									
	Year 1 1999/00	Year 2 2000/01	Year 3 2001/02	Year 4 2002/03	Year 5 2003/04	Year 6 2004/05	Year 7 2005/06	Year 8 2006/07	Year 9 2007/08	Year 10 2008/09
Development Activity: Livestock										
Before / Without Project Situation:										
Assumptions										
Households (HHs)										
Annual Livestock Net Margin										
Total Without Project Benefits	-	-	-	-	100.9	100.9	100.9	100.9	100.9	100.9
After / With Project Situation:										
Development Activity:										
Assumptions										
Households (HHs)										
Adoption Assumptions										
Annual Livestock Net Margin										
Total With Project Benefits	-	-	-	-	132.6	186.8	241.0	241.0	241.0	241.0
Incremental Benefits	-	-	-	-	31.6	85.9	140.1	140.1	140.1	140.1

Source:

Cost Benefit Analysis (CBA) Study Estimate Jan 2005.

Table AN12.17.9

IFFDC - Rajasthan - Pratapgarh: Village Dharis Kheri: Forestry Benefit Assumptions.

Without \ With Project Kharif \ Rabi Forestry	Units	Assumptions			Benefits		
					Year 1 (Rs)	Year 2 (Rs)	Year 3 (Rs)
Development Activity: Forestry							
Before / Without Project Situation: Assumptions							
Households (HHs)	No	80					
Annual Forestry Net Margin	Rs/HH				-	-	-
Total Without Project Benefits							
After / With Project Situation: Assumptions							
Households (HHs)	No	80					
Adoption Assumptions	Percent	55%	78%	100%			
Annual Forestry Net Margin	Rs/HH				192.5	273.0	350.0
Total With Project Benefits							
Incremental Benefits	Rs/HH				192.5	273.0	350.0

Source:

Cost Benefit Analysis (CBA) Study Estimate Jan 2005.

Table AN12.17.9

IFFDC - Rajasthan - Pratappgarh: Village Dharis Kheri: Incremental Forestry Benefit Stream (Rs'000).

Without \ With Project Kharif \ Rabi Forestry	Benefit Streams (Rs '000)									
	Year 1 1999/00	Year 2 2000/01	Year 3 2001/02	Year 4 2002/03	Year 5 2003/04	Year 6 2004/05	Year 7 2005/06	Year 8 2006/07	Year 9 2007/08	Year 10 2008/09
Development Activity: Forestry										
Before / Without Project Situation: Assumptions										
Households (HHs)										
Annual Forestry Net Margin										
Total Without Project Benefits	-	-	-	-	-	-	-	-	-	-
After / With Project Situation: Assumptions										
Households (HHs)										
Adoption Assumptions										
Annual Forestry Net Margin										
Total With Project Benefits	-	-	-	15.4	21.8	28.0	28.0	28.0	28.0	28.0
Incremental Benefits	-	-	-	15.4	21.8	28.0	28.0	28.0	28.0	28.0

Source:

Cost Benefit Analysis (CBA) Study Estimate Jan 2005.

Table AN12.17.10

IFFDC - Rajasthan - Pratapgarh: Village Dharis Kheri: Migration Support Benefit Assumptions.

Without \ With Project	Assumptions			Benefits		
				Year 1 (Rs)	Year 2 (Rs)	Year 3 (Rs)
Development Activity: Migration Support						
Before / Without Project Situation:						
Assumptions						
Economic Value per Day	Rs/day	25.0				
Days / Month / Household	No	-				
Economic Value per Month	Rs/month	-				
Months Migration / Year	Months	4.0				
Economic Value per Household	Rs/HH	-				
Households per Village	No	80				
Households per Village Migrating	Percent	45%				
Total Without Project Benefits	Rs/Village			-	-	-
After / With Project Situation:						
Assumptions						
Economic Value per Day \1	Rs/day	25.0	30%	32.5		
Days / Month / Household	No	-	30%	-		
Economic Value per Month	Rs/month	-		-		
Months Migration / Year	Months	4.0	-20%	3.2		
Economic Value per Household	Rs/HH	-		-		
Households per Village	No	80		80		
Households per Village Migrating	Percent	45%	-20%	36%		
Subtotal Migration Income	Rs/Village				-	-
Other Income	Sum (Rs)	-	-	-	-	-
Total With Project Benefits	Rs/Village				-	-
Incremental Benefits	Rs/Village				-	-

Source:

Cost Benefit Analysis (CBA) Study Estimate Jan 2005.

- 1\ Financial Wages (Rs/day):
 Skill Labour - Rs 160
 Casual Labour :
 Male - Rs 40
 Female - Rs 30

Table AN12.17.10

IFFDC - Rajasthan - Pratappgarh: Village Dharis Kheri: Incremental Migration Support Benefit Stream (Rs'000).

Without \ With Project	Benefit Streams (Rs '000)									
	Year 1 1999/00	Year 2 2000/01	Year 3 2001/02	Year 4 2002/03	Year 5 2003/04	Year 6 2004/05	Year 7 2005/06	Year 8 2006/07	Year 9 2007/08	Year 10 2008/09
Development Activity: Migration Support Before / Without Project Situation: Assumptions Economic Value per Day Days / Month / Household Economic Value per Month Months Migration / Year Economic Value per Household Households per Village Households per Village Migrating Total Without Project Benefits	-	-	-	-	-	-	-	-	-	-
After / With Project Situation: Assumptions Economic Value per Day \1 Days / Month / Household Economic Value per Month Months Migration / Year Economic Value per Household Households per Village Households per Village Migrating Subtotal Migration Income Other Income Total With Project Benefits Incremental Benefits	-	-	-	-	-	-	-	-	-	-

Source:

Cost Benefit Analysis (CBA) Study Estimate Jan 2005.

- 1\ Financial Wages (Rs/day):
 Skill Labour - Rs 160
 Casual Labour :
 Male - Rs 40
 Female - Rs 30

Table AN12.17.11 IFFDC - Rajasthan - Pratappgarh: Village Dharis Kheri: Weighted Household Crop Net Margin Summary (Rs/Household).

Item	WBR (%)	Before / Without Project			After / With Project			Increment		
		Khalif	Rabi	Total	Khalif	Rabi	Total	Khalif	Rabi	Total
Phase II										
Well Being Ranking - Very Poor Household Net Margin (Rs)	36.0%	834.6	834.6	834.6	834.6	834.6	834.6	834.6	834.6	834.6
Well Being Ranking - Very Poor Household Net Margin (Rs)	22.0%	637.7	637.7	637.7	637.7	637.7	637.7	637.7	637.7	637.7
Well Being Ranking - Poor Household Net Margin (Rs)	28.0%	994.0	89.3	1,083.3	3,711.4	2,508.3	6,219.6	2,717.4	2,419.0	5,136.4
Well Being Ranking - Better Off Household Net Margin (Rs)	14.0%	6,180.9	1,756.7	7,937.5	16,195.9	2,039.3	18,235.2	10,015.0	282.7	10,297.7
Well Being Ranking - Weighted Household Net Margin (Rs)	100%	1,584.4	711.7	1,855.3	3,747.3	1,428.6	4,735.2	2,603.7	1,157.6	3,320.6
Phase I \1										
Well Being Ranking - Very Poor Household Net Margin (Rs)	36.0%	436.3	267.5	703.8	3,866.5	1,668.8	5,535.3	3,430.3	1,401.3	4,831.5
Well Being Ranking - Very Poor Household Net Margin (Rs)	22.0%	485.8	657.5	1,143.3	10,136.0	5,690.3	15,826.3	9,650.3	5,032.8	14,683.0
Well Being Ranking - Poor Household Net Margin (Rs)	28.0%	986.3	3,385.0	4,371.3	9,457.5	5,195.0	14,652.5	8,471.3	1,810.0	10,281.3
Well Being Ranking - Better Off Household Net Margin (Rs)	14.0%	2,778.0	937.0	3,715.0	4,915.0	9,560.0	14,475.0	2,137.0	8,623.0	10,760.0
Well Being Ranking - Weighted Household Net Margin (Rs)	100%	929.0	1,319.9	2,248.9	6,958.1	4,645.6	11,603.7	6,029.1	3,325.7	9,354.8

Source: Study of Impact of WIRFP on Net Incomes of Target Households, Jan 2004.

WBR = IFFDC Household Well Being Ranking. Survey figures adjusted to Village Profile WBR.

\1 GVT - Madhya Pradesh - Phase I: Village Naganwat Choti: Weighted Household Crop Net Margin Summary.

Table AN12.17.12 IFFDC - Rajasthan - Pratapgarh: Village Dharis Kheri: Weighted Household Crop Net Margin Sensitivity Analysis (Rs/Household).

Item	EIRR	Before / Without Project			After / With Project			Increment		
		Khalif	Rabi	Total	Khalif	Rabi	Total	Khalif	Rabi	Total
Development Activity: Crop Technology, SWC and WRD										
Weighted Net Margin (Phase II)										
Household Net Margin (Rs)		1,584.4	711.7	2,296.1	3,747.3	1,428.6	5,175.9	2,163.0	716.9	2,879.9
Incremental Benefit (Phase II / Phase I)										31%
Base Case Assumptions										
Household Net Margin (Rs)		1,584.4	711.7	2,296.1	3,747.3	1,428.6	5,175.9	2,163.0	716.9	2,879.9
Incremental Benefit (Phase II / Phase I)										31%
Sensitivity Increase (%)	0%									
Development Activity	6%									
Overall Village	1%									
Sensitivity Assumptions										
Household Net Margin (Rs)		1,584.4	711.7	2,296.1	6,557.8	2,500.0	9,057.8	4,973.5	1,788.3	6,761.8
Incremental Benefit (Phase II / Phase I)										72%
Sensitivity Increase (%)	0%									
Development Activity	34%									
Overall Village	12%									
Weighted Net Margin (Phase I)										
Household Net Margin (Rs)		929.0	1,319.9	2,248.9	6,958.1	4,645.6	11,603.7	6,029.1	3,325.7	9,354.8

Source: IFFDC Pratapgarh Coordination Office - Rajasthan.

EIRR = Economic Internal Rate of Return (rate at which NPV equal to zero).

Table AN12.17.13 IFFDC - Rajasthan - Pratapgarh: Village Dharis Kheri: Weighted Household Livestock Net Margin Summary (Rs/Household).

Well Being Ranking	Weight (%)	Before / Without Project		After / With Project		Increment \1	
		Herd Value	Net Margin	Herd Value	Net Margin	Herd Value	Net Margin
Phase I - Well Being Ranking (WBR) \1							
Madhya Pradesh - WBR Weighted Data							
Very Poor	36.0%						
Average		580	(185.0)	5,650	412.5	474	597.5
Poor	22.0%						
Average		2,350	982.5	8,250	2,141.0	1,180	1,158.5
Moderate	28.0%						
Average		14,700	6,730.0	1,900	2,820.0	1,900	(3,910.0)
Better Off	14.0%						
Average		15,580	3,000.0	14,600	10,790.0	(196)	7,790.0
Phase I - WBR Weighted Data	100.0%	7,023	2,454.0	6,425	2,919.7	935	465.8
Phase II - Well Being Ranking (WBR)							
Very Poor	36.0%						
Average		5,756	149.2	10,970	1,446.4	1,043	1,297.2
Poor	22.0%						
Average		13,128	852.2	25,979	3,008.8	2,570	2,156.8
Moderate	28.0%						
Average		13,525	4,035.1	27,020	5,249.5	2,699	1,214.4
Better Off	14.0%						
Average		12,700	(781.7)	41,873	2,573.3	5,835	3,355.0
Phase II - WBR Weighted Data	100.0%	10,525	1,261.6	23,092	3,012.8	2,513	1,751.2

Source: Study of Impact of WIRFP on Net Incomes of Target Households, Jan 2004.

WBR = IFFDC Household Well Being Ranking.

Survey figures adjusted to Village Profile WBR.

\1 GVT - Madhya Pradesh - Phase I: Village Naganwat Choti: Weighted Household Livestock Net Margin Summary.

WIRFP - Phase II - Cost Benefit Analysis Study

Tables AN12.0 Individual Village Cost Benefit Analysis

Tables AN12.18 IFFDC - Rajasthan - Pratapgarh: Village Kachotia.

- Table AN12.18.1 IFFDC - Rajasthan - Pratapgarh: Village Kachotia: Village Profile.
- Table AN12.18.2 IFFDC - Rajasthan - Pratapgarh: Village Kachotia: Cost Benefit Analysis Summary (Rs'000).
- Table AN12.18.3 IFFDC - Rajasthan - Pratapgarh: Village Kachotia: Cost Benefit Analysis Development Activity Summary A (Rs'000).
- Table AN12.18.4 IFFDC - Rajasthan - Pratapgarh: Village Kachotia: Cost Benefit Analysis Development Activity Summary B (Rs'000).
- Table AN12.18.5 IFFDC - Rajasthan - Pratapgarh: Village Kachotia: Costs - Financial (Rs'000).
IFFDC - Rajasthan - Pratapgarh: Village Kachotia: Costs - Economic (Rs'000).
- Table AN12.18.6 IFFDC - Rajasthan - Pratapgarh: Village Kachotia: VOD Household Assumptions.
IFFDC - Rajasthan - Pratapgarh: Village Kachotia: Incremental VOD Benefit Stream (Rs'000).
- Table AN12.18.7 IFFDC - Rajasthan - Pratapgarh: Village Kachotia: Household Crop Net Margin Assumptions.
IFFDC - Rajasthan - Pratapgarh: Village Kachotia: Incremental Crop Benefit Stream (Rs'000).
- Table AN12.18.8 IFFDC - Rajasthan - Pratapgarh: Village Kachotia: Household Livestock Net Margin Assumptions.
IFFDC - Rajasthan - Pratapgarh: Village Kachotia: Incremental Livestock Benefit Stream (Rs'000).
- Table AN12.18.9 IFFDC - Rajasthan - Pratapgarh: Village Kachotia: Forestry Benefit Assumptions.
IFFDC - Rajasthan - Pratapgarh: Village Kachotia: Incremental Forestry Benefit Stream (Rs'000).
- Table AN12.18.10 IFFDC - Rajasthan - Pratapgarh: Village Kachotia: Migration Support Benefit Assumptions.
IFFDC - Rajasthan - Pratapgarh: Village Kachotia: Incremental Migration Support Benefit Stream (Rs'000).
- Table AN12.18.11 IFFDC - Rajasthan - Pratapgarh: Village Kachotia: Weighted Household Crop Net Margin Summary (Rs/Household).
- Table AN12.18.12 IFFDC - Rajasthan - Pratapgarh: Village Kachotia: Weighted Household Crop Net Margin Sensitivity Analysis (Rs/Household).
- Table AN12.18.13 IFFDC - Rajasthan - Pratapgarh: Village Kachotia: Weighted Household Livestock Net Margin Summary (Rs/Household).

Table AN12.18.1 IFFDC - Rajasthan - Pratapgarh: Village Kachotia: Village Profile.

Village Profile \1			
A. Background			
Village Name		Kachotia	
District		Pratapgarh	
State		Rajasthan	
B. Participatory Planning Process (PPP)			
Village entry		Jan-00	
PRA		Mar-00	
CPA		Mar-00	
C. Infrastructure			
Hand Pumps (no)		10	
Wells (no)		39	
Linked by Road		1 km	
Electrification		No	
School		Primary	
D. Demographic Data			
Households (no)		170	
Participating Households		100	
Population (Adults)		1,165	
Adults:			
Male		604	
Female		561	
Children:			
Boys		N/A	
Girls		N/A	
E. Well Being Ranking (No Households)			
Very Poor	75	44.1%	
Poor	51	30.0%	
Moderate	32	18.8%	
Better Off	12	7.1%	
Total	170	100%	
F. Land Resource (ha)			
Total Area		-	
Revenue Land (unused)		-	
Forest Area - Revenue		-	
Pasture Land		-	
Arable Land		-	
G. Livestock			
Oxen	369		
Cows	340		
Buffalo	81		
Goats	392		
Poultry	920		
H. Self Help Groups (No Households)			
1 Group 1	14		
2 Group 2	20		
3 Group 3	13		
4 Group 4	21		
5 Group 5	20		
6 Group 6	20		
7 Group 7	-		
Total Memberhip	108		

Source: IFFDC Pratapgarh Coordination Office - Rajasthan.

\1 Subject to final adjustment following consolidation exercise prior to Annual Review Meeting (ARM) in Feb 2005.

Table AN12.18.2 IFFDC - Rajasthan - Pratapgarh: Village Kachotia: Cost Benefit Analysis Summary (Rs'000).

Administration Costs / Development Activity	EIRR \1	NPV \2		Year 1 1999/00	Year 2 2000/01	Year 3 2001/02	Year 4 2002/03	Year 5 2003/04	Year 6 2004/05	Year 7 2005/06	Year 8 2006/07	Year 9 2007/08	Year 10 2008/09
		(10%)	(%)										
A. Administration Costs													
Total A	N/A	(1,449)	263%	237.1	209.8	199.3	366.6	388.0	389.3	373.8	37.4	37.4	37.4
B. Development Intervention Component A													
1. PPGF													
Net Incremental Benefits	N/A	(41)	7%	(6.7)	(7.4)	(8.2)	(11.0)	(10.5)	(5.1)	(7.9)	(1.3)	(1.3)	(1.3)
2. VOD													
Net Incremental Benefits	18%	53	-10%	-	(82.3)	(6.9)	39.7	9.7	30.3	(155.6)	50.7	50.9	51.1
3/5. Crop Technology, SWC and WRD													
Net Incremental Benefits	17%	220	-40%	-	(78.4)	(348.4)	(297.1)	162.0	3.5	(59.9)	224.7	224.7	224.7
6. Livestock													
Net Incremental Benefits	124%	597	-108%	-	(5.4)	(3.4)	(10.8)	9.7	81.3	149.0	170.8	170.8	170.8
7. Forestry													
Net Incremental Benefits	43%	68	-12%	-	(5.4)	(3.3)	(9.7)	0.1	7.2	2.0	26.3	26.3	26.3
8. Migration Support													
Net Incremental Benefits	N/A	-	0%	-	-	-	-	-	-	-	-	-	-
Summary													
Net Incremental Benefits	8%	(551)	100%	(243.8)	(388.6)	(569.5)	(655.5)	(217.0)	(272.1)	(446.2)	433.9	434.1	434.3
Sensitivity Analysis													
Analysis Period													
12 Years	-4%	(1,104)											
20 Years (Base Case)	8%	(551)											
25 Years	9%	(388)											
30 Years	10%	(296)											
Costs - Administration													
Investment Costs Decreased by 20 percent	10%	(261)											
Costs - Administration and Development													
Recurrent Costs Increased by 20 percent	6%	(759)											
Benefits - Crops, SWC and WRD													
Crop Benefits Increased by 20 percent	11%	(141)											
Livestock Benefits Increased by 20 percent	9%	(339)											

Source: Cost Benefit Analysis (CBA) Study Estimate Jan 2005.

\1 EIRR = Economic Internal Rate of Return (rate at which NPV equal to zero).

\2 NPV = Net Present Value of net incremental benefits at 12% (indicative opportunity cost of capital for rural development projects in India).

N/A = Not analysed as EIRR negative.

Table AN12.18.3 IFFDC - Rajasthan - Pratapgarh: Village Kachotia: Cost Benefit Analysis Development Activity Summary A (Rs'000).

Administration Costs / Development Activity	EIRR \1	NPV \2		Year 1 1999/00	Year 2 2000/01	Year 3 2001/02	Year 4 2002/03	Year 5 2003/04	Year 6 2004/05	Year 7 2005/06	Year 8 2006/07	Year 9 2007/08	Year 10 2008/09
		(10%)	(%)										
A. Administration Costs													
Investment				237.1	209.8	199.3	366.6	388.0	389.3	373.8	-	-	-
Recurrent				-	-	-	-	-	-	-	37.4	37.4	37.4
Total A	N/A	(1,449)	263%	237.1	209.8	199.3	366.6	388.0	389.3	373.8	37.4	37.4	37.4
B. Development Intervention Component A													
1. PPGF													
Cost Stream													
Investment				6.7	7.2	7.9	10.5	9.7	4.1	6.8	-	-	-
Recurrent				-	0.2	0.3	0.5	0.8	1.0	1.1	1.3	1.3	1.3
Total Costs				6.7	7.4	8.2	11.0	10.5	5.1	7.9	1.3	1.3	1.3
Benefit Stream													
Before / Without Project				-	-	-	-	-	-	-	-	-	-
After / With Project				-	-	-	-	-	-	-	-	-	-
Incremental Benefits				-	-	-	-	-	-	-	-	-	-
Net Incremental Benefits	N/A	(41)	7%	(6.7)	(7.4)	(8.2)	(11.0)	(10.5)	(5.1)	(7.9)	(1.3)	(1.3)	(1.3)
2. VOD													
Cost Stream													
Investment				-	82.3	76.9	26.6	55.6	32.4	216.9	-	-	-
Recurrent				-	-	4.1	8.0	9.3	12.1	13.7	24.5	24.5	24.5
Total Costs				-	82.3	81.1	34.6	64.9	44.5	230.6	24.5	24.5	24.5
Benefit Stream													
Before / Without Project				-	-	-	-	-	-	-	-	-	-
After / With Project				-	-	74.1	74.3	74.5	74.8	75.0	75.2	75.4	75.7
Incremental Benefits				-	-	74.1	74.3	74.5	74.8	75.0	75.2	75.4	75.7
Net Incremental Benefits	18%	53	-10%	-	(82.3)	(6.9)	39.7	9.7	30.3	(155.6)	50.7	50.9	51.1
3/5. Crop Technology, SWC and WRD													
Cost Stream													
Investment													
Crop Technology				-	0.6	5.2	28.1	60.0	27.9	29.3	-	-	-
Soil Water Conservation				-	29.9	40.4	44.1	16.5	37.1	30.4	-	-	-
Water Resource Development				-	47.8	291.8	165.0	90.1	243.0	270.0	-	-	-
Recurrent													
Crop Technology				-	-	0.0	0.1	0.8	2.3	3.0	3.8	3.8	3.8
Soil Water Conservation				-	-	3.7	8.8	14.3	16.4	21.0	24.8	24.8	24.8
Water Resource Development				-	-	7.2	50.9	75.7	89.2	125.7	166.2	166.2	166.2
Total Costs				-	78.4	348.4	297.1	257.4	415.9	479.3	194.7	194.7	194.7
Benefit Stream													
Before / Without Project				-	-	-	-	147.4	147.4	147.4	147.4	147.4	147.4
After / With Project				-	-	-	-	566.9	566.9	566.9	566.9	566.9	566.9
Incremental Benefits				-	-	-	-	419.5	419.5	419.5	419.5	419.5	419.5
Net Incremental Benefits	17%	220	-40%	-	(78.4)	(348.4)	(297.1)	162.0	3.5	(59.9)	224.7	224.7	224.7
EIRR													

Source: Cost Benefit Analysis (CBA) Study Estimate Jan 2005.

\1 EIRR = Economic Internal Rate of Return (rate at which NPV equal to zero).

\2 NPV = Net Present Value of net incremental benefits at 12% (indicative opportunity cost of capital for rural development projects in India).

N/A = Not analysed as EIRR negative.

Table AN12.18.4 IFFDC - Rajasthan - Pratapgarh: Village Kachotia: Cost Benefit Analysis Development Activity Summary B (Rs'000).

Administration Costs / Development Activity	EIRR \1	NPV \2		Year 1 1999/00	Year 2 2000/01	Year 3 2001/02	Year 4 2002/03	Year 5 2003/04	Year 6 2004/05	Year 7 2005/06	Year 8 2006/07	Year 9 2007/08	Year 10 2008/09
		(10%)	(%)										
6. Livestock													
Cost Stream													
Investment				-	5.4	2.9	10.0	38.3	28.8	24.3	-	-	-
Recurrent				-	-	0.5	0.8	1.8	5.7	8.5	11.0	11.0	11.0
Total Costs				-	5.4	3.4	10.8	40.1	34.5	32.8	11.0	11.0	11.0
Benefit Stream													
Before / Without Project				-	-	-	-	111.6	111.6	111.6	111.6	111.6	111.6
After / With Project				-	-	-	-	161.4	227.4	293.4	293.4	293.4	293.4
Incremental Benefits				-	-	-	-	49.8	115.8	181.8	181.8	181.8	181.8
Net Incremental Benefits	124%	597	-108%	-	(5.4)	(3.4)	(10.8)	9.7	81.3	149.0	170.8	170.8	170.8
7. Forestry													
Cost Stream													
Investment				-	5.4	2.7	29.6	25.6	24.3	27.0	-	-	-
Recurrent				-	-	0.5	0.8	3.8	6.3	8.8	11.5	11.5	11.5
Total Costs				-	5.4	3.3	30.4	29.4	30.6	35.8	11.5	11.5	11.5
Benefit Stream													
Before / Without Project				-	-	-	-	-	-	-	-	-	-
After / With Project				-	-	-	20.8	29.5	37.8	37.8	37.8	37.8	37.8
Incremental Benefits				-	-	-	20.8	29.5	37.8	37.8	37.8	37.8	37.8
Net Incremental Benefits	43%	68	-12%	-	(5.4)	(3.3)	(9.7)	0.1	7.2	2.0	26.3	26.3	26.3
8. Migration Support													
Cost Stream													
Investment				-	-	-	-	-	-	-	-	-	-
Recurrent				-	-	-	-	-	-	-	-	-	-
Total Costs				-	-	-	-	-	-	-	-	-	-
Benefit Stream													
Before / Without Project				-	-	-	-	-	-	-	-	-	-
After / With Project				-	-	-	-	-	-	-	-	-	-
Incremental Benefits				-	-	-	-	-	-	-	-	-	-
Net Incremental Benefits	N/A	-	0%	-	-	-	-	-	-	-	-	-	-
EIRR													
Summary													
Cost Stream													
Investment				243.8	388.4	627.1	680.6	683.7	786.9	978.4	-	-	-
Recurrent				-	0.2	16.5	70.0	106.6	133.0	181.9	280.4	280.4	280.4
Total Costs				243.8	388.6	643.6	750.6	790.3	919.9	1,160.2	280.4	280.4	280.4
Benefit Stream													
Before / Without Project				-	-	-	-	259.0	259.0	259.0	259.0	259.0	259.0
After / With Project				-	-	74.1	95.1	832.3	906.8	973.1	973.3	973.5	973.8
Incremental Benefits				-	-	74.1	95.1	573.3	647.8	714.0	714.3	714.5	714.7
Net Incremental Benefits	8%	(551)	100%	(243.8)	(388.6)	(569.5)	(655.5)	(217.0)	(272.1)	(446.2)	433.9	434.1	434.3

Source: Cost Benefit Analysis (CBA) Study Estimate Jan 2005.

EIRR = Economic Internal Rate of Return (rate at which NPV equal to zero).

NPV = Net Present Value of net incremental benefits at 12% (indicative opportunity cost of capital for rural development projects in India).

N/A = Not analysed as EIRR negative.

Table AN12.18.5

IFFDC - Rajasthan - Pratapgarh: Village Kachotia: Costs - Financial (Rs'000).

Cost Head / Subhead	1999/00	2000/01	2001/02	2002/03	2003/04	2004/05	2005/06	Total	
	Actual	Actual	Actual	Actual	Actual	Budget	Budget	(Rs'000)	(%)
A. Administration Costs									
IFFDC Head Quarters	106.0	46.3	47.3	84.7	53.8	47.2	47.2	432.5	8%
DFIDI	35.9	71.4	26.9	63.2	47.4	54.7	39.2	338.6	6%
Pratapgarh Coordination Office	117.6	107.5	144.2	252.5	324.6	324.6	324.6	1,595.6	30%
Total A	259.5	225.1	218.4	400.3	425.8	426.5	411.0	2,366.7	44%
B. Development Costs									
Component A									
1. PPG	7.4	8.0	8.7	11.6	10.8	4.5	7.5	58.6	1%
2. VOD	-	91.4	85.5	29.6	61.8	36.0	241.0	545.3	10%
3. Crop	-	0.7	5.8	31.2	66.7	31.0	32.5	167.9	3%
4. SWC	-	44.4	59.9	65.3	24.4	55.0	45.0	294.0	6%
5. WRD	-	70.8	432.3	244.5	133.5	360.0	400.0	1,641.0	31%
6. Livestock	-	6.0	3.2	11.1	42.5	32.0	27.0	121.9	2%
7. Forestry	-	6.0	3.1	32.9	28.4	27.0	30.0	127.4	2%
8. Migration Support	-	-	-	-	-	-	-	-	0%
Subtotal	7.4	227.3	598.5	426.3	368.1	545.5	783.0	2,956.1	56%
Other Development Costs									
Subtotal	-	-	-	-	-	-	-	-	0%
Total B	7.4	227.3	598.5	426.3	368.1	545.5	783.0	2,956.1	56%
Total A + B	266.9	452.4	816.9	826.6	793.9	972.0	1,194.0	5,322.8	100%

Source:

IFFDC Pratapgarh Coordination Office - Rajasthan.

DFIDI = Department for International Development (India).

PPG = Participatory Planning and Group Formation.

VOD = Village Organisation and Development.

SWC = Soil and Water Conservation.

WRD = Water Resource Development.

Table AN12.18.5

IFFDC - Rajasthan - Pratapgarh: Village Kachotia: Costs - Economic (Rs'000).

Cost Head / Subhead	Conversion Factors		1999/00	2000/01	2001/02	2002/03	2003/04	2004/05	2005/06	Total	
	CF	SCF	Actual	Actual	Actual	Actual	Actual	Budget	Budget	(Rs'000)	(%)
A. Administration Costs											
IFFDC Head Quarters	0.90	1.00	95.4	41.6	42.5	76.2	48.4	42.5	42.5	389.2	9%
DFIDI	1.00	1.00	35.9	71.4	26.9	63.2	47.4	54.7	39.2	338.6	8%
Pratapgarh Coordination Office	0.90	1.00	105.9	96.7	129.8	227.2	292.1	292.1	292.1	1,436.0	33%
Total A			237.1	209.8	199.3	366.6	388.0	389.3	373.8	2,163.9	49%
B. Development Costs											
Component A											
1. PPG	0.90	1.00	6.7	7.2	7.9	10.5	9.7	4.1	6.8	52.7	1%
2. VOD	0.90	1.00	-	82.3	76.9	26.6	55.6	32.4	216.9	490.8	11%
3. Crop	0.90	1.00	-	0.6	5.2	28.1	60.0	27.9	29.3	151.1	3%
4. SWC	0.90	0.75	-	29.9	40.4	44.1	16.5	37.1	30.4	198.5	5%
5. WRD	0.90	0.75	-	47.8	291.8	165.0	90.1	243.0	270.0	1,107.7	25%
6. Livestock	0.90	1.00	-	5.4	2.9	10.0	38.3	28.8	24.3	109.7	2%
7. Forestry	0.90	1.00	-	5.4	2.7	29.6	25.6	24.3	27.0	114.7	3%
8. Migration Support	0.90	1.00	-	-	-	-	-	-	-	-	0%
Subtotal			6.7	178.7	427.9	314.0	295.7	397.6	604.6	2,225.1	51%
Other Development Costs											
Subtotal	0.90	1.00	-	-	-	-	-	-	-	-	0%
Total B			6.7	178.7	427.9	314.0	295.7	397.6	604.6	2,225.1	51%
Total A + B			243.8	388.4	627.1	680.6	683.7	786.9	978.4	4,389.0	100%

Source:

Cost Benefit Analysis (CBA) Study Estimate Jan 2005.

DFIDI = Department for International Development (India).

PPG = Participatory Planning and Group Formation.

VOD = Village Organisation and Development.

SWC = Soil and Water Conservation.

WRD = Water Resource Development.

Table AN12.18.6

IFFDC - Rajasthan - Pratapgarh: Village Kachotia: VOD Household Assumptions.

Without \ With Project Village Organisation and Development	Units	Assumptions			Benefits		
					Year 1 (Rs)	Year 2 (Rs)	Year 3 (Rs)
Development Activity: Village Organisation and Development							
Before / Without Project Situation:							
A. Self Help Groups (SHGs)							
Assumption	Sum	Zero	Zero	Zero	-	-	-
B. Drudgery Reduction							
Assumption	Sum	Zero	Zero	Zero			
Total Without Project Benefits					-	-	-
After / With Project Situation:							
A. Self Help Groups (SHGs)							
Assumptions							
Average Saving / Household	Rs	923					
Households / Village	No	108					
Present Group Deposits	Rs'000	99.7			99.7	102.7	105.8
Annual Savings Increase	%	3%					
Deposits on Loan to Members	%	37%					
SHG Interest Income	% / Year	18%					
Assumed Benefit	Rs'000				6.6	6.8	7.0
B. Drudgery Reduction							
Assumptions							
Hours Saved / Day / Household	No	1.0					
Number of Days / Year / Household	No	200					
Days / Year / Household (8hrs/day)	No	25.0					
Households / Village	No	108					
Day Equivalent / Village	No	2,700					
Economic Value per Day	(Rs/day)	25					
Assumed Benefit	Rs'000				67.5	67.5	67.5
Total With Project Benefits	Rs'000				74.1	74.3	74.5
Incremental Benefits	Rs'000				74.1	74.3	74.5

Source:

VOD = Village Organisation and Development.
Participating households per village: Kachotia

Cost Benefit Analysis (CBA) Study Estimate Jan 2005.

Table AN12.18.6

IFFDC - Rajasthan - Pratappgarh: Village Kachotia: Incremental VOD Benefit Stream (Rs'000).

Without \ With Project Village Organisation and Development	Benefit Streams (Rs '000)									
	Year 1 1999/00	Year 2 2000/01	Year 3 2001/02	Year 4 2002/03	Year 5 2003/04	Year 6 2004/05	Year 7 2005/06	Year 8 2006/07	Year 9 2007/08	Year 10 2008/09
Development Activity: Village Organisation and Development										
Before / Without Project Situation:										
A. Self Help Groups (SHGs) Assumption										
B. Drudgery Reduction Assumption										
Total Without Project Benefits	-	-	-	-	-	-	-	-	-	-
After / With Project Situation:										
A. Self Help Groups (SHGs) Assumptions										
Average Saving / Household										
Households / Village										
Present Group Deposits	-	-	99.7	102.7	105.8	108.9	112.2	115.6	119.0	122.6
Annual Savings Increase										
Deposits on Loan to Members										
SHG Interest Income										
Assumed Benefit	-	-	6.6	6.8	7.0	7.3	7.5	7.7	7.9	8.2
B. Drudgery Reduction Assumptions										
Hours Saved / Day / Household										
Number of Days / Year / Household										
Days / Year / Household (8hrs/day)										
Households / Village										
Day Equivalent / Village										
Economic Value per Day										
Assumed Benefit	-	-	67.5	67.5	67.5	67.5	67.5	67.5	67.5	67.5
Total With Project Benefits	-	-	74.1	74.3	74.5	74.8	75.0	75.2	75.4	75.7
Incremental Benefits	-	-	74.1	74.3	74.5	74.8	75.0	75.2	75.4	75.7

Source:

VOD = Village Organisation and Development.
Participating households per village: Kachotia

Cost Benefit Analysis (CBA) Study Estimate Jan 2005.

Table AN12.18.7

IFFDC - Rajasthan - Pratapgarh: Village Kachotia: Household Crop Net Margin Assumptions.

Without \ With Project Crop Technology, SWC and WRD	Units	Assumptions			Benefits		
					Year 1 (Rs/HH)	Year 2 (Rs/HH)	Year 3 (Rs/HH)
Development Activity: Crop Technology, SWC and WRD							
Before / Without Project Situation:							
Assumptions							
Households (HHs)	No	108					
Crop Adoption Assumptions		100%	100%	100%			
Kharif Crop Net Margin	Rs/HH				1,180.0	1,180.0	1,180.0
Rabi Crop Net Margin	Rs/HH				185.0	185.0	185.0
Total Without Project Benefits	Rs/HH				1,365.1	1,365.1	1,365.1
After / With Project Situation:							
Assumptions							
Households (HHs)	No	108					
Crop Adoption Assumptions		100%	100%	100%			
Kharif Crop Net Margin	Rs/HH				4,093.7	4,093.7	4,093.7
Rabi Crop Net Margin	Rs/HH				1,155.3	1,155.3	1,155.3
Total With Project Benefits	Rs/HH				5,249.0	5,249.0	5,249.0
Incremental Benefits	Rs/HH				3,883.9	3,883.9	3,883.9

Source:

Cost Benefit Analysis (CBA) Study Estimate Jan 2005.

Table AN12.18.7

IFFDC - Rajasthan - Pratappgarh: Village Kachotia: Incremental Crop Benefit Stream (Rs'000).

Without \ With Project Crop Technology, SWC and WRD	Benefit Streams (Rs '000)									
	Year 1 1999/00	Year 2 2000/01	Year 3 2001/02	Year 4 2002/03	Year 5 2003/04	Year 6 2004/05	Year 7 2005/06	Year 8 2006/07	Year 9 2007/08	Year 10 2008/09
Development Activity: Crop Technology, SWC and WRD										
Before / Without Project Situation: Assumptions										
Households (HHs)										
Crop Adoption Assumptions										
Kharif Crop Net Margin	-	-	-	-	127.4	127.4	127.4	127.4	127.4	127.4
Rabi Crop Net Margin	-	-	-	-	20.0	20.0	20.0	20.0	20.0	20.0
Total Without Project Benefits	-	-	-	-	147.4	147.4	147.4	147.4	147.4	147.4
After / With Project Situation: Assumptions										
Households (HHs)										
Crop Adoption Assumptions										
Kharif Crop Net Margin	-	-	-	-	442.1	442.1	442.1	442.1	442.1	442.1
Rabi Crop Net Margin	-	-	-	-	124.8	124.8	124.8	124.8	124.8	124.8
Total With Project Benefits	-	-	-	-	566.9	566.9	566.9	566.9	566.9	566.9
Incremental Benefits	-	-	-	-	419.5	419.5	419.5	419.5	419.5	419.5

Source:

Cost Benefit Analysis (CBA) Study Estimate Jan 2005.

Table AN12.18.8

IFFDC - Rajasthan - Pratapgarh: Village Kachotia: Household Livestock Net Margin Assumption

Without \ With Project Livestock	Units	Assumptions			Benefits		
					Year 1 (Rs)	Year 2 (Rs)	Year 3 (Rs)
Development Activity: Livestock							
Before / Without Project Situation: Assumptions							
Households (HHs)	No	108					
Annual Livestock Net Margin	Rs/HH						
Total Without Project Benefits					1,033.3	1,033.3	1,033.3
After / With Project Situation:							
Development Activity: Assumptions							
Households (HHs)	No	108					
Adoption Assumptions	Percent	55%	78%	100%			
Annual Livestock Net Margin	Rs/HH						
Total With Project Benefits					1,494.1	2,105.4	2,716.6
Incremental Benefits	Rs/HH				460.9	1,072.1	1,683.3

Source:

Cost Benefit Analysis (CBA) Study Estimate Jan 2005.

Table AN12.18.8

IFFDC - Rajasthan - Pratappgarh: Village Kachotia: Incremental Livestock Benefit Stream (Rs'000).

Without \ With Project Livestock	Benefit Streams (Rs '000)									
	Year 1 1999/00	Year 2 2000/01	Year 3 2001/02	Year 4 2002/03	Year 5 2003/04	Year 6 2004/05	Year 7 2005/06	Year 8 2006/07	Year 9 2007/08	Year 10 2008/09
Development Activity: Livestock										
Before / Without Project Situation:										
Assumptions										
Households (HHs)										
Annual Livestock Net Margin										
Total Without Project Benefits	-	-	-	-	111.6	111.6	111.6	111.6	111.6	111.6
After / With Project Situation:										
Development Activity:										
Assumptions										
Households (HHs)										
Adoption Assumptions										
Annual Livestock Net Margin										
Total With Project Benefits	-	-	-	-	161.4	227.4	293.4	293.4	293.4	293.4
Incremental Benefits	-	-	-	-	49.8	115.8	181.8	181.8	181.8	181.8

Source:

Cost Benefit Analysis (CBA) Study Estimate Jan 2005.

Table AN12.18.9

IFFDC - Rajasthan - Pratapgarh: Village Kachotia: Forestry Benefit Assumptions.

Without \ With Project Forestry	Units	Assumptions			Benefits		
					Year 1 (Rs)	Year 2 (Rs)	Year 3 (Rs)
Development Activity: Forestry							
Before / Without Project Situation: Assumptions							
Households (HHs)	No	108					
Annual Forestry Net Margin	Rs/HH				-	-	-
Total Without Project Benefits							
After / With Project Situation: Assumptions							
Households (HHs)	No	108					
Adoption Assumptions	Percent	55%	78%	100%			
Annual Forestry Net Margin	Rs/HH				192.5	273.0	350.0
Total With Project Benefits							
Incremental Benefits	Rs/HH				192.5	273.0	350.0

Source:

Cost Benefit Analysis (CBA) Study Estimate Jan 2005.

Table AN12.18.9

IFFDC - Rajasthan - Pratappgarh: Village Kachotia: Incremental Forestry Benefit Stream (Rs'000).

Without \ With Project Forestry	Benefit Streams (Rs '000)									
	Year 1 1999/00	Year 2 2000/01	Year 3 2001/02	Year 4 2002/03	Year 5 2003/04	Year 6 2004/05	Year 7 2005/06	Year 8 2006/07	Year 9 2007/08	Year 10 2008/09
Development Activity: Forestry										
Before / Without Project Situation: Assumptions										
Households (HHs)										
Annual Forestry Net Margin										
Total Without Project Benefits	-	-	-	-	-	-	-	-	-	-
After / With Project Situation: Assumptions										
Households (HHs)										
Adoption Assumptions										
Annual Forestry Net Margin										
Total With Project Benefits	-	-	-	20.8	29.5	37.8	37.8	37.8	37.8	37.8
Incremental Benefits	-	-	-	20.8	29.5	37.8	37.8	37.8	37.8	37.8

Source:

Cost Benefit Analysis (CBA) Study Estimate Jan 2005.

Table AN12.18.10

IFFDC - Rajasthan - Pratapgarh: Village Kachotia: Migration Support Benefit Assumptions.

Without \ With Project Migration Support	Assumptions			Benefits		
				Year 1 (Rs)	Year 2 (Rs)	Year 3 (Rs)
Development Activity: Migration Support						
Before / Without Project Situation: Assumptions						
Economic Value per Day	Rs/day	25.0				
Days / Month / Household	No	-				
Economic Value per Month	Rs/month	-				
Months Migration / Year	Months	4.0				
Economic Value per Household	Rs/HH	-				
Households per Village	No	108				
Households per Village Migrating	Percent	45%				
Total Without Project Benefits	Rs/Village			-	-	-
After / With Project Situation: Assumptions						
Economic Value per Day \1	Rs/day	25.0	30%	32.5		
Days / Month / Household	No	-	30%	-		
Economic Value per Month	Rs/month	-		-		
Months Migration / Year	Months	4.0	-20%	3.2		
Economic Value per Household	Rs/HH	-		-		
Households per Village	No	108		108		
Households per Village Migrating	Percent	45%	-20%	36%		
Subtotal Migration Income	Rs/Village				-	-
Other Income	Sum (Rs)	-	-	-	-	-
Total With Project Benefits	Rs/Village				-	-
Incremental Benefits	Rs/Village				-	-

Source:

Cost Benefit Analysis (CBA) Study Estimate Jan 2005.

- 1\ Financial Wages (Rs/day):
Skill Labour - Rs 160
Casual Labour :
Male - Rs 40
Female - Rs 30

Table AN12.18.10

IFFDC - Rajasthan - Pratappgarh: Village Kachotia: Incremental Migration Support Benefit Stream (Rs'000).

Without \ With Project Migration Support	Benefit Streams (Rs '000)									
	Year 1 1999/00	Year 2 2000/01	Year 3 2001/02	Year 4 2002/03	Year 5 2003/04	Year 6 2004/05	Year 7 2005/06	Year 8 2006/07	Year 9 2007/08	Year 10 2008/09
Development Activity: Migration Support Before / Without Project Situation: Assumptions Economic Value per Day Days / Month / Household Economic Value per Month Months Migration / Year Economic Value per Household Households per Village Households per Village Migrating Total Without Project Benefits	-	-	-	-	-	-	-	-	-	-
After / With Project Situation: Assumptions Economic Value per Day \1 Days / Month / Household Economic Value per Month Months Migration / Year Economic Value per Household Households per Village Households per Village Migrating Subtotal Migration Income Other Income Total With Project Benefits Incremental Benefits	-	-	-	-	-	-	-	-	-	-

Source:

Cost Benefit Analysis (CBA) Study Estimate Jan 2005.

- 1\ Financial Wages (Rs/day):
 Skill Labour - Rs 160
 Casual Labour :
 Male - Rs 40
 Female - Rs 30

Table AN12.18.11 IFFDC - Rajasthan - Pratapgarh: Village Kachotia: Weighted Household Crop Net Margin Summary (Rs/Household).

Item	WBR (%)	Before / Without Project			After / With Project			Increment		
		Khalif	Rabi	Total	Khalif	Rabi	Total	Khalif	Rabi	Total
Phase II										
Well Being Ranking - Very Poor Household Net Margin (Rs)	44.0%	834.6	102.5	937.1	1,849.8	1,067.8	2,917.6	1,015.2	965.3	1,980.5
Well Being Ranking - Very Poor Household Net Margin (Rs)	30.0%	637.7	-	637.7	4,803.0	220.7	5,023.7	4,165.3	220.7	4,386.0
Well Being Ranking - Poor Household Net Margin (Rs)	19.0%	994.0	89.3	1,083.3	3,711.4	2,508.3	6,219.6	2,717.4	2,419.0	5,136.4
Well Being Ranking - Better Off Household Net Margin (Rs)	7.0%	6,180.9	1,756.7	7,937.5	16,195.9	2,039.3	18,235.2	10,015.0	282.7	10,297.7
Well Being Ranking - Weighted Household Net Margin (Rs)	100.0%	1,180.0	185.0	1,365.1	4,093.7	1,155.3	5,249.0	2,913.6	970.3	3,883.9
Phase I \1										
Well Being Ranking - Very Poor Household Net Margin (Rs)	44.0%	436.3	267.5	703.8	3,866.5	1,668.8	5,535.3	3,430.3	1,401.3	4,831.5
Well Being Ranking - Very Poor Household Net Margin (Rs)	30.0%	485.8	657.5	1,143.3	10,136.0	5,690.3	15,826.3	9,650.3	5,032.8	14,683.0
Well Being Ranking - Poor Household Net Margin (Rs)	19.0%	986.3	3,385.0	4,371.3	9,457.5	5,195.0	14,652.5	8,471.3	1,810.0	10,281.3
Well Being Ranking - Better Off Household Net Margin (Rs)	7.0%	2,778.0	937.0	3,715.0	4,915.0	9,560.0	14,475.0	2,137.0	8,623.0	10,760.0
Well Being Ranking - Weighted Household Net Margin (Rs)	100.0%	719.5	1,023.7	1,743.2	6,883.0	4,097.6	10,980.6	6,163.5	3,073.9	9,237.4

Source: Study of Impact of WIRFP on Net Incomes of Target Households, Jan 2004.

WBR = IFFDC Household Well Being Ranking. Survey figures adjusted to Village Profile WBR.

\1 GVT - Madhya Pradesh - Phase I: Village Naganwat Choti: Weighted Household Crop Net Margin Summary.

Table AN12.18.12 IFFDC - Rajasthan - Pratappgarh: Village Kachotia: Weighted Household Crop Net Margin Sensitivity Analysis (Rs/Household).

Item	EIRR	Before / Without Project			After / With Project			Increment		
		Khalif	Rabi	Total	Khalif	Rabi	Total	Khalif	Rabi	Total
Development Activity: Crop Technology, SWC and WRD										
Weighted Net Margin (Phase II)										
Household Net Margin (Rs)		1,180.0	185.0	1,365.1	4,093.7	1,155.3	5,249.0	2,913.6	970.3	3,883.9
Incremental Benefit (Phase II / Phase I)										42%
Base Case Assumptions										
Household Net Margin (Rs)		1,180.0	185.0	1,365.1	4,093.7	1,155.3	5,249.0	2,913.6	970.3	3,883.9
Incremental Benefit (Phase II / Phase I)										42%
Sensitivity Increase (%)	0%									
Development Activity										
Overall Village										
Sensitivity Assumptions										
Household Net Margin (Rs)		1,180.0	185.0	1,365.1	5,321.8	1,501.9	6,823.7	4,141.7	1,316.9	5,458.6
Incremental Benefit (Phase II / Phase I)										59%
Sensitivity Increase (%)	0%									
Development Activity										
Overall Village										
Weighted Net Margin (Phase I)										
Household Net Margin (Rs)		719.5	1,023.7	1,743.2	6,883.0	4,097.6	10,980.6	6,163.5	3,073.9	9,237.4

Source: Study of Impact of WIRFP on Net Incomes of Target Households, Jan 2004.

EIRR = Economic Internal Rate of Return (rate at which NPV equal to zero).

Table AN12.18.13 IFFDC - Rajasthan - Pratapgarh: Village Kachotia: Weighted Household Livestock Net Margin Summary (Rs/Household).

Well Being Ranking	Weight (%)	Before / Without Project		After / With Project		Increment \1	
		Herd Value	Net Margin	Herd Value	Net Margin	Herd Value	Net Margin
Phase I - Well Being Ranking (WBR) \1							
Madhya Pradesh - WBR Weighted Data							
Very Poor	44.0%						
Average		580	(185.0)	5,650	412.5	474	597.5
Poor	30.0%						
Average		2,350	982.5	8,250	2,141.0	1,180	1,158.5
Moderate	19.0%						
Average		14,700	6,730.0	1,900	2,820.0	1,900	(3,910.0)
Better Off	7.0%						
Average		15,580	3,000.0	14,600	10,790.0	(196)	7,790.0
Phase I - WBR Weighted Data	100.0%	4,844	1,702.1	6,344	2,114.9	910	412.9
Phase II - Well Being Ranking (WBR)							
Very Poor	44.0%						
Average		5,756	149.2	10,970	1,446.4	1,043	1,297.2
Poor	30.0%						
Average		13,128	852.2	25,979	3,008.8	2,570	2,156.8
Moderate	19.0%						
Average		13,525	4,035.1	27,020	5,249.5	2,699	1,214.4
Better Off	7.0%						
Average		12,700	(781.7)	41,873	2,573.3	5,835	3,355.0
Phase II - WBR Weighted Data	100.0%	9,930	1,033.3	20,685	2,716.6	2,151	1,683.4

Source: Study of Impact of WIRFP on Net Incomes of Target Households, Jan 2004.

WBR = IFFDC Household Well Being Ranking.

Survey figures adjusted to Village Profile WBR.

\1 GVT - Madhya Pradesh - Phase I: Village Naganwat Choti: Weighted Household Livestock Net Margin Summary.

WIRFP - Phase II - Cost Benefit Analysis Study

Tables AN12.0 Individual Village Cost Benefit Analysis

Tables AN12.19 IFFDC - Rajasthan - Pratapgarh: Village Moti Kheri.

- Table AN12.19.1 IFFDC - Rajasthan - Pratapgarh: Village Moti Kheri: Village Profile.
- Table AN12.19.2 IFFDC - Rajasthan - Pratapgarh: Village Moti Kheri: Cost Benefit Analysis Summary (Rs'000).
- Table AN12.19.3 IFFDC - Rajasthan - Pratapgarh: Village Moti Kheri: Cost Benefit Analysis Development Activity Summary A (Rs'000).
- Table AN12.19.4 IFFDC - Rajasthan - Pratapgarh: Village Moti Kheri: Cost Benefit Analysis Development Activity Summary B (Rs'000).
- Table AN12.19.5 IFFDC - Rajasthan - Pratapgarh: Village Moti Kheri: Costs - Financial (Rs'000).
IFFDC - Rajasthan - Pratapgarh: Village Moti Kheri: Costs - Economic (Rs'000).
- Table AN12.19.6 IFFDC - Rajasthan - Pratapgarh: Village Moti Kheri: VOD Household Assumptions.
IFFDC - Rajasthan - Pratapgarh: Village Moti Kheri: Incremental VOD Benefit Stream (Rs'000).
- Table AN12.19.7 IFFDC - Rajasthan - Pratapgarh: Village Moti Kheri: Household Crop Net Margin Assumptions.
IFFDC - Rajasthan - Pratapgarh: Village Moti Kheri: Incremental Crop Benefit Stream (Rs'000).
- Table AN12.19.8 IFFDC - Rajasthan - Pratapgarh: Village Moti Kheri: Household Livestock Net Margin Assumptions.
IFFDC - Rajasthan - Pratapgarh: Village Moti Kheri: Incremental Livestock Benefit Stream (Rs'000).
- Table AN12.19.9 IFFDC - Rajasthan - Pratapgarh: Village Moti Kheri: Forestry Benefit Assumptions.
IFFDC - Rajasthan - Pratapgarh: Village Moti Kheri: Incremental Forestry Benefit Stream (Rs'000).
- Table AN12.19.10 IFFDC - Rajasthan - Pratapgarh: Village Moti Kheri: Migration Support Benefit Assumptions.
IFFDC - Rajasthan - Pratapgarh: Village Moti Kheri: Incremental Migration Support Benefit Stream (Rs'000).
- Table AN12.19.11 IFFDC - Rajasthan - Pratapgarh: Village Moti Kheri: Weighted Household Crop Net Margin Summary (Rs/Household).
- Table AN12.19.12 IFFDC - Rajasthan - Pratapgarh: Village Moti Kheri: Weighted Household Crop Net Margin Sensitivity Analysis (Rs/Household).
- Table AN12.19.13 IFFDC - Rajasthan - Pratapgarh: Village Moti Kheri: Weighted Household Livestock Net Margin Summary.

Table AN12.19.1 IFFDC - Rajasthan - Pratapgarh: Village Moti Kheri: Village Profile.

Village Profile \1			
A. Background			
Village Name	Moti Kheri		
District	Pratapgarh		
State	Rajasthan		
Participatory Planning Process (PPP)			
Village entry	Oct-99		
PRA	Nov-00		
CPA	Nov-00		
B. Infrastructure			
Hand Pumps (no)	7		
Wells (no)	50		
Linked by Road	5 km		
Electrification	No		
School	Primary		
C. Demographic Data			
Households (no)	115		
Participating Households	112		
Population (Adults)	627		
Adults:			
Male	312		
Female	315		
Children:			
Boys	N/A		
Girls	N/A		
D. Well Being Ranking (No Households)			
Very Poor	27	23.5%	
Poor	33	28.7%	
Moderate	46	40.0%	
Better Off	9	7.8%	
Total	115	100%	
E. Land Resource (ha)			
Total Area	-		
Revenue Land	-		
Forest Area - F	-		
Pasture Land	-		
Arable Land	-		
F. Livestock			
Oxen	200		
Cows	193		
Buffalo	78		
Goats	271		
Poultry	93		
G. Self Help Groups (No Households)			
1	Group 1	12	
2	Group 2	7	
3	Group 3	18	
4	Group 4	11	
5	Group 5	19	
6	Group 6	13	
7	Group 7	14	
8	Group 8	15	
9	Group 9	12	
10	Group 10	14	
11	Group 11	18	
12	Group 12	14	
13	Group 13	11	
Total Memberhip		178	

Source: IFFDC Pratapgarh Coordination Office - Rajasthan.

\1 Subject to final adjustment following consolidation exercise prior to Annual Review Meeting (ARM) in Feb 2005.

Table AN12.19.2 IFFDC - Rajasthan - Pratappgarh: Village Moti Kheri: Cost Benefit Analysis Summary (Rs'000).

Administration Costs / Development Activity	EIRR ^{\1}	NPV ^{\2}		Year 1 1999/00	Year 2 2000/01	Year 3 2001/02	Year 4 2002/03	Year 5 2003/04	Year 6 2004/05	Year 7 2005/06	Year 8 2006/07	Year 9 2007/08	Year 10 2008/09
		(10%)	(%)										
A. Administration Costs													
Total A	N/A	(1,449)	96%	237.1	209.8	199.3	366.6	388.0	389.3	373.8	37.4	37.4	37.4
B. Development Intervention Component A													
1. PPGF													
Net Incremental Benefits	N/A	(53)	4%	(6.6)	(20.2)	(6.1)	(13.6)	(10.3)	(6.8)	(9.1)	(1.7)	(1.7)	(1.7)
2. VOD													
Net Incremental Benefits	19%	41	-3%	(4.3)	(11.3)	69.4	(24.5)	(25.5)	(58.7)	(222.0)	55.6	56.2	56.8
3/5. Crop Technology, SWC and WRD													
Net Incremental Benefits	2%	(695)	46%	-	(312.4)	(426.3)	(462.4)	(354.9)	(171.9)	(106.7)	168.0	168.0	168.0
6. Livestock													
Net Incremental Benefits	91%	578	-38%	-	(6.8)	(28.3)	(32.8)	69.1	138.0	86.9	163.8	163.8	163.8
7. Forestry													
Net Incremental Benefits	27%	74	-5%	-	(27.3)	(16.3)	(4.7)	3.1	13.9	(11.7)	36.9	36.9	36.9
8. Migration Support													
Net Incremental Benefits	N/A	-	0%	-	-	-	-	-	-	-	-	-	-
Summary													
Net Incremental Benefits	2%	(1,504)	100%	(248.0)	(587.6)	(606.9)	(904.6)	(706.7)	(474.8)	(636.4)	385.3	385.9	386.5
Sensitivity Analysis													
Analysis Period - Sustainability													
12 Years	N/A	(1,997)											
20 Years (Base Case)	2%	(1,504)											
25 Years	4%	(1,360)											
30 Years	6%	(1,278)											
Costs - Administration													
Investment Costs Decreased by 20 percent	3%	(1,214)											
Costs - Administration and Development													
Recurrent Costs Increased by 20 percent	-1%	(1,849)											
Benefits - Crop, SWC and WRD													
Crop Benefits Increased by 20 percent	6%	(1,025)											
Livestock Benefits Increased by 20 percent	4%	(1,179)											

Source: Cost Benefit Analysis (CBA) Study Estimate Jan 2005.

\1 EIRR = Economic Internal Rate of Return (rate at which NPV equal to zero).

\2 NPV = Net Present Value of net incremental benefits at 12% (indicative opportunity cost of capital for rural development projects in India).

N/A = Not analysed as EIRR negative.

Table AN12.19.3 IFFDC - Rajasthan - Pratappgarh: Village Moti Kheri: Cost Benefit Analysis Development Activity Summary A (Rs'000).

Administration Costs / Development Activity	EIRR \1	NPV \2		Year 1 1999/00	Year 2 2000/01	Year 3 2001/02	Year 4 2002/03	Year 5 2003/04	Year 6 2004/05	Year 7 2005/06	Year 8 2006/07	Year 9 2007/08	Year 10 2008/09
		(10%)	(%)										
A. Administration Costs													
Investment				237.1	209.8	199.3	366.6	388.0	389.3	373.8	-	-	-
Projected				-	-	-	-	-	-	-	37.4	37.4	37.4
Total A	N/A	(1,449)	96%	237.1	209.8	199.3	366.6	388.0	389.3	373.8	37.4	37.4	37.4
B. Development Intervention Component A													
1. PPGF													
Cost Stream													
Investment				6.6	20.0	5.5	12.8	9.2	5.4	7.7	-	-	-
Recurrent				-	0.2	0.7	0.8	1.1	1.4	1.5	1.7	1.7	1.7
Total Costs				6.6	20.2	6.1	13.6	10.3	6.8	9.1	1.7	1.7	1.7
Benefit Stream													
Before / Without Project				-	-	-	-	-	-	-	-	-	-
After / With Project				-	-	-	-	-	-	-	-	-	-
Incremental Benefits				-	-	-	-	-	-	-	-	-	-
Net Incremental Benefits	N/A	(53)	4%	(6.6)	(20.2)	(6.1)	(13.6)	(10.3)	(6.8)	(9.1)	(1.7)	(1.7)	(1.7)
2. VOD													
Cost Stream													
Investment				4.3	11.0	16.5	110.1	106.1	134.6	291.6	-	-	-
Recurrent				-	0.2	0.8	1.6	7.1	12.4	19.1	33.7	33.7	33.7
Total Costs				4.3	11.3	17.3	111.7	113.2	147.0	310.7	33.7	33.7	33.7
Benefit Stream													
Before / Without Project				-	-	-	-	-	-	-	-	-	-
After / With Project				-	-	86.7	87.2	87.7	88.2	88.8	89.3	89.9	90.5
Incremental Benefits				-	-	86.7	87.2	87.7	88.2	88.8	89.3	89.9	90.5
Net Incremental Benefits	19%	41	-3%	(4.3)	(11.3)	69.4	(24.5)	(25.5)	(58.7)	(222.0)	55.6	56.2	56.8
3/5. Crop Technology, SWC and WRD													
Cost Stream													
Investment													
Crop Technology				-	2.0	4.2	34.6	73.2	80.1	52.2	-	-	-
Soil Water Conservation				-	253.1	124.1	39.7	15.2	3.4	-	-	-	-
Water Resource Development				-	57.3	257.8	293.5	628.6	352.5	263.3	-	-	-
Recurrent													
Crop Technology				-	-	0.0	0.2	1.0	2.9	4.9	6.2	6.2	6.2
Soil Water Conservation				-	-	31.6	47.1	52.1	54.0	54.4	54.4	54.4	54.4
Water Resource Development				-	-	8.6	47.3	91.3	185.6	238.5	278.0	278.0	278.0
Total Costs				-	312.4	426.3	462.4	861.5	678.5	613.2	338.5	338.5	338.5
Benefit Stream													
Before / Without Project				-	-	-	-	156.7	156.7	156.7	156.7	156.7	156.7
After / With Project				-	-	-	-	663.2	663.2	663.2	663.2	663.2	663.2
Incremental Benefits				-	-	-	-	506.5	506.5	506.5	506.5	506.5	506.5
Net Incremental Benefits	2%	(695)	46%	-	(312.4)	(426.3)	(462.4)	(354.9)	(171.9)	(106.7)	168.0	168.0	168.0

Source: Cost Benefit Analysis (CBA) Study Estimate Jan 2005.

\1 EIRR = Economic Internal Rate of Return (rate at which NPV equal to zero).

\2 NPV = Net Present Value of net incremental benefits at 12% (indicative opportunity cost of capital for rural development projects in India).

N/A = Not analysed as EIRR negative.

Table AN12.19.4 IFFDC - Rajasthan - Pratapgarh: Village Moti Kheri: Cost Benefit Analysis Development Activity Summary B (Rs'000).

Administration Costs / Development Activity	EIRR \1	NPV \2		Year 1 1999/00	Year 2 2000/01	Year 3 2001/02	Year 4 2002/03	Year 5 2003/04	Year 6 2004/05	Year 7 2005/06	Year 8 2006/07	Year 9 2007/08	Year 10 2008/09
		(10%)	(%)										
6. Livestock													
Cost Stream													
Investment				-	6.8	27.6	38.6	21.1	38.3	85.5	-	-	-
Recurrent				-	-	0.7	3.4	7.3	9.4	13.2	21.8	21.8	21.8
Total Costs				-	6.8	28.3	42.0	28.4	47.7	98.7	21.8	21.8	21.8
Benefit Stream													
Before / Without Project				-	-	-	206.3	206.3	206.3	206.3	206.3	206.3	206.3
After / With Project				-	-	-	215.6	303.8	392.0	392.0	392.0	392.0	392.0
Incremental Benefits				-	-	-	9.2	97.4	185.6	185.6	185.6	185.6	185.6
Net Incremental Benefits	91%	578	-38%	-	(6.8)	(28.3)	(32.8)	69.1	138.0	86.9	163.8	163.8	163.8
7. Forestry													
Cost Stream													
Investment				-	27.3	13.6	31.4	33.4	31.5	54.0	-	-	-
Recurrent				-	-	2.7	4.1	7.2	10.6	13.7	19.1	19.1	19.1
Total Costs				-	27.3	16.3	35.5	40.6	42.1	67.7	19.1	19.1	19.1
Benefit Stream													
Before / Without Project				-	-	-	-	-	-	-	-	-	-
After / With Project				-	-	-	30.8	43.7	56.0	56.0	56.0	56.0	56.0
Incremental Benefits				-	-	-	30.8	43.7	56.0	56.0	56.0	56.0	56.0
Net Incremental Benefits	27%	74	-5%	-	(27.3)	(16.3)	(4.7)	3.1	13.9	(11.7)	36.9	36.9	36.9
EIRR													
8. Migration Support													
Cost Stream													
Investment				-	-	-	-	-	-	-	-	-	-
Recurrent				-	-	-	-	-	-	-	-	-	-
Total Costs				-	-	-	-	-	-	-	-	-	-
Benefit Stream													
Before / Without Project				-	-	-	-	-	-	-	-	-	-
After / With Project				-	-	-	-	-	-	-	-	-	-
Incremental Benefits				-	-	-	-	-	-	-	-	-	-
Net Incremental Benefits	N/A	-	0%	-	-	-	-	-	-	-	-	-	-
Summary													
Cost Stream													
Investment				248.0	587.2	648.5	927.4	1,274.8	1,035.1	1,128.0	-	-	-
Recurrent				-	0.4	45.1	104.5	167.2	276.2	345.3	452.2	452.2	452.2
Total Costs				248.0	587.6	693.6	1,031.9	1,442.0	1,311.2	1,473.3	452.2	452.2	452.2
Benefit Stream													
Before / Without Project				-	-	-	206.3	363.0	363.0	363.0	363.0	363.0	363.0
After / With Project				-	-	86.7	333.6	1,098.3	1,199.4	1,199.9	1,200.5	1,201.1	1,201.7
Incremental Benefits				-	-	86.7	127.2	735.3	836.4	836.9	837.5	838.1	838.7
Net Incremental Benefits	2%	(1,504)	100%	(248.0)	(587.6)	(606.9)	(904.6)	(706.7)	(474.8)	(636.4)	385.3	385.9	386.5

Source: Cost Benefit Analysis (CBA) Study Estimate Jan 2005.

Table AN12.19.5

IFFDC - Rajasthan - Pratapgarh: Village Moti Kheri: Costs - Financial (Rs'000).

Cost Head / Subhead	1999/00	2000/01	2001/02	2002/03	2003/04	2004/05	2005/06	Total	
	Actual	Actual	Actual	Actual	Actual	Budget	Budget	(Rs'000)	(%)
A. Administration Costs									
IFFDC Head Quarters (Delhi)	106.0	46.3	47.3	84.7	53.8	47.2	47.2	432.5	6%
DFIDI	35.9	71.4	26.9	63.2	47.4	54.7	39.2	338.6	5%
Pratapgarh Coordination Office, Rajasthan	117.6	107.5	144.2	252.5	324.6	324.6	324.6	1,595.6	22%
Total A	259.5	225.1	218.4	400.3	425.8	426.5	411.0	2,366.7	32%
B. Development Costs						0%	0%		
Component A									
1. PPG	7.3	22.2	6.1	14.2	10.2	6.0	8.5	74.6	1%
2. VOD	4.8	12.3	18.4	122.3	117.9	149.5	324.0	749.1	10%
3. Crop	-	2.2	4.6	38.5	81.4	89.0	58.0	273.7	4%
4. SWC	-	375.0	183.9	58.8	22.5	5.0	-	645.1	9%
5. WRD	-	84.9	381.9	434.8	931.3	522.3	390.0	2,745.2	38%
6. Livestock	-	7.6	30.6	42.9	23.4	42.5	95.0	242.0	3%
7. Forestry	-	30.3	15.1	34.9	37.1	35.0	60.0	212.5	3%
8. Migration Support	-	-	-	-	-	-	-	-	0%
Subtotal	12.1	534.4	640.6	746.4	1,223.8	849.3	935.5	4,942.2	68%
Other Development Costs									
Subtotal	-	-	-	-	-	-	-	-	0%
Total B	12.1	534.4	640.6	746.4	1,223.8	849.3	935.5	4,942.2	68%
Total A + B	271.6	759.5	859.0	1,146.8	1,649.7	1,275.8	1,346.5	7,308.9	100%

Source:

IFFDC Pratapgarh Coordination Office - Rajasthan.

DFIDI = Department for International Development (India).

PPG = Participatory Planning and Group Formation.

VOD = Village Organisation and Development.

SWC = Soil and Water Conservation.

WRD = Water Resource Development.

Table AN12.19.5

IFFDC - Rajasthan - Pratapgarh: Village Moti Kheri: Costs - Economic (Rs'000).

Cost Head / Subhead	Conversion Factors		1999/00	2000/01	2001/02	2002/03	2003/04	2004/05	2005/06	Total	
	CF	SCF	Actual	Actual	Actual	Actual	Actual	Budget	Budget	(Rs'000)	(%)
A. Administration Costs											
IFFDC Head Quarters (Delhi)	0.90	1.00	95.4	41.6	42.5	76.2	48.4	42.5	42.5	389.2	7%
DFIDI	1.00	1.00	35.9	71.4	26.9	63.2	47.4	54.7	39.2	338.6	6%
Pratapgarh Coordination Office, Rajasthan	0.90	1.00	105.9	96.7	129.8	227.2	292.1	292.1	292.1	1,436.0	25%
Total A			237.1	209.8	199.3	366.6	388.0	389.3	373.8	2,163.9	37%
B. Development Costs											
Component A											
1. PPG	0.90	1.00	6.6	20.0	5.5	12.8	9.2	5.4	7.7	67.1	1%
2. VOD	0.90	1.00	4.3	11.0	16.5	110.1	106.1	134.6	291.6	674.2	12%
3. Crop	0.90	1.00	-	2.0	4.2	34.6	73.2	80.1	52.2	246.3	4%
4. SWC	0.90	0.75	-	253.1	124.1	39.7	15.2	3.4	-	435.4	7%
5. WRD	0.90	0.75	-	57.3	257.8	293.5	628.6	352.5	263.3	1,853.0	32%
6. Livestock	0.90	1.00	-	6.8	27.6	38.6	21.1	38.3	85.5	217.8	4%
7. Forestry	0.90	1.00	-	27.3	13.6	31.4	33.4	31.5	54.0	191.2	3%
8. Migration Support	0.90	1.00	-	-	-	-	-	-	-	-	0%
Subtotal			10.9	377.5	449.2	560.7	886.8	645.7	754.2	3,685.1	63%
Other Development Costs											
Subtotal	0.90	1.00	-	-	-	-	-	-	-	-	0%
Total B			10.9	377.5	449.2	560.7	886.8	645.7	754.2	3,685.1	63%
Total A + B			248.0	587.2	648.5	927.4	1,274.8	1,035.1	1,128.0	5,849.1	100%

Source:

Cost Benefit Analysis (CBA) Study Estimate Jan 2005.

DFIDI = Department for International Development (India).

PPG = Participatory Planning and Group Formation.

VOD = Village Organisation and Development.

SWC = Soil and Water Conservation.

WRD = Water Resource Development.

Table AN12.19.6

IFFDC - Rajasthan - Pratapgarh: Village Moti Kheri: VOD Household Assumptions.

Without \ With Project	Units	Assumptions			Benefits		
					Year 1 (Rs)	Year 2 (Rs)	Year 3 (Rs)
Development Activity: Village Organisation and Development							
Before / Without Project Situation:							
A. Self Help Groups (SHGs)							
Assumption	Sum	Zero	Zero	Zero	-	-	-
B. Drudgery Reduction							
Assumption	Sum	Zero	Zero	Zero			
Total Without Project Benefits					-	-	-
After / With Project Situation:							
A. Self Help Groups (SHGs)							
Assumptions							
Average Saving / Household	Rs	2,482					
Households / Village	No	112					
Present Group Deposits	Rs'000	278.0			278.0	286.3	294.9
Annual Savings Increase	%	3%					
Deposits on Loan to Members	%	40%					
SHG Interest Income	% / Year	15%					
Assumed Benefit	Rs'000				16.7	17.2	17.7
B. Drudgery Reduction							
Assumptions							
Hours Saved / Day / Household	No	1.0					
Number of Days / Year / Household	No	200					
Days / Year / Household (8hrs/day)	No	25.0					
Households / Village	No	112					
Day Equivalent / Village	No	2,800					
Economic Value per Day	(Rs/day)	25					
Assumed Benefit	Rs'000				70.0	70.0	70.0
Total With Project Benefits	Rs'000				86.7	87.2	87.7
Incremental Benefits	Rs'000				86.7	87.2	87.7

Source:

VOD = Village Organisation and Development.
Participating households per village: Moti Kheri

Cost Benefit Analysis (CBA) Study Estimate Jan 2005.

Table AN12.19.6

IFFDC - Rajasthan - Pratappgarh: Village Moti Kheri: Incremental VOD Benefit Stream (Rs'000).

Without \ With Project	Benefit Streams (Rs '000)									
	Year 1 1999/00	Year 2 2000/01	Year 3 2001/02	Year 4 2002/03	Year 5 2003/04	Year 6 2004/05	Year 7 2005/06	Year 8 2006/07	Year 9 2007/08	Year 10 2008/09
Development Activity: Village Organisation and Development Before / Without Project Situation: A. Self Help Groups (SHGs) Assumption B. Drudgery Reduction Assumption Total Without Project Benefits	-	-	-	-	-	-	-	-	-	-
After / With Project Situation: A. Self Help Groups (SHGs) Assumptions Average Saving / Household Households / Village Present Group Deposits Annual Savings Increase Deposits on Loan to Members SHG Interest Income Assumed Benefit B. Drudgery Reduction Assumptions Hours Saved / Day / Household Number of Days / Year / Household Days / Year / Household (8hrs/day) Households / Village Day Equivalent / Village Economic Value per Day Assumed Benefit Total With Project Benefits Incremental Benefits	-	-	278.0	286.3	294.9	303.8	312.9	322.3	331.9	341.9
	-	-	16.7	17.2	17.7	18.2	18.8	19.3	19.9	20.5
	-	-	70.0	70.0	70.0	70.0	70.0	70.0	70.0	70.0
	-	-	86.7	87.2	87.7	88.2	88.8	89.3	89.9	90.5
	-	-	86.7	87.2	87.7	88.2	88.8	89.3	89.9	90.5

Source:

VOD = Village Organisation and Development.
Participating households per village: Moti Kheri

Cost Benefit Analysis (CBA) Study Estimate Jan 2005.

Table AN12.19.7

IFFDC - Rajasthan - Pratapgarh: Village Moti Kheri: Household Crop Net Margin Assumptions.

Without \ With Project	Units	Assumptions			Benefits		
					Year 1 (Rs/HH)	Year 2 (Rs/HH)	Year 3 (Rs/HH)
Development Activity: Crop Technology, SWC and WRD							
Before / Without Project Situation: Assumptions							
Households (HHs)	No	112					
Crop Adoption Assumptions		100%	100%	100%			
Kharif Crop Net Margin	Rs/HH				1,215.5	1,215.5	1,215.5
Rabi Crop Net Margin	Rs/HH				183.3	183.3	183.3
Total Without Project Benefits	Rs/HH				1,398.8	1,398.8	1,398.8
After / With Project Situation: Assumptions							
Households (HHs)	No	112					
Crop Adoption Assumptions		100%	100%	100%			
Kharif Crop Net Margin	Rs/HH				4,455.1	4,455.1	4,455.1
Rabi Crop Net Margin	Rs/HH				1,466.3	1,466.3	1,466.3
Total With Project Benefits	Rs/HH				5,921.4	5,921.4	5,921.4
Incremental Benefits	Rs/HH				4,522.6	4,522.6	4,522.6

Source:

Cost Benefit Analysis (CBA) Study Estimate Jan 2005.

Table AN12.19.7

IFFDC - Rajasthan - Pratappgarh: Village Moti Kheri: Incremental Crop Benefit Stream (Rs'000).

Without \ With Project	Benefit Streams (Rs '000)									
	Year 1 1999/00	Year 2 2000/01	Year 3 2001/02	Year 4 2002/03	Year 5 2003/04	Year 6 2004/05	Year 7 2005/06	Year 8 2006/07	Year 9 2007/08	Year 10 2008/09
Development Activity: Crop Technology, SWC and WRD										
Before / Without Project Situation: Assumptions										
Households (HHs)										
Crop Adoption Assumptions										
Kharif Crop Net Margin	-	-	-	-	136.1	136.1	136.1	136.1	136.1	136.1
Rabi Crop Net Margin	-	-	-	-	20.5	20.5	20.5	20.5	20.5	20.5
Total Without Project Benefits	-	-	-	-	156.7	156.7	156.7	156.7	156.7	156.7
After / With Project Situation: Assumptions										
Households (HHs)										
Crop Adoption Assumptions										
Kharif Crop Net Margin	-	-	-	-	499.0	499.0	499.0	499.0	499.0	499.0
Rabi Crop Net Margin	-	-	-	-	164.2	164.2	164.2	164.2	164.2	164.2
Total With Project Benefits	-	-	-	-	663.2	663.2	663.2	663.2	663.2	663.2
Incremental Benefits	-	-	-	-	506.5	506.5	506.5	506.5	506.5	506.5

Source:

Cost Benefit Analysis (CBA) Study Estimate Jan 2005.

Table AN12.19.8

IFFDC - Rajasthan - Pratapgarh: Village Moti Kheri: Household Livestock Net Margin Assumptio

Without \ With Project Livestock	Units	Assumptions			Benefits		
					Year 1 (Rs)	Year 2 (Rs)	Year 3 (Rs)
Development Activity: Livestock							
Before / Without Project Situation: Assumptions							
Households (HHs)	No	112					
Annual Livestock Net Margin	Rs/HH						
Total Without Project Benefits					1,842.3	1,842.3	1,842.3
After / With Project Situation:							
Development Activity: Assumptions							
Households (HHs)	No	112					
Adoption Assumptions	Percent	55%	78%	100%			
Annual Livestock Net Margin	Rs/HH						
Total With Project Benefits					1,924.8	2,712.2	3,499.6
Incremental Benefits	Rs/HH				82.5	869.9	1,657.3

Source:

Cost Benefit Analysis (CBA) Study Estimate Jan 2005.

Table AN12.19.8

IFFDC - Rajasthan - Pratappgarh: Village Moti Kheri: Incremental Livestock Benefit Stream (Rs'000).

Without \ With Project Livestock	Benefit Streams (Rs '000)									
	Year 1 1999/00	Year 2 2000/01	Year 3 2001/02	Year 4 2002/03	Year 5 2003/04	Year 6 2004/05	Year 7 2005/06	Year 8 2006/07	Year 9 2007/08	Year 10 2008/09
Development Activity: Livestock										
Before / Without Project Situation:										
Assumptions										
Households (HHs)										
Annual Livestock Net Margin										
Total Without Project Benefits	-	-	-	206.3	206.3	206.3	206.3	206.3	206.3	206.3
After / With Project Situation:										
Development Activity:										
Assumptions										
Households (HHs)										
Adoption Assumptions										
Annual Livestock Net Margin										
Total With Project Benefits	-	-	-	215.6	303.8	392.0	392.0	392.0	392.0	392.0
Incremental Benefits	-	-	-	9.2	97.4	185.6	185.6	185.6	185.6	185.6

Source:

Cost Benefit Analysis (CBA) Study Estimate Jan 2005.

Table AN12.19.9

IFFDC - Rajasthan - Pratapgarh: Village Moti Kheri: Forestry Benefit Assumptions.

Without \ With Project Forestry	Units	Assumptions			Benefits		
					Year 1 (Rs)	Year 2 (Rs)	Year 3 (Rs)
Development Activity: Forestry							
Before / Without Project Situation: Assumptions							
Households (HHs)	No	112					
Annual Forestry Net Margin	Rs/HH				-	-	-
Total Without Project Benefits							
After / With Project Situation: Assumptions							
Households (HHs)	No	112					
Adoption Assumptions	Percent	55%	78%	100%			
Annual Forestry Net Margin	Rs/HH				275.0	390.0	500.0
Total With Project Benefits							
Incremental Benefits	Rs/HH				275.0	390.0	500.0

Source:

Cost Benefit Analysis (CBA) Study Estimate Jan 2005.

Table AN12.19.9

IFFDC - Rajasthan - Pratappgarh: Village Moti Kheri: Incremental Forestry Benefit Stream (Rs'000).

Without \ With Project Forestry	Benefit Streams (Rs '000)									
	Year 1 1999/00	Year 2 2000/01	Year 3 2001/02	Year 4 2002/03	Year 5 2003/04	Year 6 2004/05	Year 7 2005/06	Year 8 2006/07	Year 9 2007/08	Year 10 2008/09
Development Activity: Forestry										
Before / Without Project Situation: Assumptions										
Households (HHs)										
Annual Forestry Net Margin										
Total Without Project Benefits	-	-	-	-	-	-	-	-	-	-
After / With Project Situation: Assumptions										
Households (HHs)										
Adoption Assumptions										
Annual Forestry Net Margin										
Total With Project Benefits	-	-	-	30.8	43.7	56.0	56.0	56.0	56.0	56.0
Incremental Benefits	-	-	-	30.8	43.7	56.0	56.0	56.0	56.0	56.0

Source:

Cost Benefit Analysis (CBA) Study Estimate Jan 2005.

Table AN12.19.10

IFFDC - Rajasthan - Pratapgarh: Village Moti Kheri: Migration Support Benefit Assumptions.

Without \ With Project	Assumptions			Benefits		
				Year 1 (Rs)	Year 2 (Rs)	Year 3 (Rs)
Development Activity: Migration Support						
Before / Without Project Situation:						
Assumptions						
Economic Value per Day	Rs/day	25.0				
Days / Month / Household	No	-				
Economic Value per Month	Rs/month	-				
Months Migration / Year	Months	4.0				
Economic Value per Household	Rs/HH	-				
Households per Village	No	112				
Households per Village Migrating	Percent	45%				
Total Without Project Benefits	Rs/Village			-	-	-
After / With Project Situation:						
Assumptions						
Economic Value per Day \1	Rs/day	25.0	30%	32.5		
Days / Month / Household	No	-	30%	-		
Economic Value per Month	Rs/month	-		-		
Months Migration / Year	Months	4.0	-20%	3.2		
Economic Value per Household	Rs/HH	-		-		
Households per Village	No	112		112		
Households per Village Migrating	Percent	45%	-20%	36%		
Subtotal Migration Income	Rs/Village				-	-
Other Income	Sum (Rs)	-	-	-	-	-
Total With Project Benefits	Rs/Village				-	-
Incremental Benefits	Rs/Village				-	-

Source:

Cost Benefit Analysis (CBA) Study Estimate Jan 2005.

- 1\ Financial Wages (Rs/day):
 - Skill Labour - Rs 160
 - Casual Labour :
 - Male - Rs 40
 - Female - Rs 30

Table AN12.19.10

IFFDC - Rajasthan - Pratappgarh: Village Moti Kheri: Incremental Migration Support Benefit Stream (Rs'000).

Without \ With Project	Benefit Streams (Rs '000)									
	Year 1 1999/00	Year 2 2000/01	Year 3 2001/02	Year 4 2002/03	Year 5 2003/04	Year 6 2004/05	Year 7 2005/06	Year 8 2006/07	Year 9 2007/08	Year 10 2008/09
Development Activity: Migration Support Before / Without Project Situation: Assumptions Economic Value per Day Days / Month / Household Economic Value per Month Months Migration / Year Economic Value per Household Households per Village Households per Village Migrating Total Without Project Benefits	-	-	-	-	-	-	-	-	-	-
After / With Project Situation: Assumptions Economic Value per Day \1 Days / Month / Household Economic Value per Month Months Migration / Year Economic Value per Household Households per Village Households per Village Migrating Subtotal Migration Income Other Income Total With Project Benefits Incremental Benefits	-	-	-	-	-	-	-	-	-	-

Source:

Cost Benefit Analysis (CBA) Study Estimate Jan 2005.

- 1\ Financial Wages (Rs/day):
 Skill Labour - Rs 160
 Casual Labour :
 Male - Rs 40
 Female - Rs 30

Table AN12.19.11 IFFDC - Rajasthan - Pratapgarh: Village Moti Kheri: Weighted Household Crop Net Margin Summary (Rs/Household).

Item	WBR (%)	Before / Without Project			After / With Project			Increment		
		Khalif	Rabi	Total	Khalif	Rabi	Total	Khalif	Rabi	Total
Phase II										
Well Being Ranking - Very Poor Household Net Margin (Rs)	24.0%	834.6	102.5	937.1	1,849.8	1,067.8	2,917.6	1,015.2	965.3	1,980.5
Well Being Ranking - Poor Household Net Margin (Rs)	29.0%	637.7	-	637.7	4,803.0	220.7	5,023.7	4,165.3	220.7	4,386.0
Well Being Ranking - Moderate Household Net Margin (Rs)	40.0%	994.0	89.3	1,083.3	3,711.4	2,508.3	6,219.6	2,717.4	2,419.0	5,136.4
Well Being Ranking - Better Off Household Net Margin (Rs)	7.0%	6,180.9	1,756.7	7,937.5	16,195.9	2,039.3	18,235.2	10,015.0	282.7	10,297.7
Well Being Ranking - Weighted Household Net Margin (Rs)	100%	1,215.5	183.3	1,398.8	4,455.1	1,466.3	5,921.4	3,239.6	1,283.0	4,522.6
Phase I \1										
Well Being Ranking - Very Poor Household Net Margin (Rs)	24.0%	436.3	267.5	703.8	3,866.5	1,668.8	5,535.3	3,430.3	1,401.3	4,831.5
Well Being Ranking - Poor Household Net Margin (Rs)	29.0%	485.8	657.5	1,143.3	10,136.0	5,690.3	15,826.3	9,650.3	5,032.8	14,683.0
Well Being Ranking - Moderate Household Net Margin (Rs)	40.0%	986.3	3,385.0	4,371.3	9,457.5	5,195.0	14,652.5	8,471.3	1,810.0	10,281.3
Well Being Ranking - Better Off Household Net Margin (Rs)	7.0%	2,778.0	937.0	3,715.0	4,915.0	9,560.0	14,475.0	2,137.0	8,623.0	10,760.0
Well Being Ranking - Weighted Household Net Margin (Rs)	100%	834.5	1,674.5	2,509.0	7,994.5	4,797.9	12,792.3	7,159.9	3,123.4	10,283.3

Source: Study of Impact of WIRFP on Net Incomes of Target Households, Jan 2004.

WBR = IFFDC Household Well Being Ranking. Survey figures adjusted to Village Profile WBR.

\1 GVT - Madhya Pradesh - Phase I: Village Naganwat Choti: Weighted Household Crop Net Margin Summary.

Table AN12.19.12 IFFDC - Rajasthan - Pratappgarh: Village Moti Kheri: Weighted Household Crop Net Margin Sensitivity Analysis (Rs/Household).

Item	EIRR	Before / Without Project			After / With Project			Increment		
		Khalif	Rabi	Total	Khalif	Rabi	Total	Khalif	Rabi	Total
Development Activity: Crop Technology, SWC and WRD										
Weighted Net Margin (Phase II)										
Household Net Margin (Rs)		1,215.5	183.3	1,398.8	4,455.1	1,466.3	5,921.4	3,239.6	1,283.0	4,522.6
Incremental Benefit (Phase II / Phase I)										44%
Base Case Assumptions										
Household Net Margin (Rs)		1,215.5	183.3	1,398.8	4,455.1	1,466.3	5,921.4	3,239.6	1,283.0	4,522.6
Incremental Benefit (Phase II / Phase I)										44%
Sensitivity Increase (%)	0%									
Development Activity										
Overall Village										
Sensitivity Assumptions										
Household Net Margin (Rs)		1,215.5	183.3	1,398.8	7,128.1	2,346.1	9,474.2	5,912.6	2,162.8	8,075.5
Incremental Benefit (Phase II / Phase I)										79%
Sensitivity Increase (%)	0%									
Development Activity										
Overall Village										
Weighted Net Margin (Phase I)										
Household Net Margin (Rs)		834.5	1,674.5	2,509.0	7,994.5	4,797.9	12,792.3	7,159.9	3,123.4	10,283.3

Source: Subject to final adjustment following consolidation exercise prior to Annual Review Meeting (ARM) in Feb 2005.

EIRR = Economic Internal Rate of Return (rate at which NPV equal to zero).

Table AN12.19.13 IFFDC - Rajasthan - Pratapgarh: Village Moti Kheri: Weighted Household Livestock Net Margin Summary.

Well Being Ranking	Weight (%)	Before / Without Project		After / With Project		Increment \1	
		Herd Value	Net Margin	Herd Value	Net Margin	Herd Value	Net Margin
Phase I - Well Being Ranking (WBR) \1							
Madhya Pradesh - WBR Weighted Data							
Very Poor	24.0%						
Average		580	(185.0)	5,650	412.5	474	597.5
Poor	29.0%						
Average		2,350	982.5	8,250	2,141.0	1,180	1,158.5
Moderate	40.0%						
Average		14,700	6,730.0	1,900	2,820.0	1,900	(3,910.0)
Better Off	7.0%						
Average		15,580	3,000.0	14,600	10,790.0	(196)	7,790.0
Phase I - WBR Weighted Data	100.0%	7,791	3,142.5	5,531	2,603.2	1,202	(539.3)
Phase II - Well Being Ranking (WBR)							
Very Poor	24.0%						
Average		5,756	149.2	10,970	1,446.4	1,043	1,297.2
Poor	29.0%						
Average		13,128	852.2	25,979	3,008.8	2,570	2,156.8
Moderate	40.0%						
Average		13,525	4,035.1	27,020	5,249.5	2,699	1,214.4
Better Off	7.0%						
Average		12,700	(781.7)	41,873	2,573.3	5,835	3,355.0
Phase II - WBR Weighted Data	100.0%	11,488	1,842.3	23,906	3,499.6	2,484	1,657.4

Source: Study of Impact of WIRFP on Net Incomes of Target Households, Jan 2004.

WBR = IFFDC Household Well Being Ranking.

Survey figures adjusted to Village Profile WBR.

\1 GVT - Madhya Pradesh - Phase I: Village Naganwat Choti: Weighted Household Livestock Net Margin Summary.

WIRFP - Phase II - Cost Benefit Analysis Study

Tables AN12.0 Individual Village Cost Benefit Analysis

Tables AN12.20 IFFDC - Rajasthan - Pratapgarh: Village S Ka Khera.

- Table AN12.20.1 IFFDC - Rajasthan - Pratapgarh: Village S Ka Khera: Village Profile.
- Table AN12.20.2 IFFDC - Rajasthan - Pratapgarh: Village S Ka Khera: Cost Benefit Analysis Summary (Rs'000).
- Table AN12.20.3 IFFDC - Rajasthan - Pratapgarh: Village S Ka Khera: Cost Benefit Analysis Development Activity Summary A (Rs'000).
- Table AN12.20.4 IFFDC - Rajasthan - Pratapgarh: Village S Ka Khera: Cost Benefit Analysis Development Activity Summary B (Rs'000).
- Table AN12.20.5 IFFDC - Rajasthan - Pratapgarh: Village S Ka Kheri: Costs - Financial (Rs'000).
IFFDC - Rajasthan - Pratapgarh: Village S Ka Kheri: Costs - Economic (Rs'000).
- Table AN12.20.6 IFFDC - Rajasthan - Pratapgarh: Village S Ka Khera: VOD Household Assumptions.
IFFDC - Rajasthan - Pratapgarh: Village S Ka Khera: Incremental VOD Benefit Stream (Rs'000).
- Table AN12.20.7 IFFDC - Rajasthan - Pratapgarh: Village S Ka Khera: Household Crop Net Margin Assumptions.
IFFDC - Rajasthan - Pratapgarh: Village S Ka Khera: Incremental Crop Benefit Stream (Rs'000).
- Table AN12.20.8 IFFDC - Rajasthan - Pratapgarh: Village S Ka Khera: Household Livestock Net Margin Assumptions.
IFFDC - Rajasthan - Pratapgarh: Village S Ka Khera: Incremental Livestock Benefit Stream (Rs'000).
- Table AN12.20.9 IFFDC - Rajasthan - Pratapgarh: Village S Ka Khera: Forestry Benefit Assumptions.
IFFDC - Rajasthan - Pratapgarh: Village S Ka Khera: Incremental Forestry Benefit Stream (Rs'000).
- Table AN12.20.10 IFFDC - Rajasthan - Pratapgarh: Village S Ka Khera: Migration Support Benefit Assumptions.
IFFDC - Rajasthan - Pratapgarh: Village S Ka Khera: Incremental Migration Support Benefit Stream (Rs'000).
- Table AN12.20.11 IFFDC - Rajasthan - Pratapgarh: Village S Ka Khera: Weighted Household Crop Net Margin Summary (Rs/Household).
- Table AN12.20.12 IFFDC - Rajasthan - Pratapgarh: Village S Ka Khera: Weighted Household Crop Net Margin Sensitivity Analysis (Rs/Household).
- Table AN12.20.13 IFFDC - Rajasthan - Pratapgarh: Village S Ka Khera: Weighted Household Livestock Net Margin Summary (Rs/Household).

Table AN12.20.1 IFFDC - Rajasthan - Pratapgarh: Village S Ka Khera: Village Profile.

Village Profile \1					
A. Background			D. Well Being Ranking (No Households)		
Village Name	S Ka Khera		Very Poor	8	20.0%
District	Pratapgarh		Poor	13	32.5%
State	Rajasthan		Moderate	15	37.5%
Participatory Planning Process (PPP)			Better Off	4	10.0%
Village entry	Oct-99		Total	40	100%
PRA	Nov-99		E. Land Resource (ha)		
CPA	Nov-99		Total Area		62
B. Infrastructure			Revenue Land (unused)		4
Hand Pumps (no)		3	Forest Area - Revenue		22
Wells (no)		12	Pasture Land		-
Linked by Road		1 km	Arable Land		36
Electrification		No	F. Livestock		
School		Primary	Oxen		200
C. Demographic Data			Cows		193
Households (no)		40	Buffalo		78
Participating Households		34	Goats		271
Population (Adults)		186	Poultry		93
Adults:			G. Self Help Groups (No Households)		
Male		103	1 Group 1		15
Female		83	2 Group 2		17
Children:			3 Group 3		15
Boys		N/A	4 Group 4		-
Girls		N/A	Total Membership		47

Source: IFFDC Pratapgarh Coordination Office - Rajasthan.

\1 Subject to final adjustment following consolidation exercise prior to Annual Review Meeting (ARM) in Feb 2005.

Table AN12.20.1 IFFDC - Rajasthan - Pratapgarh: Village S Ka Khera: Village Profile.

Village Profile \1					
A. Background			D. Well Being Ranking (No Households)		
Village Name	S Ka Khera		Very Poor	8	20.0%
District	Pratapgarh		Poor	13	32.5%
State	Rajasthan		Moderate	15	37.5%
			Better Off	4	10.0%
			Total	40	100%
Participatory Planning Process (PPP)			E. Land Resource (ha)		
Village entry	Oct-99		Total Area		62
PRA	Nov-99		Revenue Land (unused)		4
CPA	Nov-99		Forest Area - Revenue		22
			Pasture Land		-
			Arable Land		36
B. Infrastructure			F. Livestock		
Hand Pumps (no)		3	Oxen		200
Wells (no)		12	Cows		193
Linked by Road		1 km	Buffalo		78
Electrification		No	Goats		271
School		Primary	Poultry		93
C. Demographic Data			G. Self Help Groups (No Households)		
Households (no)		40	1 Group 1		15
Participating Households		34	2 Group 2		17
Population (Adults)		186	3 Group 3		15
Adults:			4 Group 4		-
Male		103			
Female		83			
Children:					
Boys		N/A			
Girls		N/A			
			Total Membership		47

Source: IFFDC Pratapgarh Coordination Office - Rajasthan.

\1 Subject to final adjustment following consolidation exercise prior to Annual Review Meeting (ARM) in Feb 2005.

Table AN12.20.2 IFFDC - Rajasthan - Pratapgarh: Village S Ka Khera: Cost Benefit Analysis Summary (Rs'000).

Administration Costs / Development Activity	EIRR \1	NPV \2		Year 1 1999/00	Year 2 2000/01	Year 3 2001/02	Year 4 2002/03	Year 5 2003/04	Year 6 2004/05	Year 7 2005/06	Year 8 2006/07	Year 9 2007/08	Year 10 2008/09
		(10%)	(%)										
A. Administration Costs													
Total A	N/A	(1,449)	96%	237.1	209.8	199.3	366.6	388.0	389.3	373.8	37.4	37.4	37.4
B. Development Intervention Component A													
1. PPGF													
Net Incremental Benefits	N/A	(24)	2%	-	(1.2)	(3.6)	(11.2)	(5.5)	(7.7)	(7.9)	(0.9)	(0.9)	(0.9)
2. VOD													
Net Incremental Benefits	-2%	(37)	2%	-	-	21.6	18.8	5.2	(23.5)	(197.8)	11.7	11.7	11.7
3/5. Crop Technology, SWC and WRD													
Net Incremental Benefits	-1%	(279)	18%	-	(27.1)	(55.1)	(318.9)	(217.6)	(45.9)	(28.5)	49.5	49.5	49.5
6. Livestock													
Net Incremental Benefits	103%	255	-17%	-	(9.7)	(1.0)	(1.1)	32.8	52.4	50.6	67.6	67.6	67.6
7. Forestry													
Net Incremental Benefits	26%	17	-1%	-	(3.6)	(5.4)	(11.0)	2.2	5.0	4.6	8.6	8.6	8.6
8. Migration Support													
Net Incremental Benefits	N/A	-	0%	-	-	-	-	-	-	-	-	-	-
Summary													
Net Incremental Benefits	N/A	(1,517)	100%	(237.1)	(251.4)	(242.7)	(690.2)	(570.9)	(409.0)	(552.9)	99.2	99.2	99.2
Sensitivity Analysis													
Analysis Period													
12 Years	N/A	(1,643)											
20 Years (Base Case)	N/A	(1,517)											
25 Years	-4%	(1,480)											
30 Years	-2%	(1,459)											
Costs - Administration													
Investment Costs Decreased by 20 percent	N/A	(1,227)											
Costs - Administration and Development													
Recurrent Costs Increased by 20 percent	N/A	(1,677)											
Benefits - Crop, SWC and WRD													
Crop Benefits Increased by 20 percent	-4%	(1,295)											
Livestock Benefits Increased by 20 percent	N/A	(1,517)											

Source: Cost Benefit Analysis (CBA) Study Estimate Jan 2005.

\1 EIRR = Economic Internal Rate of Return (rate at which NPV equal to zero).

\2 NPV = Net Present Value of net incremental benefits at 12% (indicative opportunity cost of capital for rural development projects in India).

N/A = Not analysed as EIRR negative.

Table AN12.20.3 IFFDC - Rajasthan - Pratapgarh: Village S Ka Khera: Cost Benefit Analysis Development Activity Summary A (Rs'000).

Administration Costs / Development Activity	EIRR ¹	NPV ²		Year 1 1999/00	Year 2 2000/01	Year 3 2001/02	Year 4 2002/03	Year 5 2003/04	Year 6 2004/05	Year 7 2005/06	Year 8 2006/07	Year 9 2007/08	Year 10 2008/09
		(10%)	(%)										
A. Administration Costs													
Investment				237.1	209.8	199.3	366.6	388.0	389.3	373.8	-	-	-
Recurrent				-	-	-	-	-	-	-	37.4	37.4	37.4
Total A	N/A	(1,449)	96%	237.1	209.8	199.3	366.6	388.0	389.3	373.8	37.4	37.4	37.4
B. Development Intervention Component A													
1. PPGF													
Cost Stream													
Investment				-	1.2	3.6	11.1	5.1	7.2	7.2	-	-	-
Recurrent				-	-	0.0	0.1	0.4	0.5	0.7	0.9	0.9	0.9
Total Costs				-	1.2	3.6	11.2	5.5	7.7	7.9	0.9	0.9	0.9
Benefit Stream													
Before / Without Project				-	-	-	-	-	-	-	-	-	-
After / With Project				-	-	-	-	-	-	-	-	-	-
Incremental Benefits				-	-	-	-	-	-	-	-	-	-
Net Incremental Benefits	N/A	(24)	2%	-	(1.2)	(3.6)	(11.2)	(5.5)	(7.7)	(7.9)	(0.9)	(0.9)	(0.9)
2. VOD													
Cost Stream													
Investment				-	-	5.1	7.7	21.0	48.6	220.5	-	-	-
Recurrent				-	-	-	0.3	0.6	1.7	4.1	15.1	15.1	15.1
Total Costs				-	-	5.1	8.0	21.6	50.3	224.6	15.1	15.1	15.1
Benefit Stream													
Before / Without Project				-	-	-	-	-	-	-	-	-	-
After / With Project				-	-	26.8	26.8	26.8	26.8	26.8	26.8	26.9	26.9
Incremental Benefits				-	-	26.8	26.8	26.8	26.8	26.8	26.8	26.9	26.9
Net Incremental Benefits	-2%	(37)	2%	-	-	21.6	18.8	5.2	(23.5)	(197.8)	11.7	11.7	11.7
3/5. Crop Technology, SWC and WRD													
Cost Stream													
Investment													
Crop Technology				-	7.7	6.2	6.3	57.1	13.5	41.4	-	-	-
Soil Water Conservation				-	-	0.4	3.4	2.1	23.6	16.9	-	-	-
Water Resource Development				-	19.4	45.4	499.6	273.3	81.0	27.0	-	-	-
Recurrent													
Crop Technology				-	-	0.2	0.3	0.5	1.9	2.3	3.3	3.3	3.3
Soil Water Conservation				-	-	-	0.1	0.5	0.7	3.7	5.8	5.8	5.8
Water Resource Development				-	-	2.9	9.7	84.6	125.6	137.8	141.8	141.8	141.8
Total Costs				-	27.1	55.1	519.4	418.1	246.4	229.0	151.0	151.0	151.0
Benefit Stream													
Before / Without Project				-	-	-	66.9	66.9	66.9	66.9	66.9	66.9	66.9
After / With Project				-	-	-	267.4	267.4	267.4	267.4	267.4	267.4	267.4
Incremental Benefits				-	-	-	200.5	200.5	200.5	200.5	200.5	200.5	200.5
Net Incremental Benefits	-1%	(279)	18%	-	(27.1)	(55.1)	(318.9)	(217.6)	(45.9)	(28.5)	49.5	49.5	49.5

Source: Cost Benefit Analysis (CBA) Study Estimate Jan 2005.

¹ EIRR = Economic Internal Rate of Return (rate at which NPV equal to zero).

² NPV = Net Present Value of net incremental benefits at 12% (indicative opportunity cost of capital for rural development projects in India).

N/A = Not analysed as EIRR negative.

Table AN12.20.4 IFFDC - Rajasthan - Pratapgarh: Village S Ka Khera: Cost Benefit Analysis Development Activity Summary B (Rs'000).

Administration Costs / Development Activity	EIRR \1	NPV \2		Year 1 1999/00	Year 2 2000/01	Year 3 2001/02	Year 4 2002/03	Year 5 2003/04	Year 6 2004/05	Year 7 2005/06	Year 8 2006/07	Year 9 2007/08	Year 10 2008/09
		(10%)	(%)										
6. Livestock													
Cost Stream													
Investment				-	9.7	-	8.1	6.2	18.9	18.9	-	-	-
Recurrent				-	-	1.0	1.0	1.8	2.4	4.3	6.2	6.2	6.2
Total Costs				-	9.7	1.0	9.1	8.0	21.3	23.2	6.2	6.2	6.2
Benefit Stream													
Before / Without Project				-	-	-	72.5	72.5	72.5	72.5	72.5	72.5	72.5
After / With Project				-	-	-	80.4	113.3	146.2	146.2	146.2	146.2	146.2
Incremental Benefits				-	-	-	7.9	40.8	73.7	73.7	73.7	73.7	73.7
Net Incremental Benefits	103%	255	-17%	-	(9.7)	(1.0)	(1.1)	32.8	52.4	50.6	67.6	67.6	67.6
7. Forestry													
Cost Stream													
Investment				-	3.6	5.0	17.1	5.0	4.5	4.5	-	-	-
Recurrent				-	-	0.4	0.9	2.6	3.1	3.5	4.0	4.0	4.0
Total Costs				-	3.6	5.4	18.0	7.6	7.6	8.0	4.0	4.0	4.0
Benefit Stream													
Before / Without Project				-	-	-	-	-	-	-	-	-	-
After / With Project				-	-	-	6.9	9.8	12.6	12.6	12.6	12.6	12.6
Incremental Benefits				-	-	-	6.9	9.8	12.6	12.6	12.6	12.6	12.6
Net Incremental Benefits	26%	17	-1%	-	(3.6)	(5.4)	(11.0)	2.2	5.0	4.6	8.6	8.6	8.6
8. Migration Support													
Cost Stream													
Investment				-	-	-	-	-	-	-	-	-	-
Recurrent				-	-	-	-	-	-	-	-	-	-
Total Costs				-	-	-	-	-	-	-	-	-	-
Benefit Stream													
Before / Without Project				-	-	-	-	-	-	-	-	-	-
After / With Project				-	-	-	-	-	-	-	-	-	-
Incremental Benefits				-	-	-	-	-	-	-	-	-	-
Net Incremental Benefits	N/A	-	0%	-	-	-	-	-	-	-	-	-	-
Summary													
Cost Stream													
Investment				237.1	251.4	265.0	920.0	757.8	586.7	710.2	-	-	-
Recurrent				-	-	4.5	12.3	91.0	136.0	156.4	214.5	214.5	214.5
Total Costs				237.1	251.4	269.5	932.3	848.9	722.7	866.6	214.5	214.5	214.5
Benefit Stream													
Before / Without Project				-	-	-	139.4	139.4	139.4	139.4	139.4	139.4	139.4
After / With Project				-	-	26.8	381.5	417.3	453.0	453.0	453.0	453.1	453.1
Incremental Benefits				-	-	26.8	242.1	278.0	313.6	313.7	313.7	313.7	313.7
Net Incremental Benefits	N/A	(1,517)	100%	(237.1)	(251.4)	(242.7)	(690.2)	(570.9)	(409.0)	(552.9)	99.2	99.2	99.2

Source: Cost Benefit Analysis (CBA) Study Estimate Jan 2005.

Table AN12.20.5

IFFDC - Rajasthan - Pratapgarh: Village S Ka Kheri: Costs - Financial (Rs'000).

Cost Head / Subhead	1999/00	2000/01	2001/02	2002/03	2003/04	2004/05	2005/06	Total	
	Actual	Actual	Actual	Actual	Actual	Budget	Budget	(Rs'000)	(%)
A. Administration Costs									
IFFDC Head Quarters	106.0	46.3	47.3	84.7	53.8	47.2	47.2	432.5	10%
DFIDI	35.9	71.4	26.9	63.2	47.4	54.7	39.2	338.6	8%
Pratapgarh Coordination Office	117.6	107.5	144.2	252.5	324.6	324.6	324.6	1,595.6	36%
Total A	259.5	225.1	218.4	400.3	425.8	426.5	411.0	2,366.7	53%
B. Development Costs									
Component A									
1. PPG	-	1.4	4.0	12.4	5.6	8.0	8.0	39.4	1%
2. VOD	-	-	5.7	8.6	23.3	54.0	245.0	336.6	8%
3. Crop	-	8.6	6.9	7.0	63.4	15.0	46.0	147.0	3%
4. SWC	-	-	0.7	5.0	3.1	35.0	25.0	68.8	2%
5. WRD	-	28.7	67.2	740.1	404.9	120.0	40.0	1,400.9	31%
6. Livestock	-	10.8	-	9.0	6.9	21.0	21.0	68.7	2%
7. Forestry	-	4.0	5.6	19.0	5.6	5.0	5.0	44.2	1%
8. Migration Support	-	-	-	-	-	-	-	-	0%
Subtotal	-	53.5	90.0	801.1	512.9	258.0	390.0	2,105.5	47%
Other Development Costs									
Subtotal	-	-	-	-	-	-	-	-	0%
Total B	-	53.5	90.0	801.1	512.9	258.0	390.0	2,105.5	47%
Total A + B	259.5	278.6	308.4	1,201.5	938.8	684.5	801.0	4,472.3	100%

Source:

IFFDC Pratapgarh Coordination Office - Rajasthan.

DFIDI = Department for International Development (India).
PPG = Participatory Planning and Group Formation.
VOD = Village Organisation and Development.
SWC = Soil and Water Conservation.
WRD = Water Resource Development.

Table AN12.20.5

IFFDC - Rajasthan - Pratapgarh: Village S Ka Kheri: Costs - Economic (Rs'000).

Cost Head / Subhead	CF	SCF	1999/00	2000/01	2001/02	2002/03	2003/04	2004/05	2005/06	Total	
			Actual	Actual	Actual	Actual	Actual	Budget	Budget	(Rs'000)	(%)
A. Administration Costs											
IFFDC Head Quarters	0.90	1.00	95.4	41.6	42.5	76.2	48.4	42.5	42.5	389.2	10%
DFIDI	1.00	1.00	35.9	71.4	26.9	63.2	47.4	54.7	39.2	338.6	9%
Pratapgarh Coordination Office	0.90	1.00	105.9	96.7	129.8	227.2	292.1	292.1	292.1	1,436.0	39%
Total A			237.1	209.8	199.3	366.6	388.0	389.3	373.8	2,163.9	58%
B. Development Costs											
Component A											
1. PPG	0.90	1.00	-	1.2	3.6	11.1	5.1	7.2	7.2	35.4	1%
2. VOD	0.90	1.00	-	-	5.1	7.7	21.0	48.6	220.5	303.0	8%
3. Crop	0.90	1.00	-	7.7	6.2	6.3	57.1	13.5	41.4	132.3	4%
4. SWC	0.90	0.75	-	-	0.4	3.4	2.1	23.6	16.9	46.4	1%
5. WRD	0.90	0.75	-	19.4	45.4	499.6	273.3	81.0	27.0	945.6	25%
6. Livestock	0.90	1.00	-	9.7	-	8.1	6.2	18.9	18.9	61.9	2%
7. Forestry	0.90	1.00	-	3.6	5.0	17.1	5.0	4.5	4.5	39.7	1%
8. Migration Support	0.90	1.00	-	-	-	-	-	-	-	-	0%
Subtotal			-	41.7	65.7	553.4	369.8	197.3	336.4	1,564.3	42%
Other Development Costs											
Subtotal	0.90	1.00	-	-	-	-	-	-	-	-	0%
Total B			-	41.7	65.7	553.4	369.8	197.3	336.4	1,564.3	42%
Total A + B			237.1	251.4	265.0	920.0	757.8	586.7	710.2	3,728.2	100%

Source:

Cost Benefit Analysis (CBA) Study Estimate Jan 2005.

DFIDI = Department for International Development (India).
PPG = Participatory Planning and Group Formation.
VOD = Village Organisation and Development.
SWC = Soil and Water Conservation.
WRD = Water Resource Development.

Table AN12.20.6

IFFDC - Rajasthan - Pratapgarh: Village S Ka Khera: VOD Household Assumptions.

Without \ With Project	Units	Assumptions			Benefits		
					Year 1 (Rs)	Year 2 (Rs)	Year 3 (Rs)
Development Activity: Village Organisation and Development							
Before / Without Project Situation:							
A. Self Help Groups (SHGs)							
Assumption	Sum	Zero	Zero	Zero	-	-	-
B. Drudgery Reduction							
Assumption	Sum	Zero	Zero	Zero			
Total Without Project Benefits					-	-	-
After / With Project Situation:							
A. Self Help Groups (SHGs)							
Assumptions							
Average Saving / Household	Rs	160					
Households / Village	No	42					
Present Group Deposits	Rs'000	6.7			6.7	6.9	7.1
Annual Savings Increase	%	3%					
Deposits on Loan to Members	%	75%					
SHG Interest Income	% / Year	10%					
Assumed Benefit	Rs'000				0.5	0.5	0.5
B. Drudgery Reduction							
Assumptions							
Hours Saved / Day / Household	No	1.0					
Number of Days / Year / Household	No	200					
Days / Year / Household (8hrs/day)	No	25.0					
Households / Village	No	42					
Day Equivalent / Village	No	1,050					
Economic Value per Day	(Rs/day)	25					
Assumed Benefit	Rs'000				26.3	26.3	26.3
Total With Project Benefits	Rs'000				26.8	26.8	26.8
Incremental Benefits	Rs'000				26.8	26.8	26.8

Source:

Cost Benefit Analysis (CBA) Study Estimate Jan 2005.

VOD = Village Organisation and Development.

Participating households per village: S Ka Khera

Table AN12.20.6

IFFDC - Rajasthan - Pratappgarh: Village S Ka Khera: Incremental VOD Benefit Stream (Rs'000).

Without \ With Project	Benefit Streams (Rs '000)									
	Year 1 1999/00	Year 2 2000/01	Year 3 2001/02	Year 4 2002/03	Year 5 2003/04	Year 6 2004/05	Year 7 2005/06	Year 8 2006/07	Year 9 2007/08	Year 10 2008/09
Development Activity: Village Organisation and Development										
Before / Without Project Situation:										
A. Self Help Groups (SHGs) Assumption										
B. Drudgery Reduction Assumption										
Total Without Project Benefits	-	-	-	-	-	-	-	-	-	-
After / With Project Situation:										
A. Self Help Groups (SHGs) Assumptions										
Average Saving / Household Households / Village										
Present Group Deposits Annual Savings Increase	-	-	6.7	6.9	7.1	7.4	7.6	7.8	8.0	8.3
Deposits on Loan to Members SHG Interest Income										
Assumed Benefit	-	-	0.5	0.5	0.5	0.6	0.6	0.6	0.6	0.6
B. Drudgery Reduction Assumptions										
Hours Saved / Day / Household Number of Days / Year / Household Days / Year / Household (8hrs/day) Households / Village Day Equivalent / Village Economic Value per Day										
Assumed Benefit	-	-	26.3	26.3	26.3	26.3	26.3	26.3	26.3	26.3
Total With Project Benefits	-	-	26.8	26.8	26.8	26.8	26.8	26.8	26.9	26.9
Incremental Benefits	-	-	26.8	26.8	26.8	26.8	26.8	26.8	26.9	26.9

Source:

Cost Benefit Analysis (CBA) Study Estimate Jan 2005.

VOD = Village Organisation and Development.
Participating households per village: S Ka Khera

Table AN12.20.7

IFFDC - Rajasthan - Pratapgarh: Village S Ka Khera: Household Crop Net Margin Assumptions.

Without \ With Project	Units	Assumptions			Benefits		
					Year 1 (Rs/HH)	Year 2 (Rs/HH)	Year 3 (Rs/HH)
Development Activity: Crop Technology, SWC and WRD							
Before / Without Project Situation:							
Assumptions							
Households (HHs)	No	42					
Crop Adoption Assumptions		100%	100%	100%			
Kharif Crop Net Margin	Rs/HH				1,363.2	1,363.2	1,363.2
Rabi Crop Net Margin	Rs/HH				229.2	229.2	229.2
Total Without Project Benefits	Rs/HH				1,592.4	1,592.4	1,592.4
After / With Project Situation:							
Assumptions							
Households (HHs)	No	42					
Crop Adoption Assumptions		100%	100%	100%			
Kharif Crop Net Margin	Rs/HH				4,947.7	4,947.7	4,947.7
Rabi Crop Net Margin	Rs/HH				1,418.4	1,418.4	1,418.4
Total With Project Benefits	Rs/HH				6,366.1	6,366.1	6,366.1
Incremental Benefits	Rs/HH				4,773.7	4,773.7	4,773.7

Source:

Cost Benefit Analysis (CBA) Study Estimate Jan 2005.

Table AN12.20.7

IFFDC - Rajasthan - Pratapgarh: Village S Ka Khera: Incremental Crop Benefit Stream (Rs'000).

Without \ With Project	Benefit Streams (Rs '000)									
	Year 1 1999/00	Year 2 2000/01	Year 3 2001/02	Year 4 2002/03	Year 5 2003/04	Year 6 2004/05	Year 7 2005/06	Year 8 2006/07	Year 9 2007/08	Year 10 2008/09
Development Activity: Crop Technology, SWC and WRD										
Before / Without Project Situation:										
Assumptions										
Households (HHs)										
Crop Adoption Assumptions										
Kharif Crop Net Margin	-	-	-	57.3	57.3	57.3	57.3	57.3	57.3	57.3
Rabi Crop Net Margin	-	-	-	9.6	9.6	9.6	9.6	9.6	9.6	9.6
Total Without Project Benefits	-	-	-	66.9	66.9	66.9	66.9	66.9	66.9	66.9
After / With Project Situation:										
Assumptions										
Households (HHs)										
Crop Adoption Assumptions										
Kharif Crop Net Margin	-	-	-	207.8	207.8	207.8	207.8	207.8	207.8	207.8
Rabi Crop Net Margin	-	-	-	59.6	59.6	59.6	59.6	59.6	59.6	59.6
Total With Project Benefits	-	-	-	267.4	267.4	267.4	267.4	267.4	267.4	267.4
Incremental Benefits	-	-	-	200.5	200.5	200.5	200.5	200.5	200.5	200.5

Source:

Cost Benefit Analysis (CBA) Study Estimate Jan 2005.

Table AN12.20.8

IFFDC - Rajasthan - Pratapgarh: Village S Ka Khera: Household Livestock Net Margin Assumpt

Without \ With Project Livestock	Units	Assumptions			Benefits		
					Year 1 (Rs)	Year 2 (Rs)	Year 3 (Rs)
Development Activity: Livestock							
Before / Without Project Situation: Assumptions							
Households (HHS)	No	42					
Annual Livestock Net Margin	Rs/HH						
Total Without Project Benefits					1,725.9	1,725.9	1,725.9
After / With Project Situation:							
Development Activity: Assumptions							
Households (HHS)	No	42					
Adoption Assumptions	Percent	55%	78%	100%			
Annual Livestock Net Margin	Rs/HH						
Total With Project Benefits					1,915.0	2,698.4	3,481.8
Incremental Benefits	Rs/HH				189.1	972.5	1,755.9

Source:

Cost Benefit Analysis (CBA) Study Estimate Jan 2005.

Table AN12.20.8

IFFDC - Rajasthan - Pratapgarh: Village S Ka Khera: Incremental Livestock Benefit Stream (Rs'000).

Without \ With Project Livestock	Benefit Streams (Rs '000)									
	Year 1 1999/00	Year 2 2000/01	Year 3 2001/02	Year 4 2002/03	Year 5 2003/04	Year 6 2004/05	Year 7 2005/06	Year 8 2006/07	Year 9 2007/08	Year 10 2008/09
Development Activity: Livestock Before / Without Project Situation: Assumptions Households (HHs) Annual Livestock Net Margin Total Without Project Benefits	-	-	-	72.5	72.5	72.5	72.5	72.5	72.5	72.5
After / With Project Situation: Development Activity: Assumptions Households (HHs) Adoption Assumptions Annual Livestock Net Margin Total With Project Benefits	-	-	-	80.4	113.3	146.2	146.2	146.2	146.2	146.2
Incremental Benefits	-	-	-	7.9	40.8	73.7	73.7	73.7	73.7	73.7

Source:

Cost Benefit Analysis (CBA) Study Estimate Jan 2005.

Table AN12.20.9

IFFDC - Rajasthan - Pratapgarh: Village S Ka Khera: Forestry Benefit Assumptions.

Without \ With Project Forestry	Units	Assumptions			Benefits		
					Year 1 (Rs)	Year 2 (Rs)	Year 3 (Rs)
Development Activity: Forestry							
Before / Without Project Situation: Assumptions							
Households (HHs)	No	42					
Annual Forestry Net Margin	Rs/HH				-	-	-
Total Without Project Benefits							
After / With Project Situation: Assumptions							
Households (HHs)	No	42					
Adoption Assumptions	Percent	55%	78%	100%			
Annual Forestry Net Margin	Rs/HH				165.0	234.0	300.0
Total With Project Benefits							
Incremental Benefits	Rs/HH				165.0	234.0	300.0

Source:

Cost Benefit Analysis (CBA) Study Estimate Jan 2005.

Table AN12.20.9

IFFDC - Rajasthan - Pratappgarh: Village S Ka Khera: Incremental Forestry Benefit Stream (Rs'000).

Without \ With Project Forestry	Benefit Streams (Rs '000)									
	Year 1 1999/00	Year 2 2000/01	Year 3 2001/02	Year 4 2002/03	Year 5 2003/04	Year 6 2004/05	Year 7 2005/06	Year 8 2006/07	Year 9 2007/08	Year 10 2008/09
Development Activity: Forestry										
Before / Without Project Situation: Assumptions										
Households (HHs)										
Annual Forestry Net Margin										
Total Without Project Benefits	-	-	-	-	-	-	-	-	-	-
After / With Project Situation: Assumptions										
Households (HHs)										
Adoption Assumptions										
Annual Forestry Net Margin										
Total With Project Benefits	-	-	-	6.9	9.8	12.6	12.6	12.6	12.6	12.6
Incremental Benefits	-	-	-	6.9	9.8	12.6	12.6	12.6	12.6	12.6

Source:

Cost Benefit Analysis (CBA) Study Estimate Jan 2005.

Table AN12.20.10

IFDC - Rajasthan - Pratapgarh: Village S Ka Khera: Migration Support Benefit Assumptions.

Without \ With Project	Assumptions				Benefits		
					Year 1 (Rs)	Year 2 (Rs)	Year 3 (Rs)
Development Activity: Migration Support							
Before / Without Project Situation: Assumptions							
Economic Value per Day	Rs/day	25.0					
Days / Month / Household	No	-					
Economic Value per Month	Rs/month	-					
Months Migration / Year	Months	4.0					
Economic Value per Household	Rs/HH	-					
Households per Village	No	42					
Households per Village Migrating	Percent	45%					
Total Without Project Benefits	Rs/Village				-	-	-
After / With Project Situation: Assumptions							
Economic Value per Day \1	Rs/day	25.0	30%	32.5			
Days / Month / Household	No	-	30%	-			
Economic Value per Month	Rs/month	-		-			
Months Migration / Year	Months	4.0	-20%	3.2			
Economic Value per Household	Rs/HH	-		-			
Households per Village	No	42		42			
Households per Village Migrating	Percent	45%	-20%	36%			
Subtotal Migration Income	Rs/Village				-	-	-
Other Income	Sum (Rs)	-	-	-	-	-	-
Total With Project Benefits	Rs/Village				-	-	-
Incremental Benefits	Rs/Village				-	-	-

Source:

Cost Benefit Analysis (CBA) Study Estimate Jan 2005.

- 1\ Financial Wages (Rs/day):
 Skill Labour - Rs 160
 Casual Labour :
 Male - Rs 40
 Female - Rs 30

Table AN12.20.10

IFFDC - Rajasthan - Pratapgarh: Village S Ka Khera: Incremental Migration Support Benefit Stream (Rs'000).

Without \ With Project	Benefit Streams (Rs '000)									
	Year 1 1999/00	Year 2 2000/01	Year 3 2001/02	Year 4 2002/03	Year 5 2003/04	Year 6 2004/05	Year 7 2005/06	Year 8 2006/07	Year 9 2007/08	Year 10 2008/09
Development Activity: Migration Support Before / Without Project Situation: Assumptions Economic Value per Day Days / Month / Household Economic Value per Month Months Migration / Year Economic Value per Household Households per Village Households per Village Migrating Total Without Project Benefits	-	-	-	-	-	-	-	-	-	-
After / With Project Situation: Assumptions Economic Value per Day \1 Days / Month / Household Economic Value per Month Months Migration / Year Economic Value per Household Households per Village Households per Village Migrating Subtotal Migration Income Other Income Total With Project Benefits Incremental Benefits	-	-	-	-	-	-	-	-	-	-

Source:

Cost Benefit Analysis (CBA) Study Estimate Jan 2005.

- 1\ Financial Wages (Rs/day):
 Skill Labour - Rs 160
 Casual Labour :
 Male - Rs 40
 Female - Rs 30

Table AN12.20.11 IFFDC - Rajasthan - Pratapgarh: Village S Ka Khera: Weighted Household Crop Net Margin Summary (Rs/Household).

Item	WBR (%)	Before / Without Project			After / With Project			Increment		
		Khalif	Rabi	Total	Khalif	Rabi	Total	Khalif	Rabi	Total
Phase II										
Well Being Ranking - Very Poor Household Net Margin (Rs)	20.0%	834.6	102.5	937.1	1,849.8	1,067.8	2,917.6	1,015.2	965.3	1,980.5
Well Being Ranking - Poor Household Net Margin (Rs)	33.0%	637.7	-	637.7	4,803.0	220.7	5,023.7	4,165.3	220.7	4,386.0
Well Being Ranking - Moderate Household Net Margin (Rs)	37.0%	994.0	89.3	1,083.3	3,711.4	2,508.3	6,219.6	2,717.4	2,419.0	5,136.4
Well Being Ranking - Better Off Household Net Margin (Rs)	10.0%	6,180.9	1,756.7	7,937.5	16,195.9	2,039.3	18,235.2	10,015.0	282.7	10,297.7
Well Being Ranking - Weighted Household Net Margin (Rs)	100.0%	1,363.2	229.2	1,592.4	4,947.7	1,418.4	6,366.1	3,584.5	1,189.2	4,773.7
Phase I \1										
Well Being Ranking - Very Poor Household Net Margin (Rs)	20.0%	436.3	484.0	436.3	2,304.0	1,078.3	2,898.3	2,351.8	1,078.3	2,946.0
Well Being Ranking - Poor Household Net Margin (Rs)	33.0%	485.8	657.5	1,143.3	10,136.0	5,690.3	15,826.3	9,650.3	5,032.8	14,683.0
Well Being Ranking - Moderate Household Net Margin (Rs)	37.0%	986.3	3,385.0	4,371.3	9,457.5	5,195.0	14,652.5	8,471.3	1,810.0	10,281.3
Well Being Ranking - Better Off Household Net Margin (Rs)	10.0%	2,778.0	937.0	3,715.0	4,915.0	9,560.0	14,475.0	2,137.0	8,623.0	10,760.0
Well Being Ranking - Weighted Household Net Margin (Rs)	100.0%	890.3	1,659.9	2,453.4	7,796.5	4,971.6	12,671.2	7,003.0	3,408.5	10,314.7

Source: Study of Impact of WIRFP on Net Incomes of Target Households, Jan 2004.

WBR = IFFDC Household Well Being Ranking. Survey figures adjusted to Village Profile WBR.

\1 GVT - Madhya Pradesh - Phase I: Village Naganwat Choti: Weighted Household Crop Net Margin Summary.

Table AN12.20.12 IFFDC - Rajasthan - Pratapgarh: Village S Ka Khera: Weighted Household Crop Net Margin Sensitivity Analysis (Rs/Household).

Item	EIRR	Before / Without Project			After / With Project			Increment		
		Khalif	Rabi	Total	Khalif	Rabi	Total	Khalif	Rabi	Total
Development Activity: Crop Technology, SWC and WRD										
Weighted Net Margin (Phase II)										
Household Net Margin (Rs)		1,363.2	229.2	1,592.4	4,947.7	1,418.4	6,366.1	3,584.5	1,189.2	4,773.7
Incremental Benefit (Phase II / Phase I)										46%
Base Case Assumptions										
Household Net Margin (Rs)		1,363.2	229.2	1,592.4	4,947.7	1,418.4	6,366.1	3,584.5	1,189.2	4,773.7
Incremental Benefit (Phase II / Phase I)										46%
Sensitivity Increase (%)	0%									
Development Activity	-1%									
Overall Village	N/A									
Sensitivity Assumptions										
Household Net Margin (Rs)		1,363.2	229.2	1,592.4	11,874.6	3,404.1	15,278.6	10,511.3	3,174.9	13,686.2
Incremental Benefit (Phase II / Phase I)										133%
Sensitivity Increase (%)	0%									
Development Activity	51%									
Overall Village	12%									
Weighted Net Margin (Phase I)										
Household Net Margin (Rs)		890.3	1,659.9	2,453.4	7,796.5	4,971.6	12,671.2	7,003.0	3,408.5	10,314.7

Source: Study of Impact of WIRFP on Net Incomes of Target Households, Jan 2004.

EIRR = Economic Internal Rate of Return (rate at which NPV equal to zero).

N/A = Not analysed as EIRR negative.

Table AN12.20.13 IFFDC - Rajasthan - Pratapgarh: Village S Ka Khera: Weighted Household Livestock Net Margin Summary (Rs/Household).

Well Being Ranking	Weight (%)	Before / Without Project		After / With Project		Increment \1	
		Herd Value	Net Margin	Herd Value	Net Margin	Herd Value	Net Margin
Phase I - Well Being Ranking (WBR) \1							
Madhya Pradesh - WBR Weighted Data							
Very Poor	20.0%						
Average		580	(185.0)	5,650	412.5	474	597.5
Poor	33.0%						
Average		2,350	982.5	8,250	2,141.0	1,180	1,158.5
Moderate	37.0%						
Average		14,700	6,730.0	1,900	2,820.0	1,900	(3,910.0)
Better Off	10.0%						
Average		15,580	3,000.0	14,600	10,790.0	(196)	7,790.0
Phase I - WBR Weighted Data	100.0%	7,889	3,077.3	6,016	2,911.4	1,168	(165.9)
Phase II - Well Being Ranking (WBR)							
Very Poor	20.0%						
Average		5,756	149.2	10,970	1,446.4	1,043	1,297.2
Poor	33.0%						
Average		13,128	852.2	25,979	3,008.8	2,570	2,156.8
Moderate	37.0%						
Average		13,525	4,035.1	27,020	5,249.5	2,699	1,214.4
Better Off	10.0%						
Average		12,700	(781.7)	41,873	2,573.3	5,835	3,355.0
Phase II - WBR Weighted Data	100.0%	11,758	1,725.9	24,952	3,481.8	2,639	1,756.0

Source: Study of Impact of WIRFP on Net Incomes of Target Households, Jan 2004.

WBR = IFFDC Household Well Being Ranking. Survey figures adjusted to Village Profile WBR.

\1 GVT - Madhya Pradesh - Phase I: Village Naganwat Choti: Weighted Household Livestock Net Margin Summary.

Table AN12.20.13 IFFDC - Rajasthan - Pratapgarh: Village S Ka Khera: Weighted Household Livestock Net Margin Summary (Rs/Household).

Well Being Ranking	Weight (%)	Before / Without Project		After / With Project		Increment \1	
		Herd Value	Net Margin	Herd Value	Net Margin	Herd Value	Net Margin
Phase I - Well Being Ranking (WBR) \1							
Madhya Pradesh - WBR Weighted Data							
Very Poor	20.0%						
Average		580	(185.0)	5,650	412.5	474	597.5
Poor	33.0%						
Average		2,350	982.5	8,250	2,141.0	1,180	1,158.5
Moderate	37.0%						
Average		14,700	6,730.0	1,900	2,820.0	1,900	(3,910.0)
Better Off	10.0%						
Average		15,580	3,000.0	14,600	10,790.0	(196)	7,790.0
Phase I - WBR Weighted Data	100.0%	7,889	3,077.3	6,016	2,911.4	1,168	(165.9)
Phase II - Well Being Ranking (WBR)							
Very Poor	20.0%						
Average		5,756	149.2	10,970	1,446.4	1,043	1,297.2
Poor	33.0%						
Average		13,128	852.2	25,979	3,008.8	2,570	2,156.8
Moderate	37.0%						
Average		13,525	4,035.1	27,020	5,249.5	2,699	1,214.4
Better Off	10.0%						
Average		12,700	(781.7)	41,873	2,573.3	5,835	3,355.0
Phase II - WBR Weighted Data	100.0%	11,758	1,725.9	24,952	3,481.8	2,639	1,756.0

Source: Study of Impact of WIRFP on Net Incomes of Target Households, Jan 2004.

WBR = IFFDC Household Well Being Ranking. Survey figures adjusted to Village Profile WBR.

\1 GVT - Madhya Pradesh - Phase I: Village Naganwat Choti: Weighted Household Livestock Net Margin Summary.



AN13 | **Project Cost Benefit Analysis**

AN13 | Project Cost Benefit Analysis

Overall Results

Details of the economic investment and recurrent costs and the quantified incremental economic benefits for each of the major development activities are set out in Annex 13 for the 20 sample villages. Selected results are summarised in Table A13.1.

The overall EIRR of the net incremental benefit stream for the 20 sample villages is estimated at 10 percent with a resulting negative NPV of Rs 4.6 million when using an opportunity cost of capital of 12 percent for rural development projects in India. This should be considered as a satisfactory result given the exceedingly poor resource base of the villages selected for the phase two interventions.

Of the twenty sample villages, six villages (Gujarat two, Madhya Pradesh two and Rajasthan two) achieved EIRRs in excess of the 12 percent measure of the opportunity cost of capital for rural development projects.

Sensitivity analysis

Three types of sensitivity analysis were conducted to test the robustness of the cost and benefit assumptions for the phase two sample villages, namely:

- the required level of incremental household net crop margin, in relation to the figure recorded in the phase one village, to achieve an EIRR of 12 percent;
- variation to the number of years for the analysis period to identify the minimum number of years required for project viability; and
- sensitivity to decreases/increases in cost and benefit assumptions:
- a decrease in administration investment costs by 20 percent;
 - an increase in administration and development recurrent costs estimates by 20 percent;
 - an increase in the 'with project' household crop net margin by 20 percent, and
 - an increase in the 'with project' household livestock net margin by 20 percent.

Incremental Household Crop Net Margin

The phase two incremental household net crop margins, weighted for WBR, for the 20 sample villages ranged from a low of Rs 2,880 (Dharis Kheri, Rajasthan) to a high

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of Rs 7,063 (Sundripada, Rajasthan). Given this range of incremental income, six of the 20 sample villages achieved EIRRs equal to or exceeding 12 percent (base case). The adjusted incremental household income to achieve an EIRR of 12 percent, ranged from a low of Rs 7,229 to a high of Rs 12,712. The base case assumptions for the phase two villages, represents some 30 to 50 percent of incremental income levels achieved in the phase one village sampled. It is suggested that, given a longer period of sustained support to the phase two villages, incremental income levels can be expected to increase above those levels recorded in the Net Income Survey in 2003. The sensitivity test measured, for each of the 20 sample villages, the required level of incremental income to achieve an EIRR of 12 percent. This required incremental income level was then compared with the results using the data from the phase one-village sample.

This sensitivity analysis showed that a further nine villages (a total of 15 villages) would achieve an EIRR of 12 percent at incremental household income levels less than those achieved using the phase one sample data, but that the remaining five village would require incremental income levels significantly above the phase one sample to achieve the 12 percent EIRR.

Period of Analysis (years)

The base case period of analysis is for the benefit assumptions to be sustainable for over a 20-year period yielding an EIRR 10 percent. The discounting process has a relatively insignificant effect on the overall EIRR if the analysis period, and benefit assumptions, are extended beyond this period. For both a 25 and 30-year period of analysis, the EIRR would increase by two percentage points to 12 percent. However, and of more significance, if the period of project sustainability is only maintained for 12 years, the EIRR would be reduced by 10 percentage points to zero percent with a substantially negative NPV of Rs 17.6 million.

Cost / Benefit Assumptions - Reduced Administration Investment Costs

At the inception workshop there was much discussion concerning the allocation of the implementing agency headquarter and consultancy administration investment costs. The concern centred on whether the allocation of these investment costs on the basis of the percentage of development costs disbursed for component A, reliably reflected the level of headquarter activity related to this component. A 20 percent reduction in these administration costs would increase the overall village sample EIRR by two percentage points to 12 percent with a near zero NPV, and with a total of seven of the sample villages achieving an EIRR greater than 12 percent.

Cost / Benefit Assumptions – Increased Ongoing Recurrent Costs

As previously indicated in this Annex, no information was forthcoming from the implementing agencies as to the projected level of ongoing administration and development recurrent cost expenditure. This recurrent expenditure would be required to sustain the village development over the life of the project. In addition, no a source of funding been identified for this expenditure. Indicative estimates of recurrent costs have been made for the purpose of the cost benefit analysis but it is recognised that these projections could be substantially under estimated. A sensitivity test was run to identify the effect of a 20 percent increase in the projected recurrent expenditure over the period of the project. Such an increase would reduce

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the overall village sample EIRR by two percentage points to eight percent with a resulting negative NPV of Rs 9.5 million, and with only six villages achieving an EIRR greater than 12 percent.

Cost / Benefit Assumptions – Increased Incremental Household Crop Benefits

It is recognised that assumptions regarding the level of incremental household crop benefits are critical to the overall EIRR of the 20 sample villages. This reflects the fact that, on average, some 70 percent of the development investment costs, has been spent on crop technology, SWC and WRD. The benefits to this investment have been measured in terms of the incremental household net margins based on data recorded for the Net Income Study. Discussions with the involved agencies at the final presentation workshop indicated that there was some concern about the size of the sample used to obtain this crucial data for identifying crop benefits.

A sensitivity test was run to indicate the effect of a 20 percent increase in the incremental household crop net margin of the phase two village sample. This increase would still be significantly less than the level of incremental benefits obtained from the survey of the phase one village. Such an increase would increase the overall village sample EIRR by four percentage points to 14 percent with a corresponding positive NPV of Rs 5.2 million, and with a further three villages, nine villages in all, achieving an EIRR greater than 12 percent.

Cost / Benefit Assumptions – Increased Incremental Household Livestock Benefits

The NPV of benefits resulting from the incremental household livestock benefits are substantial in all villages. This reflects a relatively low percentage of development costs allocated to the livestock programme (five percent as opposed to 70 percent of the development investment costs spent on crop technology, SWC and WRD). The benefits to this investment have been measured in terms of the incremental household net margins based on data recorded for the Net Income Study. In calculating the incremental livestock benefit stream, the apparent annual appreciation in the value of the herd was excluded from the calculation. The benefits to the livestock programme may therefore be understated.

A sensitivity test was run to indicate the effect of a 20 percent increase in the incremental household livestock net margin of the phase two village sample. Such an increase would raise the overall village sample EIRR by two percentage points to 12 percent with a resulting small negative NPV of Rs 0.9 million, and with only one additional village, achieving an EIRR greater than 12 percent.

Results of the sensitivity analysis as measured by the number of villages achieving a 12 percent EIRR, the overall village sample EIRR and NPV at 12 percent interest rate, are set out in Table A13.1.

Table A13.1: Economic Analysis – Sensitivity Tests

Sensitivity Test	Results in Comparison to Base Case Assumptions			
Base Case				
Number of Villages (No) ^{1/}	6			
Overall Sample EIRR (%)	10%			
Overall Sample NVP (Rs M)	(4.6)			
Incremental Crop Income Level	Base Case	Positive		Negative
Number of Villages (No) ^{1/}	6	15		5
Change from Base Case (No)		+9		
Period of Analysis	20 Years	12 Years	25 Years	30 Years
Number of Villages (No)	6	3	7	8
Change from Base Case (No)	-	-3	+1	+2
Overall Sample EIRR (%)	10%	0%	12%	12%
Change from Base Case (%)	-	-10%	+2%	+2%
Overall Sample NVP (Rs M)	(4.6)	(17.6)	(0.8)	1.3
Change from Base Case (Rs M)	-	(13.0)	3.8	5.9
Changes to Cost / Benefit Assumptions ^{2/}	Test 1	Test 2	Test 3	Test 4
Number of Villages (No)	7	6	9	7
Change from Base Case (No)	+1	-	+3	+1
Overall Sample EIRR (%)	12%	8%	14%	12%
Change from Base Case (%)	+2%	-2%	+6%	+4%
Overall Sample NVP (Rs M)	(0.1)	(9.5)	5.2	(0.9)
Change from Base Case (Rs M)	3.5	(4.9)	9.8	3.7

Source: Cost Benefit Analysis Study, January 2005.

^{1/} Number of villages achieving an economic internal rate of return (EIRR) greater than 12 percent (taken as the opportunity cost of capital for rural development projects in India).

^{2/} Test One = Administration investment costs reduced by 20 percent.

Test Two = Administration and development recurrent costs increased by 20 percent.

Test Three = Household crop net margins increased by 20 percent.

Test Four = Household livestock net margins increased by 20 percent.

EIRR = Economic Internal Rate of Return, NPV = Net Present Value at 12% interest rate.

WIRFP - Phase II - Cost Benefit Analysis Study

Tables AN13.0 Project Cost Benefit Analysis

Table AN13.1	Cost Benefit Analysis - Sample Village Summary - Financial and Economic Costs (Rs'000).
Table AN13.2	Cost Benefit Analysis - Sample Village Summary - Economic Net Incremental Benefit Stream (Rs'000).
Table AN13.3	Cost Benefit Analysis - Sample Village Summary - Economic Analysis - Net Present Value (NPV) and Economic Internal Rate of Return (EIRR).
	Cost Benefit Analysis - Sample Village Summary - Economic Analysis - Sensitivity Analysis A.
	Cost Benefit Analysis - Sample Village Summary - Economic Analysis - Sensitivity Analysis B.
	Cost Benefit Analysis - Sample Village Summary - Economic Analysis - Sensitivity Analysis C.

Table AN13.1 Cost Benefit Analysis - Sample Village Summary - Financial and Economic Costs (Rs'000).

Sample Villages	Phase II Core Villages (No)	Financial Costs Per Village (Rs'000)				Households / Village		Economic Costs Per Village (Rs'000)				
		Administration	Development Costs		Total	Number	Cost	Administration	Development Costs		Total	
			Component A	Other Costs \1					Component A	Other Costs \1		
						(No)	(Rs'000)					
Gramin Vikas Trust (GVT)												
Dahod Coordination Office, Gujarat												
A. GVT Administration Costs Gujarat												
	20											
		383.7						345.4				
		338.6						338.6				
		1,757.6						1,581.8				
		Total A	2,480.0	2,879.1	684.2	3,563.3	188	19	2,265.8	2,192.2	615.8	2,808.0
B. Development Costs (per village analysed)												
Component A												
1. Jadha		2,480.0	7,384.1	-	9,864.1	363	27	2,265.8	5,344.7	-	7,610.5	
2. Kasotia		2,480.0	3,042.5	-	5,522.5	193	29	2,265.8	2,283.5	-	4,549.4	
3. Poyali		2,480.0	3,978.9	-	6,458.8	120	54	2,265.8	2,914.2	-	5,180.0	
Jhabua Coordination Office, Madhya Pradesh												
A. GVT Administration Costs Madhya Pradesh												
	72											
		383.7						345.4				
		338.6						338.6				
		903.0						812.7				
		Total A	1,625.4	1,996.7	295.3	3,917.4	107	37	1,496.7	1,479.1	265.7	3,241.6
B. Development Costs (per village analysed)												
Component A												
1. Bagoli		1,625.4	3,887.2	-	5,512.6	86	64	1,496.7	2,880.9	-	4,377.6	
2. Borwa		1,625.4	1,250.9	-	2,876.3	36	80	1,496.7	969.1	-	2,465.8	
3. Chamjhar		1,625.4	3,798.3	-	5,423.7	79	69	1,496.7	2,712.0	-	4,208.7	
4. Chenpura		1,625.4	3,700.9	-	5,326.3	160	33	1,496.7	2,860.7	-	4,357.4	
5. Kadwapada		1,625.4	2,342.7	-	3,968.1	86	46	1,496.7	1,872.9	-	3,369.6	
6. Padabanda		1,625.4	2,840.0	-	4,465.4	37	121	1,496.7	2,077.7	-	3,574.4	
Banswara Coordination Office, Rajasthan												
A. GVT Administration Costs Rajasthan												
	60											
		383.7						345.4				
		338.6						338.6				
		869.1						782.2				
		Total A	1,591.5	2,586.3	437.4	4,615.2	140	33	1,466.2	1,926.1	393.7	3,786.0
B. Development Costs (per village analysed)												
Component A												
1. Bakaner		1,591.5	3,541.4	-	5,132.9	90	57	1,466.2	2,634.7	-	4,100.9	
2. Bhuripada		1,591.5	3,909.4	-	5,500.9	160	34	1,466.2	2,851.0	-	4,317.2	
3. Gara		1,591.5	5,901.0	-	7,492.5	120	62	1,466.2	4,196.3	-	5,662.5	
4. Merana		1,591.5	2,400.7	-	3,992.2	147	27	1,466.2	1,834.5	-	3,300.7	
5. Sundripada		1,591.5	3,040.6	-	4,632.1	80	58	1,466.2	2,252.6	-	3,718.8	
Indian Farm Forestry Development Cooperative (IFFDC)												
Pratapgarh Coordination Office, Rajasthan												
A. IFFDC Administration Costs Rajasthan												
	25											
		432.5						389.2				
		338.6						338.6				
		1,595.6						1,436.0				
		Total A	2,366.7	2,011.4	57.6	4,435.7	86	52	2,163.9	1,456.7	51.8	3,672.4
B. Development Costs (per village analysed)												
Component A												
1. Chhayana		2,366.7	3,824.0	-	6,190.7	60	103	2,163.9	2,764.9	-	4,928.8	
2. Chhota Myanga		2,366.7	2,461.9	-	4,828.7	49	99	2,163.9	1,765.6	-	3,929.5	
3. Dharis Kheri		2,366.7	2,241.9	-	4,608.7	80	58	2,163.9	1,708.7	-	3,872.6	
4. Kachotia		2,366.7	2,956.1	-	5,322.8	108	49	2,163.9	2,225.1	-	4,389.0	
5. Moti Kheri		2,366.7	4,942.2	-	7,308.9	112	65	2,163.9	3,685.1	-	5,849.1	
6. Soma Ka Khera		2,366.7	2,105.5	-	4,472.3	42	106	2,163.9	1,564.3	-	3,728.2	

Source: Cost Benefit Analysis (CBA) Study Estimate Jan 2005.

\1 Component B and C development costs.

Table AN13.2 Cost Benefit Analysis - Sample Village Summary - Economic Net Incremental Benefit Stream (Rs'000).

Sample Villages	EIRR \1	NPV \2 (10%)	Year 1 1999/00	Year 2 2000/01	Year 3 2001/02	Year 4 2002/03	Year 5 2003/04	Year 6 2004/05	Year 7 2005/06	Year 8 2006/07	Year 9 2007/08	Year 10 2008/09
Gramin Vikas Trust (GVT)												
Dahod Coordination Office, Gujarat												
Incremental Net Benefits (per villaged analysed)												
1. Jadha	28%	4,440	(36)	(700)	(1,175)	(1,204)	(795)	902	1,498	2,041	2,045	2,049
2. Kasotia	27%	2,266	(36)	(750)	(616)	(307)	472	(96)	383	1,078	1,079	1,080
3. Poyali	11%	(178)	(36)	(469)	(1,118)	(289)	(521)	(477)	(26)	604	604	604
Subtotal	23%	6,527	(108)	(1,920)	(2,909)	(1,800)	(843)	329	1,855	3,723	3,728	3,733
Jhabua Coordination Office, Madhya Pradesh												
Incremental Net Benefits (per villaged analysed)												
1. Bagoli	3%	(1,046)	(36)	(491)	(1,093)	(592)	(750)	25	76	313	313	313
2. Borwa	5%	(516)	(36)	(227)	(263)	(409)	(512)	(80)	(378)	222	222	222
3. Chamjhar	N/A	(1,888)	(36)	(364)	(1,021)	(673)	(350)	(907)	(230)	121	121	121
4. Chenpura	18%	956	(36)	(263)	(693)	(1,169)	(1,060)	318	654	887	887	888
5. Kadwapada	14%	175	(36)	(287)	(503)	(718)	(384)	(103)	219	488	489	489
6. Padabanda	N/A	(1,593)	(36)	(257)	(614)	(844)	(347)	(739)	(160)	90	90	90
Subtotal	6%	(3,913)	(215)	(1,888)	(4,187)	(4,406)	(3,403)	(1,487)	182	2,120	2,122	2,123
Banswara Coordination Office, Rajasthan												
Incremental Net Benefits (per villaged analysed)												
1. Bakaner	4%	(918)	(36)	(312)	(762)	(1,123)	(564)	(42)	(145)	352	353	353
2. Bhuripada	14%	323	(36)	(339)	(743)	(1,201)	(346)	255	302	725	622	622
3. Gara	4%	(611)	(36)	(260)	(353)	420	(323)	(1,651)	(544)	302	302	303
4. Merana	32%	2,884	(46)	(542)	(801)	(527)	495	675	690	1,145	1,145	1,145
5. Sundripada	11%	(141)	(36)	(268)	(494)	(396)	(768)	(684)	(238)	549	550	550
Subtotal	15%	1,537	(189)	(1,722)	(3,154)	(2,827)	(1,506)	(1,446)	65	3,073	2,971	2,973
Indian Farm Forestry Development Cooperative (IFFDC)												
Pratapgarh Coordination Office, Rajasthan												
Incremental Net Benefits (per villaged analysed)												
1. Chhayana	N/A	(2,408)	(244)	(230)	(576)	(1,166)	(1,018)	(471)	(684)	91	92	93
2. Chhota Mayanga	N/A	(1,660)	(237)	(267)	(330)	(734)	(868)	(395)	(541)	138	138	139
3. Dharis Kheri	1%	(1,121)	(241)	(278)	(451)	(607)	(432)	(373)	(541)	241	241	241
4. Kachotia	8%	(551)	(244)	(389)	(569)	(655)	(217)	(272)	(446)	434	434	434
5. Moti Kheri	2%	(1,504)	(248)	(588)	(607)	(905)	(707)	(475)	(636)	385	386	386
6. Soma Ka Khera	-4%	(1,480)	(237)	(251)	(243)	(690)	(571)	(409)	(553)	99	99	99
Subtotal	-1%	(8,761)	(1,451)	(2,003)	(2,776)	(4,757)	(3,812)	(2,395)	(3,400)	1,389	1,391	1,393
Net Incremental Benefits - Sample Village Summary	10%	(4,609)	(1,963)	(7,533)	(13,026)	(13,790)	(9,565)	(4,999)	(1,299)	10,305	10,211	10,222

Source: Cost Benefit Analysis (CBA) Study Estimate Jan 2005.

\1 EIRR = Economic Internal Rate of Return (rate at which NPV equal to zero).

\2 NPV = Net Present Value of net incremental benefits at 12% (indicative opportunity cost of capital for rural development projects in India).

N/A = Not analysed as EIRR negative.

Table AN13.3

Cost Benefit Analysis - Sample Village Summary - Economic Analysis - Net Present Value (NPV) and Economic Internal Rate of Return (EIRR).

Sample Villages	Administration		Development Activity Benefits					Result		EIRR \1
	Cost	PPGF	VOD	Crop, SWC & WRD	LiveStock	Forestry	Migration	Overall Village		
	NPV \2	NPV	NPV	NPV	NPV	NPV	NPV	NPV	NPV	
Gramin Vikas Trust (GVT)										
Dahod Coordination Office, Gujarat										
Development Activity NPV and EIRR										
1. Jadha	(1,503)	(200)	1,231	2,260	2,350	75	226	4,440	28%	*
2. Kasotia	(1,503)	(107)	454	1,995	1,304	54	69	2,266	27%	*
3. Poyali	(1,503)	(103)	220	484	605	48	70	(178)	11%	
Jhabua Coordination Office, Madhya Pradesh										
Development Activity NPV and EIRR										
1. Bagoli	(985)	(46)	(103)	(166)	220	34	-	(1,046)	3%	
2. Borwa	(985)	(40)	(13)	334	152	8	28	(516)	5%	
3. Chamjhar	(985)	(40)	49	(1,348)	408	30	(2)	(1,888)	N/A	
4. Chenpura	(985)	(63)	207	748	1,020	26	4	956	18%	*
5. Kadwapada	(985)	(85)	175	708	290	62	10	175	14%	*
6. Padabanda	(985)	(50)	(106)	(710)	227	19	12	(1,593)	N/A	
Banswara Coordination Office, Rajasthan										
Development Activity NPV and EIRR										
1. Bakaner	(972)	(141)	70	(174)	269	30	-	(918)	4%	
2. Bhuripada	(972)	(129)	369	497	520	38	-	323	14%	*
3. Gara	(972)	(59)	202	(107)	307	18	-	(611)	4%	
4. Merana	(972)	(113)	337	2,689	894	49	-	2,884	32%	*
5. Sundripada	(972)	(146)	96	375	482	23	-	(141)	11%	
Indian Farm Forestry Development Cooperative (IFFDC)										
Pratapgarh Coordination Office, Rajasthan										
Development Activity NPV and EIRR										
1. Chhayan	(1,449)	(42)	7	(1,300)	348	27	-	(2,408)	N/A	
2. Chhota Mayanga	(1,449)	(19)	26	(517)	272	27	-	(1,660)	N/A	
3. Dharis Kheri	(1,449)	(54)	58	(174)	448	50	-	(1,121)	1%	
4. Kachotia	(1,449)	(41)	53	220	597	68	-	(551)	8%	
5. Moti Kheri	(1,449)	(53)	41	(695)	578	74	-	(1,504)	2%	
6. Soma Ka Khera	(1,449)	(37)	(279)	255	255	17	-	(1,517)	N/A	
Project Sample Villages (20) - Overall	-	-	-	-	-	-	-	(4,609)	10%	6

Source:

Cost Benefit Analysis (CBA) Study Estimate Jan 2005.

\1 EIRR = Economic Internal Rate of Return (rate at which NPV equal to zero).

\2 NPV = Net Present Value of net incremental benefits at 12% (indicative opportunity cost of capital for rural development projects in India).

N/A = Not analysed as EIRR negative.

* Individual villages achieving an EIRR greater than 12 percent.

Table AN13.3

Cost Benefit Analysis - Sample Village Summary - Economic Analysis - Sensitivity Analysis A

Sample Villages	Incremental Household Income			Crop, SWC and WRD Sensitivity Analysis									
	Phase I	Phase II		Activity EIRR	Village EIRR	Base Case		Sensitivity Test \1					
	(Rs/HH)	(Rs/HH)	(\%) \2			Incremental Income		Activity EIRR	Village EIRR	Incremental Income			
						(Rs/HH)	(\%) \2			(Rs/HH)	(\%) \2		
Gramin Vikas Trust (GVT)													
Dahod Coordination Office, Gujarat													
Development Activity NPV and EIRR													
1. Jadha	12,712.1	4,313.5	34%	29%	28%	4,313.5	34%	*	29%	28%	4,313.5	34%	*
2. Kasotia	12,073.4	4,095.6	34%	67%	27%	4,095.6	34%	*	67%	27%	4,095.6	34%	*
3. Poyali	9,873.1	4,807.8	49%	22%	11%	4,807.8	49%		24%	12%	5,146.0	52%	*
Jhabua Coordination Office, Madhya Pradesh													
Development Activity NPV and EIRR													
1. Bagoli	11,183.1	5,401.4	48%	9%	3%	5,401.4	48%		23%	12%	8,347.8	75%	*
2. Borwa	11,367.8	6,354.5	56%	34%	5%	6,354.5	56%		63%	12%	10,174.4	90%	*
3. Chamjhar	7,228.8	3,183.9	44%	N/A	N/A	3,183.9	44%		19%	12%	8,819.8	122%	
4. Chenpura	10,989.7	4,238.8	39%	23%	18%	4,238.8	39%	*	23%	18%	4,238.8	39%	*
5. Kadwapada	9,715.4	4,692.0	48%	32%	14%	4,692.0	48%	*	32%	14%	4,692.0	48%	*
6. Padabanda	11,200.4	6,144.0	55%	N/A	N/A	6,144.0	55%		27%	12%	18,019.9	161%	
Banswara Coordination Office, Rajasthan													
Development Activity NPV and EIRR													
1. Bakaner	10,259.4	4,672.4	46%	9%	4%	4,672.4	46%		22%	12%	7,470.8	73%	*
2. Bhuripada	10,989.7	4,238.8	39%	19%	14%	4,238.8	39%	*	19%	14%	4,238.8	39%	*
3. Gara	11,183.1	5,401.4	48%	8%	4%	5,401.4	48%		46%	12%	6,653.6	59%	*
4. Merana	11,435.5	6,232.6	55%	50%	32%	6,232.6	55%	*	50%	32%	6,232.6	55%	*
5. Sundripada	11,006.9	7,062.9	64%	19%	11%	7,062.9	64%		21%	12%	7,613.2	69%	*
Indian Farm Forestry Development Cooperative (IFFDC)													
Pratapgarh Coordination Office, Rajasthan													
Development Activity NPV and EIRR													
1. Chhayana	10,073.1	4,627.9	46%	N/A	N/A	4,627.9	46%		24%	12%	15,542.4	154%	
2. Chhota Mayanga	11,081.3	5,190.7	47%	-5%	N/A	5,190.7	47%		33%	12%	14,845.8	134%	
3. Dharis Kheri	9,354.8	2,879.9	31%	6%	1%	2,879.9	31%		34%	12%	6,761.8	72%	*
4. Kachotia	9,237.4	3,883.9	42%	17%	8%	3,883.9	42%		28%	12%	5,458.6	59%	*
5. Moti Kheri	10,283.3	4,522.6	44%	2%	2%	4,522.6	44%		20%	12%	8,075.5	79%	*
6. Soma Ka Khera	10,314.7	4,773.7	46%	-1%	N/A	4,773.7	46%		51%	12%	13,686.2	133%	
Project Sample Villages (20) - Overall													
6													
15													

Source:

Cost Benefit Analysis (CBA) Study Estimate Jan 2005.

\1 Incremental HH income required to give the activity an EIRR sufficient to provide a return to both activity development cost and administrative costs. If the activity EIRR was greater than 15% or the village EIRR greater than 12% no sensitivity analysis was performed.

\2 Phase II incremental household income expressed as a percentage of the phase I incremental household income.

* Individual villages achieving an EIRR greater than 12 percent.

Table AN13.3

Sample Villages
<p>Gramin Vikas Trust (GVT)</p> <p>Dahod Coordination Office, Gujarat Development Activity NPV and EIRR</p> <ol style="list-style-type: none"> 1. Jadha 2. Kasotia 3. Poyali <p>Jhabua Coordination Office, Madhya Pradesh Development Activity NPV and EIRR</p> <ol style="list-style-type: none"> 1. Bagoli 2. Borwa 3. Chamjhar 4. Chenpura 5. Kadwapada 6. Padabanda <p>Banswara Coordination Office, Rajasthan Development Activity NPV and EIRR</p> <ol style="list-style-type: none"> 1. Bakaner 2. Bhuripada 3. Gara 4. Merana 5. Sundripada <p>Indian Farm Forestry Development Cooperative (IFFDC) Pratapgarh Coordination Office, Rajasthan Development Activity NPV and EIRR</p> <ol style="list-style-type: none"> 1. Chhayan 2. Chhota Mayanga 3. Dharis Kheri 4. Kachotia 5. Moti Kheri 6. Soma Ka Khera <p>Project Sample Villages (20) - Overall</p>

Source:

Table AN13.3

Cost Benefit Analysis - Sample Village Summary - Economic Analysis - Sensitivity Analysis B

Sample Villages	Participating Households Per Village (Number)	Base Case		Project Analysis Period							
		Analysis Period		Years							
		20 Years		12		25		30			
		EIRR \1	NPV \2	EIRR \1	NPV \2	EIRR \1	NPV \2	EIRR \1	NPV \2		
Gramin Vikas Trust (GVT)											
Dahod Coordination Office, Gujarat											
Development Activity NPV and EIRR											
1. Jadha	363	28%	4,440 *	23%	1,828 *	28%	4,440 *	29%	5,639 *		
2. Kasotia	193	27%	2,266 *	22%	889 *	27%	2,669 *	27%	2,898 *		
3. Poyali	120	11%	(178)	0%	(949)	12%	48 *	13%	176 *		
Jhabua Coordination Office, Madhya Pradesh											
Development Activity NPV and EIRR											
1. Bagoli	86	3%	(1,046)	-9%	(1,445)	6%	(929)	7%	(862)		
2. Borwa	36	5%	(516)	5%	(800)	7%	(433)	8%	(386)		
3. Chamjhar	79	N/A	(1,888)	N/A	(2,042)	-4%	(1,843)	-2%	(1,818)		
4. Chenpura	160	18%	956 *	10%	(176)	19%	1,288 *	19%	1,476 *		
5. Kadwapada	86	14%	175 *	5%	(449)	15%	357 *	15%	461 *		
6. Padabanda	37	N/A	(1,593)	N/A	(1,708)	N/A	(1,560)	-2%	(1,541)		
Banswara Coordination Office, Rajasthan											
Development Activity NPV and EIRR											
1. Bakaner	90	4%	(918)	-8%	(1,368)	7%	(786)	8%	(712)		
2. Bhuripada	160	14%	323 *	6%	(470)	15%	556 *	16%	688 *		
3. Gara	120	4%	(611)	N/A	(997)	7%	(498)	8%	(434)		
4. Merana	147	32%	2,884 *	28%	1,424 *	32%	3,312 *	32%	3,555 *		
5. Sundripada	80	11%	(141.4)	-1%	(842)	12%	64 *	13%	181 *		
Indian Farm Forestry Development Cooperative (IFFDC)											
Pratapgarh Coordination Office, Rajasthan											
Development Activity NPV and EIRR											
1. Chhayan	60	N/A	(2,408)	N/A	(2,527)	N/A	(2,374)	N/A	(2,354)		
2. Chhota Mayanga	49	N/A	(1,660)	N/A	(1,837)	-2%	(1,608)	0%	(1,579)		
3. Dharis Kheri	80	1%	(1,121)	N/A	(1,429)	1%	(1,121)	5%	(980)		
4. Kachotia	108	8%	(551)	-4%	(1,104)	9%	(388)	10%	(296)		
5. Moti Kheri	112	2%	(1,504)	N/A	(1,997)	4%	(1,360)	6%	(1,278)		
6. Soma Ka Khera	42	N/A	(1,517)	N/A	(1,643)	-4%	(1,480)	-2%	(1,459)		
Project Sample Villages (20) - Overall		10%	(4,609) 6	0%	(17,643) 3	12%	(789) 8	12%	1,378 8		

Source:

Cost Benefit Analysis (CBA) Study Estimate Jan 2005.

\1 EIRR = Economic Internal Rate of Return (rate at which NPV equal to zero).

\2 NPV = Net Present Value of net incremental benefits at 12% (indicative opportunity cost of capital for rural development projects in N/A = Not analysed as EIRR negative.

* Individual villages achieving an EIRR greater than 12 percent.

Table AN13.3

Cost Benefit Analysis - Sample Village Summary - Economic Analysis - Sensitivity Analysis C

Sample Villages	Participating Households Per Village (Number)	Costs				Benefits				
		Administration Investment Less 20%		Development Recurrent Plus 20%		Crops, SWC and WRD HH Income Plus 20%		Livestock HH Income Plus 20%		
		EIRR \1	NPV \2	EIRR \1	NPV \2	EIRR \1	NPV \2	EIRR \1	NPV \2	
Gramin Vikas Trust (GVT)										
Dahod Coordination Office, Gujarat										
Development Activity NPV and EIRR										
1. Jadha	363	30%	4,740 *	27%	3,931 *	31%	5,348 *	31%	5,265 *	
2. Kasotia	193	31%	2,566 *	26%	2,090 *	30%	2,945 *	30%	2,771 *	
3. Poyali	120	13%	122 *	9%	(456)	15%	495 *	12%	61 *	
Jhabua Coordination Office, Madhya Pradesh										
Development Activity NPV and EIRR										
1. Bagoli	86	5%	(849)	1%	(1,327)	8%	(520)	3%	(1,046)	
2. Borwa	36	7%	(319)	3%	(586)	9%	(250)	6%	(440)	
3. Chamjhar	79	N/A	(1,691)	N/A	(2,167)	-2%	(1,478)	-5%	(1,732)	
4. Chenpura	160	19%	1,116 *	16%	677 *	20%	1,474 *	19%	1,251 *	
5. Kadwapada	86	17%	372 *	14%	47 *	18%	572 *	16%	382 *	
6. Padabanda	37	N/A	(1,396)	N/A	(1,783)	-3%	(1,349)	N/A	(1,489)	
Banswara Coordination Office, Rajasthan										
Development Activity NPV and EIRR										
1. Bakaner	90	6%	(724)	2%	(1,140)	8%	(514)	7%	(689)	
2. Bhuripada	160	16%	518 *	12%	61 *	18%	963 *	16%	541 *	
3. Gara	120	6%	(416)	-1%	(959)	13%	123 *	8%	(297)	
4. Merana	147	34%	3,078 *	30%	2,721 *	36%	3,844 *	32%	2,884 *	
5. Sundripada	80	11%	(141.4)	8%	(503.3)	14%	334.7 *	11%	(141.4)	
Indian Farm Forestry Development Cooperative (IFFDC)										
Pratapgarh Coordination Office, Rajasthan										
Development Activity NPV and EIRR										
1. Chhayana	60	N/A	(2,118)	N/A	(2,703)	N/A	(2,130)	N/A	(2,272)	
2. Chhota Mayanga	49	-4%	(1,370)	N/A	(1,853)	-2%	(1,397)	-4%	(1,563)	
3. Dharis Kheri	80	3%	(831)	-1%	(1,278)	4%	(822)	3%	(947)	
4. Kachotia	108	10%	(261)	6%	(759)	11%	(141)	9%	(339)	
5. Moti Kheri	112	3%	(1,214)	-1%	(1,849)	6%	(1,025)	4%	(1,179)	
6. Soma Ka Khera	42	N/A	(1,227)	N/A	(1,677)	(0.0)	(1,295)	N/A	(1,517)	
Project Sample Villages (20) - Overall			12%	(46) 7	8%	(9,513) 6	14%	5,177 9	12%	(933) 7

Source:

Cost Benefit Analysis (CBA) Study Estimate Jan 2005.

\1 EIRR = Economic Internal Rate of Return (rate at which NPV equal to zero).

\2 NPV = Net Present Value of net incremental benefits at 12% (indicative opportunity cost of capital for rural development projects in India).

N/A = Not analysed as EIRR negative.

* Individual villages achieving an EIRR greater than 12 percent.