

ECONOMIC AND PRIVATE SECTOR PROFESSIONAL EVIDENCE AND APPLIED KNOWLEDGE SERVICES

HELPDESK REQUEST

Designing public works programmes and cash transfers to promote growth and mitigate violence

Rodolfo Beazley, Robert Morris, Anna Vitali Oxford Policy Management February 2016



EPS-PEAKS is a consortium of organisations that provides Economics and Private Sector Professional Evidence and Applied Knowledge Services to the DfID. The core services include:

- 1) Helpdesk
- 2) Document library
- 3) Information on training and e-learning opportunities
- 4) Topic guides
- 5) Structured professional development sessions
- 6) E-Bulletin

To find out more or access EPS-PEAKS services or feedback on this or other output, visit the EPS-PEAKS community on http://partnerplatform.org/eps-peaks or contact Alberto Lemma, Knowledge Manager, EPS-PEAKS core services at a.lemma@odi.org.uk.

Disclaimer Statement:

The views presented in this paper are those of the authors and do not necessarily represent the views of Consortium partner organisations, DFID or the UK Government. The authors take full responsibility for any errors or omissions contained in this report.

Contents

Executiv	ve summary	iv			
Designing public works programmes to generate jobs and growth					
Designing public works and cash transfer programmes to mitigate the risk of violent					
conflict		V			
Trade-off	s and the importance of defining programme objectives	V			
Understa	nding local constraints to growth and drivers of conflict	V			
1	Introduction	1			
1.1	Rationale	1			
1.2	Approach	2			
1.3	Structure of the report	3			
2	The link between public works programmes, jobs and growth	4			
2.1	Explanation 1: cash transferred	4			
2.2	Explanation 2: assets created or improved	5			
2.3	Explanation 3: skills developed or enhanced	8			
2.4	Explanation 4: complementary interventions	8			
2.5	Designing PWPs to enhance productivity and growth	9			
3	The link between public works and cash transfer programmes and				
	violent conflict	14			
3.1	Explanation 1: influencing the opportunity cost of violence	14			
3.2	Explanation 2: information-sharing and violence reduction	18			
3.3	Explanation 3: perceptions of state legitimacy and violence reduction	20			
3.4	Explanation 4: employment and social status	23			
3.5	Unintended side-effect 1: corruption and grievance	25			
3.6	Unintended side-effect 2: insurgent responses to attacks	28			
3.7	Designing PWPs and cash transfers to mitigate the risk of violent conflict	30			
4	Considerations	32			
References					
Annex A: List of public works programmes and cash transfers reviewed 4					
Annex B:List of sources by research type, design and method					

List of boxes and figures

Pox 1. Easters to consider when desiding on appropriate each delivery					
Box 1: Factors to consider when deciding on appropriate cash delivery mechanism	11				
Box 2: Design implications of evidence on opportunity cost logic	18				
Box 3: Design implications of evidence on information-sharing	20				
Box 4: Design implications of evidence on boosting state legitimacy	23				
Box 5: Design implications of evidence on addressing social drivers of	20				
violent conflict	25				
Box 6: Design implications of evidence on mitigating the risk of corruption	27				
Box 7: Design implications of evidence on insurgent response to attacks	30				
Figure 1: Main causal pathways identified in literature review	3				
Table 4. E. Marson and another 4	4 -				
Table 1: Evidence on explanation 115					
Table 2: Evidence on explanation 219					
Table 3: Evidence on explanation 320					
Table 4: Evidence on explanation 4	24				
Table 5: Evidence on unintended side-effect 1	26				
Table 6: Evidence on unintended side-effect 2	28				
Table 7: Summary of recommendations for designing public works and cash	า				
transfer programmes to mitigate the risk of violent conflict	33				

Executive summary

This report presents a short review of the evidence on designing Public Works Programmes (PWPs) and cash transfer programmes to promote economic growth and mitigate the risks of violent conflict. This executive summary highlights the key implications for policymakers considering the design on programme design.

Overall, despite of the increasing interest in the productive roles of PWPs and cash transfers and their potential to mitigate the risk of violent conflict, **the body of evidence is still weak**. Although it is often claimed that PWPs can promote growth, evidence to support these claims is scarce. The design of these programmes as well as their evaluation have focused on the short term poverty reduction / consumption smoothing effects, rather than on the productivity gains and wider growth impacts. The theoretical causal links by which PWPs could potentially promote growth do exist, although programmes have not exploited them sufficiently and their effects still need to be proved.

It is also usually claimed that PWPs and cash transfer programmes have the potential to mitigate the risk of violent conflict through job creation and growth. However, in practice the relationship between these social protection interventions and violent conflict is complex, simultaneously working through multiple causal mechanisms that are not necessarily cumulative, linear or even positive. Evidence supporting these multiple causal pathways, with both positive and negative outcomes, is also scarce and mixed.

Designing public works programmes to generate jobs and growth

PWPs can impact productivity and economic growth through three main channels: (i) Cash transferred, (ii) assets created or improved, and (iii) skills developed or enhanced.

Evidence about PWPs tends to focus on the effects of cash on consumption smoothing and poverty reduction, rather than on the productive effects of cash, the assets created or the skills developed. Maximising the impact of PWPs on jobs and growth tends to involve **integrating multiple targeting methods** to ensure the identification of the poor is accurate and comprehensive. While the need to work for low wages introduces an element of **self-selection**, this is usually combined with **geographic and/or community targeting**.

On top of its targeting implications, the **wage rate** paid to beneficiaries has an indirect impact on productive investments, local multiplier effects, inflation, labour market distortions, and foregone income. Policymakers should consider the trade-offs in achieving these aims when designing a PWP.

The design of the **payment process** can also influence how cash is spent, programme efficiency, opportunities for monitoring, and security. Key factors to consider include the frequency of transfers, remuneration method and cash delivery mechanism.

There is potential for tension between two contrasting goals when **selecting public works projects undertaken**: the creation of jobs and the generation of productive assets. Whilst PWPs tend to select labour-intensive projects to maximise the number of people who can be employed and benefit, excessive focus on labour intensity may compromise the overall quality of works or limit potential to invest in more productive assets. Project selection should be consistent with local development priorities, and so the integration of projects in larger economic development plans and **community involvement** in project selection might help ensure that PWPs respond to the productive needs of the community.

Designing public works and cash transfer programmes to mitigate the risk of violent conflict

Despite the widespread reference of a link between poverty, unemployment and violent conflict, there is extremely limited evidence examining the potential of PWPs and cash transfers to mitigate the risk of violent conflict.

The most common rationale for why PWPs – and to a lesser extent cash transfers – may reduce violent conflict is that they increase **the opportunity cost of participating in armed groups**. According to this logic, as potential to earn income in the peaceful labour market increases, individuals must forgo increasing amounts of income in order to spend time organising and committing violence.

However, the relationship between employment and violence is complex, simultaneously operating through multiple causal channels that are not necessarily cumulative, linear or even positive. Other key ways in which social protection programmes may influence conflict dynamics are: by **incentivising sharing information** with the state; by fostering improved perceptions of **state legitimacy**, and by **influencing other non-economic motivations** to participate in violent conflict, such as social status.

There is some suggestive evidence that the implementation of social protection programmes may also influence the **strategies of armed groups** engaging in violent conflict. In particular, armed groups may increase attacks in order to prevent successful implementation and may shift to less labour-intensive means of violence. Programmes may also exacerbate grievances arising from perception of **corruption**, which in turn may reinforce existing drivers of conflict.

The body of evidence is too weak to make concrete recommendations with universal applicability. Instead, this review highlights **key considerations** for policymakers designing PWPs and cash transfers to mitigate the risk of violent conflict.

Trade-offs and the importance of defining programme objectives

All good things do not go together. There are a number of potential **trade-offs** that means that PWPs and cash transfers cannot address short term poverty, medium to long term growth, and mitigate the risk of violent conflict at the same time. For example, targeting the poorest may present the largest potential gains for generating new jobs or growth, but may not effectively target those most vulnerable to recruitment into armed groups, especially where motivations for participation in violence are primarily non-economic or interact in complex ways with identity, inequalities, or territorial power struggles.

Designers of PWPs and cash transfers should clearly identify a **hierarchy of programme objectives** that will enable an informed approach to addressing trade-offs in programme design. From the targeting criteria and methodology to the work requirements, programme features will differ based on the core goals.

Understanding local constraints to growth and drivers of conflict

Policymakers should undertake a **context-specific analysis to identify the key constraints to economic growth and drivers of conflict**. Ideally, analysis should be undertaken at the sub-national level given that both economic growth and conflict dynamics can vary significantly even across relatively short distances.

One way of facilitating this local variation is through **involvement of local communities in the selection of beneficiaries and projects**. Engagement should consider appropriate social norms and power dynamics to maximise potential impact on perceptions of procedural legitimacy and minimise perceptions of corruption. Conflict analysis should focus on understanding individuals' motivation for joining armed groups and the organisational structure and tactics of armed groups, both of which should facilitate an intelligent approach to addressing trade-offs in design.

1 Introduction

This helpdesk report provides an overview of the link between public works programmes (PWPs), cash transfer programmes, economic growth and violent conflict. It is structured in two broad sections. The first section assesses the relationship between PWPs and economic growth. The second takes a broader view of the relationship between PWPs and cash transfer programmes on the one hand, and the drivers of violent conflict on the other. In each section the theory and evidence is discussed, before identifying the implications for policymakers responsible for designing PWPs and cash transfer programmes in fragile and conflict-affected situations (FCAS).

1.1 Rationale

Interest in social protection programming in FCAS has grown significantly over the past few decades. On the one hand, an increasing proportion of the world's extreme poor is based in fragile states, with baseline projections suggesting this share will rise to 50% in 2018 and nearly 75% in 2030 (Chandy et al 2013). Protecting the world's most vulnerable therefore means operating in more operationally complex environments with a greater potential for 'doing harm'. On the other hand, the rise of so-called 'complex emergencies' has focused attention on the potentially reinforcing nature of violent conflict and low levels of economic development (Collier et al 2003). This has led the policy community to consider ways in which development aid can also mitigate the risk of violent conflict and a growing awareness of the importance of 'upstream conflict prevention' (UK 2011).

In this context, DFID Afghanistan have been presented with proposals for a jobs-focused economic stimulus program implemented by the Afghan government. Faced with the withdrawal of international military forces and a reinsurgence in armed groups, such a programme would be designed to provide short-term assistance that would mitigate the negative impact of the current economic shock on livelihoods and violent conflict until the effects of broader macro-economic reforms have a chance to trickle-down into the wider economy.

This report is a coordinated response to three questions asked on the Economic and Private Sector Professional Evidence and Applied Knowledge Services (EPS-PEAKS) helpdesk service by DFID Afghanistan.

- 1 What does the literature tell us about how best to design and operate public works schemes to generate growth and jobs in low income developing countries?
- 2 What does the literature tell us about how best to design and operate public works schemes to mitigate the risk of violent conflict in fragile states?
- 3 What does the literature tell us about how best to design and operate cash transfer programmes to mitigate the risk of violent conflict in fragile states?

Given that both PWPs and cash transfer programmes share a similar set of dynamics with relation to their impact on jobs, growth and violent conflict, the report structure does not distinguish between these two types of programme *per se*. However, given that two out of the three questions are on PWPs, and that the proposals presented to DFID Afghanistan concern PWPs in particular, the report focuses slightly more on PWPs than cash transfers. Differences between the two programme types are noted on an *ad hoc* basis throughout the report.

The report also limits its scope to *collective violence*.¹ This decision was taken in light of resource constraints and the rationale for the report to inform programming to prevent relapse into armed conflict in Afghanistan.

1.2 Approach

This report is based on a semi-structured review of the policy and academic literature. An initial selection of the literature was gathered on the basis of searching for key terms on common and specialist search engines.² Key search terms were selected on the basis of researchers' prior knowledge of the mechanisms linking programmes to impact. Additional sources were identified using a 'snowball' approach in which relevant references within the already identified literature were gathered and reviewed as appropriate.

Evidence about cash transfers and public works programmes tends to focus on the effects of cash on consumption smoothing and poverty reduction, rather than on the productive effects of cash, or the impact of assets and employment creation on economic growth and conflict reduction. Where possible, priority has been given to gathering evidence from primary research, and (quasi-)experimental or observational studies in particular. However, (quasi-)experimental studies exploring the casual links between public works programmes and jobs creation, economic growth and violent conflict are scarce. As Annex B shows, most evidence on PWPs comes from observational studies and secondary sources. A significant proportion of these are made up of project evaluations or reviews that do not address questions of intervention outcome/impact or do not provide sufficient detail on the method for data collection and analysis in order to assess the strength of evidence.

To illustrate the weakness of the evidence base, a recently conducted systematic review noted that

"Despite the centrality of employment creation as an instrument to promote stability in the post-conflict policy discourse, no robusts qualitative or quantitative evidence was found to illustrate this relationship in the literature" (Holmes et al, 2013)

A recent Governance and Social Development Resource Centre (GSDRC) review noted that the idea that unemployment is a major motivating factor behind violent conflict is "based more on intuition and assumption than on evidence" (Cramer 2015).³

The limited evidence base examining the relationship between PWPs/cash transfers, economic growth and violent conflict led us to adopt a theory-based approach to reviewing the evidence. Social protection programmes can achieve outcomes through multiple causal pathways, and each section of the report tackles one of these commonly-cited causal pathways at a time. Rather than focusing just on PWPs *per se*, we also briefly review the broader literature on the link between employment, growth and violent conflict. Adopting this approach enables us to situate the limited evidence from PWPs/cash transfers within a broader evidence base, and therefore encourages both critical engagement with the limited existing literature and increased potential for tentative lesson-learning. Resources

¹ The term 'collective violence' here refers to behaviour that: (i) immediately inflicts physical damage on persons and/or objects; (ii) involves at least two perpetrators of damage; and (iii) results at least in part from coordination among persons who perform the damaging acts (Tilly 2003). This tends to exclude most (though not all) instances of petty crime and intimate partner violence.

² Specialist search engines included Google Scholar and JSTOR.

³ The weak evidence base is caused in part by: poor labour market data (Oya 2013); poorly conceptualised variables; a lack of controls, baseline data, and longitudinal data (Holmes et al 2013); a lack of individual-level (rather than district-level) data; and lack of variation in programme design within similar settings that would enable attribution of impact to policy design features.

permitting, review of (quasi-)experimental or observational studies was complemented by review of case study research, operational reviews, and literature reviews.

1.3 Structure of the report

Section 2 examines the evidence and policy implications of the link between PWPs, job creation and economic growth (responding to question 1 above). It identifies three main transmission mechanisms through which PWPs may achieve impact. Section 3 examines link between PWPs/CTs and the risk of violent conflict (responding to questions 2 and 3). It is split into sub-sections focused on maximising the positive impact and minimising potential negative impact. Section 4 summarises the policy implications of the preceding chapters and highlights some of the trade-offs that must be addressed in the design of PWPs/CTs.

Figure 1 below summarises the main causal pathways identified through the review of the literature.



Figure 1: Main causal pathways identified in literature review

Key: Blue arrows = Expected positive effects
Black arrows = Expected both positive and negative effects
Red arrows = Expected negative effects
Dotted arrow = Macro and meso-level effects not reviewed

2 The link between public works programmes, jobs and growth

PWPs have been widely employed in both developed and developing countries to provide social protection to the working age poor. The main attraction of PWPs to Governments and donors lies in the their potential to combine protective and productive objectives, while at the same time avoid the risk of welfare dependency⁴ and labour market distortions often associated with cash transfers programmes (Beazley and Vaidya 2015).

Although growth is rarely the primary stated objective of PWPs, adequately designed policies can potentially enhance local productivity and contribute to overall economic development in the longer term (Devereux 2012). By transferring cash to beneficiaries, PWPs can protect households' consumption, while at the same time promote savings and investments in productive assets. Additionally, through the generation of public goods and the provision of training, public works can lead to the accumulation of community assets and the development of skills, which may play an important role in alleviating local productivity constraints and fostering economic growth.

The next sections will draw on theories and evidence from the literature to present a simple theory of change linking PWPs to economic growth. In addition, some of the key aspects of public works will be critically reviewed, with the aim of analysing how specific design features can promote the productive potential of these programmes.

Recent years have seen a growing interest in PWPs as policy instruments to not only address the immediate consumption needs of the poor, but also promote individuals' productivity (Devereux 2012). In theory, PWPs can impact productivity and economic growth through three main channels: a) cash transferred; b) assets created or improved; c) skills developed or enhanced. The next sections will analyse how the inputs and outputs of PWPs can lead to the generation of employment and growth via these three mechanisms.

2.1 Explanation 1: cash transferred

By transferring cash to beneficiaries, PWPs can play an important role in protecting and enhancing the productive potential of households.

The provision of regular and predictable transfers can insure beneficiaries against income shocks (Del Ninno et al 2009). By supplementing low and variable income through regular and predictable cash transfers, PWPs help households to smooth consumption, and sustain spending on food, schooling and healthcare in lean periods or in the aftermath of economic crisis and natural disasters (Beazley and Vaidya 2015). Income insurance is especially important for individuals who lack access to liquid savings or credit, as their response to shocks typically involves dangerous coping behaviours, such as migration, sale of productive assets, or a sharp reduction in consumption of food or health services (Barret 2002). Similar strategies are likely to compromise households' productive potential and future income prospects, turning what might otherwise be a transitory income shock into a permanent one.

The cash transferred through PWPs allows, in theory, liquidity constrained individuals to accumulate savings and obtain access to credit on better terms, thus incentivizing investments in physical and human capital (DFID 2011; Devereux 2012; Kidd et al. 2014). In the long term, PWPs have the potential to enhance livelihoods and increase households' productivity by fostering the use of productive assets and the accumulation of human capital. Additionally, if PWPs offer repeated employment opportunities over a sustained

⁴ Welfare support acting as a disincentive to seek work.

period of time, reduced uncertainty about future income streams can incentivize recipients to invest in profitable but also riskier activities, such as starting small businesses.

If wage rates are high enough, beneficiaries could potentially invest the cash benefits in productive assets or activities. However, in practice, most PWPs aim at supporting consumption rather than promoting productive investments and offer low wage rates due to a number of reasons (to allow for pro-poor self-targeting, budget constraints, etc.). Consequently, benefits are used primarily for consumption rather than investment (McCord 2013).

The impact evaluations of the Productive Safety Net Programme (PSNP) in Ethiopia show that households' participation in public works has reduced the incidence of distress sales of assets for food and non-food needs (Devereux et al. 2006 and 2008, Berhane et al. 2011). In addition, data show a strong effect of the programme on income growth and household food security among beneficiaries. Similarly, the qualitative evaluation of OXFAM Cash for Work programme in Hazarajat, Afghanistan, found that the injection of cash prior to the winter allowed beneficiaries to prepare food stocks and other essential items, thus preventing some households from selling important household assets (Jones 2004).

Hartwig's (2013) evaluation of the Vision 2020 Umurenge (VUP) in Rwanda reports a positive impact of the programme on the formation of durable household assets and livestock holdings. Similarly, Berhane et al. (2011) find evidence that PSNP beneficiaries in Ethiopia experienced a steadier increase in the value of assets with respect to non-beneficiaries. In regard to PWPs effect on risky investments, results from the National Rural Employment Guarantee Scheme (NREGS) in India show that the introduction of the programme enabled households to invest in a higher share of high-risk, high-profit crops (Gehrke 2014). A similar result is found by Srinivasan (2014), who studied NREGS impact on beneficiaries' occupational choices. The author shows that participation in the programme allowed liquidity constrained individuals to accumulate savings and acquire the minimum level of capital necessary to start small businesses.

The ability of public works to protect and promote the accumulation of productive assets rely on a set of specific programme features. First, public works must be available quickly in response to negative shocks to avoid households recurring to harmful coping behaviours to meet their immediate consumption needs. Second, the wage rate must be high enough to allow households to meet their consumption needs and leave margin for investments. Finally, cash transfers must be made on time and regularly to guarantee predictable streams of income that can incentivize investment in high-return activities. More details on how to select wage rates and payments delivery methods to enhance the productivity potential of PWPs will be provided in section 2.1.2.

2.2 Explanation 2: assets created or improved

Through the creation of public goods, PWPs have the potential of alleviating local productivity constraints. Turning what would otherwise be perceived as a 'consumption' expenditure in welfare into a 'productive' investment benefitting the whole community, the creation of assets is a key rationale for the selection of PWPs over other forms of social protection (McCord and Slater 2009).

PWPs can lead to the creation of three types of public goods, each addressing specific productivity constraints: a) transport infrastructures; b) environmental infrastructures and services; c) social infrastructures and services.

• Investments in roads, bridges, and other transport infrastructures can stimulate growth through both micro- and macroeconomic mechanisms. At the individual level, higher personal mobility can lead to better employment opportunities and improve access to education and health

services (Bryceson and Howe 1993; Levy 1996). At the community level, by facilitating access to local inputs and outputs markets, transport infrastructures can significantly reduce the costs of production and improve access to modern technologies in many sectors, thus contributing to lower prices and higher quality of products in the community (Binswanger, Khandker, and Rosenzweig 1993; Kessides 1993; Levy 1996; BIDS 2004; Lokshin and Yemtsov 2005). Finally, at the more macro level, improved infrastructures can promote regional and international trade, thus facilitating the commercialization of agricultural businesses and the specialization of industries, and allowing for production and employment to expand by exploiting economies of scale as well as the efficient reallocation of factors of production in the economy (Gannion and Liu 1997).

- Environmental infrastructures and services can play an important role in mitigating the risks associated with climate change (Subbarao et al 2012). Such investments include projects to protect and restore land productivity and soil fertility (afforestation, construction of terraces and flood control structures, renovation of traditional water bodies, etc.), as well as soil and water conservation operations (agroforestry, debris removal, gully control, compost generation, etc.). Investments in infrastructure that directly enhance agricultural productivity can have a high economic return through increased output. Additionally, the generation of environmentally sound assets can be key for risks prevention and for increasing community resilience in the longrun.
- Social infrastructure and services can generate employment both directly through the creation of jobs and indirectly through the accumulation of human capital. These assets typically involve the educational, health and recreational sectors. Examples of social infrastructure projects are the construction and maintenance of schools, health facilities, community centres, as well as low-income housing. Social services include running child care centres, nursing homes and school kitchens among others (Subbarao et al 2012). This type of public goods have a direct impact on employment through the creation of permanent jobs in the community. In addition, by improving access to education and health services, social infrastructures are likely to increase individuals' employment opportunities, productivity and, as a consequence, income levels in the community at large (Duflo 2000; Bloom, Canning and Sevilla 2001). Finally, the availability of social services like child care centres might reduce the opportunity cost of labour especially for women, thus inducing more people to engage in employment (Del Boca 2002).

Measuring the returns to physical and social infrastructures and in particular their contribution to production and trade, and assessing precisely who benefits, and how much, from community-level assets is very complex. Therefore, **despite the large role attributed to assets creation through PWPs, evidence on the effectiveness of such policies to enhance community-wide economic activities and promote livelihoods is limited** (McCord 2008).

Several studies have concluded that transport infrastructures, irrespectively of whether created through public works or not, have positive effects on individuals' productivity and employment, as well as on markets development (Mu and Van de Walle 2007; Khandker et al. 2009). One of these is an impact assessment of the Emergency Drought Recovery Project in Zambia. Researchers found that the construction of transport infrastructures improved access of rural communities to markets and facilitated access to and delivery of essential public services (World Bank 2006). 36.6 percent of the interviewed programme beneficiaries indicated that, by connecting previously disconnected road networks, the project reduced travel time and improved their access to markets. Further, 15.2 and 12.6 percent said that children's school attendance and access to health services, respectively, improved thanks to the project.

Evidence on the impact of environmental infrastructures and services on productivity is also scarce. In Ethiopia, the 2008 PSNP Public Works Impact Assessment carried out an economic analysis on completed public works projects in 10 watersheds nationwide. Results from household interviews show that communities greatly benefitted from the assets built by the programme (Wiseman et al. 2010). By favouring the regeneration of grass and trees, soil and water conservation projects increased the supply of livestock feed, bee forage and medical plants. Water supply projects generated health gains from greater access to clean water and increased labour productivity. Finally, through increased agricultural productivity, small scale irrigation systems increased both income and livestock ownership.

A similar result is found in the Indian region of Maharashtra. The Mahatma Gandhi National Rural Employment Guarantee Act (MGNREGA) improved irrigation systems and increased the areas under irrigation for a second crop. This had a positive impact on agricultural productivity and stimulated demand for agricultural labourers, thus leading to indirect creation of employment in the region (Subbarao 2003). However, a more recent study of the same programme conducted in two villages in Tamil Nadu found that overall MGNREGA failed to create durable rural assets and to enhance the local economy in the region (Global Insights 2013).

Although well-designed PWPs have the potential of promoting productivity and growth through the accumulation of community assets, a number of studies show that when specific aspects of PWPs are neglected, the returns to public goods are likely to be negligible (Von Braun et al. 1999; Mashiri and Mahapa 2002; Johnson 2004).

- The provision of community assets should be in line with local development priorities and address local productivity constraints. The main risk is to otherwise turn the opportunity of generating long-lasting, productivity-enhancing assets into a mere "make-work" activity, carried out primarily to satisfy the work conditionality (Devereux 2002)⁵.
- Involving communities in the selection of projects is likely to result in the creation of infrastructures and services that are mostly needed by the local population. However, to ensure the integration of projects across different communities and sectors, and to avoid wasting resources in works that might be redundant, the selection of assets should be part of economic development strategies set at a higher level (Subbarao et al 2012).
- The technical quality and the sustainability of the created assets are also determinants of their productive potential. A common criticism to PWPs is that, due to their poor quality, assets created through these policies generate negligible returns and rapidly become unusable (Devereux 2002). One of the main reasons for the general lack of quality lies in the fact that governments of low-income countries often lack the capacity to ensure the convergence of technical, managerial and non-labour inputs at the work site⁶.

⁶ For example, Johnson (2004) found that a shortage of qualified and experienced engineers in Afghanistan Labour Intensive Works Programme (LIWP) led to the creation of poor quality roads and protection walls. Similarly, in Zimbabwe insufficient resources for non-wage inputs led to minimal asset creation and negligible long-term productivity gains from the nation's extensive Food for Work programme (von Braun et al. 1999). Moreover, the 2006 Public Works Review (Ethiopia Ministry of Agriculture and Rural Development 2006) found that the sustainability of water and irrigation projects was highly compromised by the lack of resources for ongoing operations and maintenance.

⁵ The Tshitwe road upgrading project in South Africa provides a good example of PWP that did not focus on alleviating local constraints. The project recruited men and women from the local communities to upgrade the conditions of the road. The overall aim of the project was to "benefit the agricultural economy in the area through higher farm-gate prices, lower costs of delivering productive inputs (fertilizer, seeds, etc) cheaper, more reliable availability of trucking services and better accessibility to agricultural extension services" (Mashiri and Mahapa 2002). Although the programme was successful in improving roads, the supply of road passenger services (buses, vans, combi-taxes, etc.) did not increase. As this was the primary constraint to mobility, upgrading roads did not affect the time and costs of accessing markets or social services.

2.3 Explanation 3: skills developed or enhanced

Only few PWPs include training components⁷ aimed at developing workers' skills beyond the ones required for the programme, with the expectation of increasing their employability (McCord and Slater 2009). In theory, through increased productivity, graduates from PWPs face better employment opportunities and are expected to have a better and more sustainable engagement with the labour market, either through self-employment or wage employment. At both local and macroeconomic level, the accumulation of human capital and a general improvement of labour market performance can play a vital role in the creation of economy-wide long-term growth.

PWPs offering training are most appropriately implemented when the key constraint to employment is identified to be lack of skills rather than lack of employment opportunities per se (McCord and Slater 2009). In this case, it is critical for the programme to provide participants with skills that are relevant for the labour market in which they operate. If there is unmet demand for generated skills, PWPs offering training have the potential to alleviate supply-side constraints to employment, thus improving labour market outcomes. By contrast, if there is no skills shortage, training will not result in significant increases in aggregate employment (McCord and Slater 2009).

PWPs workers may be required to participate in training and education activities to acquire skills that are not directly linked with the programme. Bangladesh's Rural Maintenance Programme (RMP) for example requires women participating in the programme to attend income generation and skills training programme, as well as to participate in a compulsory savings plan retaining part of their earnings. The aim of the programme is to promote enterprise development by providing beneficiaries with the necessary skills and capital to become self-employed and start profitable businesses (Hashemi and Rosenberg 2006). A similar programme (Jefes y Jefas de Hogar) was previously implemented in Argentina, where participants were given the option to work or participate in training activities for four to six hours a day in exchange for payment (Del Ninno et al 2009).

Evidence on the effectiveness of PWPs in developing skills that can enhance participants' employability is scarce. Data from the RMP programme in Bangladesh show that, although not all women succeed in becoming entrepreneurs, 79% of women who graduated from the programme continue to be self-employed in microenterprises three years after the end of the programme cycle (Hashemi and Rosenberg 2006). This finding should however be interpreted with caution, as it is likely to be the result of several aspects of the programme rather than training alone. Evidence from the well-established Expanded Public Works Programme (EPWP) in South Africa offers a different picture. The EPWP programme was explicitly designed to develop participants' skills and expose them to labour market with the aim of improving their employability. Despite this, a study by McCord (2005) reports that workers' participation in training is unlikely to translate into the creation of employment, as the skills generated through the programme are not demanded by the market. For instance, EPWP tends to equip workers with low-level skills despite the lack of demand for low and unskilled labour in the South African market. This evidence confirms that designing training programmes aimed at creating jobs requires a careful evaluation of the suitability of the intervention to alleviate supply-side constraints to employment.

2.4 Explanation 4: complementary interventions

In a few cases, PWPs have put in place a series of complementary interventions with the objective of fostering participants' graduation out of the programme and promoting the

⁷ The training component here does not refer to on-the-job training provided to participants to acquire the skills that are necessary for the specific PWP. Instead, it refers to the training provided to workers as an additional benefit of the programme, to develop a wider set of productive skills.

sustainability of public works' impact on poverty. Such interventions include access to agricultural credit or inputs, extension programmes or savings schemes (McCord 2012).

The most widely known example of complementary interventions are the Other Food Security Programmes (OFSP) in Ethiopia, which include the provision of subsidized credit, inputs and assets. Hoddinott et al. (2012) find that participants in both PSNP and OFSP are more likely to be food secure, borrow for productive purposes, use improved agricultural technologies and operate non-farm own business activities with respect to non-beneficiaries. By contrast, the authors observe that PSNP programme alone has no effect on agricultural input use or productivity, and has only a small impact on agricultural investment. Although limited, this evidence suggests that complementing PWPs with interventions promoting investments in other productive inputs might be critical to fully realize the growth potential of such programmes.

2.5 Designing PWPs to enhance productivity and growth

Public works are very complex programmes. For them to be successful, it is crucial that the programme design guarantees that the assumptions and conditions at the basis of the three channels of impact hold true. The next sections analyse aspects of programme design that might be relevant in this respect and review alternative options in light of the theoretical links identified in the previous sections.

2.5.1 Targeting

One of the claimed advantages of PWPs is that, by attaching a work requirement to the cash transfer and setting the wages below the market level, they allow for poor to self-select into the programme. This significantly reduces the information and administrative efforts that would be required to identify the most vulnerable in the community. However self-targeting is not always feasible nor desirable (Barrett and Clay 2003; Beazley and Vaidya 2015; Devereux and Solomon 2006; Lembani and Mandala 2006). In fact, most of the times the demand for participation is higher than the number of available jobs, making rationing necessary. For this reason, most programmes tend to combine self-targeting with some sort of explicit targeting.

In practice, self-targeting is usually complemented with geographic and/or community targeting. Geographic targeting consists in the identification and selection of areas with higher poverty concentration within the country for the implementation of the public works programme. Community targeting consists in community groups being made responsible for the identification of the most vulnerable, who become eligible for participating into the programme. There is evidence showing that multiple targeting methods improve targeting performance by making the identification of the poor more accurate and comprehensive (Coady, Grosh, and Hoddinott, 2004).

2.5.2 Wage rate

Setting the wage rate to be paid to public works beneficiaries has implications on a number of aspects: targeting, impact on productive investments, local multiplier effects, inflation, labour markets distortions, increase in local wages, and forgone income. Each of these aspects should be carefully weighted in order to set a rate that is conform to the main programme objectives.

• Two wage rates need to be taken into account for targeting implications: the minimum wage, which is the statutorily fixed wage rate, and the market wage, which is the unskilled market wage for labourers (Del Ninno et al 2009). The interlinks between these two rates and the programme wage rate are fundamental, as they determine the feasibility

of self-targeting mechanisms. Being mostly publicly funded, public works cannot set wages that are below the minimum wage. When the market wage is higher than the minimum wage, PWPs can pay wages that are either at the level of the minimum wage or slightly higher. In this setting, self-selection is most likely to attract the poor into the programme. However, there might be situations in which the minimum wage is higher than the actual wage paid to unskilled workers in the market, for example due to a weak enforcement of the minimum wage. In this case the effectiveness of self-selection to identify the poor might be compromised: the programme wage, higher than the market wage, would most likely attract the non-poor to participate in the programme.

- There is a constant trade-off between setting wages low to ensure the feasibility of self-targeting, and guaranteeing participants a level of income that is high enough to promote investments in productive activities. Individual propensity to invest is closely related to the amount of money earned relative to households' consumption needs. Typically, benefits from PWPs are used primarily for consumption. Transfers are only likely to be used for human capital investments and for savings or productive investments once households have met their basic consumption needs. Therefore, productivity gains can be expected only if the wage rate is sufficiently high to enable households to meet consumption needs and leave margin for investments (McCord 2012).
- The value of the transfers made through public works can also determine the magnitude of the programme multiplier effects. Multiplier effects refer to the "boost to workers' purchasing power created by the injection of cash or food, which is fungible into the local economy, which increases the general level of economic activity by being spent on goods and services, generating income and profits for others" (Devereux 2002). The higher the income transfer, the larger the impacts on the local economy are likely to be. However, it might take some time for markets and production to respond to the increased demand generated by cash transfers. This is more likely to happen when very high public works wages cause a significant shift in the demand for goods and services. In this case, additional purchasing power might fuel inflation at least in the short term (Farrington and Slater 2006).
- PWPs may distort local labour markets, with positive and/or negative results. On the one hand, high wage rates could divert labour away from other activities, in particular casual agriculture, thus reducing crop production and generating dependency from PWPs (Devereux 2002). On the other hand, the programme might generate upward pressure on labour market wages through two mechanisms. First, by increasing the demand for casual workers, public works might raise the competition for this type of labour. Second, by providing minimum statutory wages to workers, it might increase the pressure on agriculture sector to pay the minimum wages (Azam 2011). Several studies of the NREGA programme in India found that public works had a positive impact on the average wages of casual agricultural workers (Azam 2011; Berg et al 2015). Although higher wages are likely to have a positive impact on the poor through increased income, their overall effects on the economy are ambiguous, as higher wages also increase the costs of production.
- Finally, benefits from cash transferred through PWPs should be weighed against the income participants have to forgo to meet the work requirement. The size of the forgone income is difficult to measure and depends on the specifics of the local labour market and the characteristics of beneficiaries (Beazley and Vaidya 2015). A recent paper by Murgai et al. (2013) tries to estimate forgone income for the participants of India's Employment Guarantee Scheme in Bihar. The authors find that forgone income is significant for some participants and limits the net impact of public works transfers. However, some aspects of PWPs design might help reducing forgone income.

For instance, by allowing beneficiaries to decide when to demand work, Employment Guarantee Schemes (EGSs) are likely to minimize forgone earnings (Beazley and Vaidya 2015).

2.5.3 Payment process

The timely and regular delivery of transfers is a key determinant of the programme impact on consumption smoothing and households' investments. It is widely acknowledged that any efficient cash transfer scheme needs to transfer cash with regularity and predictability so that beneficiaries can internalise the cash transfer in household budgets and plan their expenditures (DFID, 2011). However, PWPs in developing countries are often affected by low levels of administrative capacity and poor coordination. As a consequence, delays in the delivery of payments are a common issue (Johnson 2004; Del Ninno et al 2009). Achieving timely transfers is possible if investments in capacity building, and mechanisms to continuously monitor and correct the payment process, are in place. In this regard, the computerization of payrolls and attendance sheets might make it easier to collect data on payments, which can then be shared with decision-makers in a timely fashion. Similarly, the use of modern technologies to transfer money might reduce the time and costs of payments delivery, thus facilitating the regularity of transfers.

Past experience shows that there are a range of delivery mechanisms that should be considered from both the implementing agency and beneficiaries' perspectives. These include: direct cash payment; delivery through an agent (e.g. post office, money transfer agent); pre-paid or smart cards; mobile money accounts; bank accounts; and (electronic) vouchers that can be exchanged for cash. Each of these mechanisms will have advantages and disadvantages that vary between contexts.⁸

Box 1: Factors to consider when deciding on appropriate cash delivery mechanism

- What options are available? Do beneficiaries have reliable access to money transfer agents, mobile money, or bank accounts? What is the capacity of local businesses perform transport and disbursement functions?
- How far will recipients have to travel to reach the disbursement point, and how vulnerable are recipients to attack following receipt of cash depending on the delivery mechanism?¹
- How much cash is being transferred?
- How frequently are payments required?
- What is the existing capacity of the implementing agency to establish disbursement arrangements, and how long will it take to build any additional capacity needed?
- How might involvement of local community leaders facilitate security guarantees?¹

Adapted from ICRC (2007) and UNHCR (2016)

Complementing regular transfers with lump-sum payments might enhance productivity and reduce financial constraints to investments. As previously mentioned, frequent transfers are fundamental to promote consumption smoothing and allow households to meet their basic needs without the necessity to sell assets or take on debt. However, paying workers on completion could reduce their incentives to decrease their efforts on the job. Additionally, the lump sum component of the scheme could act as a form of commitment saving and enable liquidity and credit constrained households to

⁸ For an excellent review of the advantages and disadvantages of different delivery mechanisms, see ICRC (2007).

purchase productive assets. Evidence on the impact of complementing regular transfers with lump-sums comes mainly from the cash transfers literature, but findings are limited and by no means conclusive. The only study designed to test the effects of lump-sum payments is an Evaluation of a cash transfer programme implemented by GiveDirectly in Kenya. Results from a Randomized Control Trial (RCT) indicate that lump sum payments indeed can have productive effects at the household level (Haushofer & Shapiro, 2014).

Other relevant features of lump-sum payments might be the timing of the transfers and the local administrative constraints. For lump-sum payments to have any productive impact, the timing of transfer needs to be appropriate. For instance, a lump-sum payment in the planting season might facilitate investments in lumpy productive inputs. By contrast, a similar transfer in the lean season might be used for temptation goods if individuals have high temptation to spend or high discount rates (Beegle, Galasso and Goldberg 2015). Finally, transaction costs and external constraints, such as lack of local administrative capacity or liquidity issues in local financial institutions, need to be balanced against the previous considerations.

Another important aspect of the payments process is the remuneration method. Workers can be paid according to a piece-rate or time-rate system. Piece-rate systems pay workers based on their output, namely the number of products they produce, or the tasks they complete. Time-rate systems remunerate workers according to the amount of time spent working (usually the number of hours).

- By attracting more productive individuals and incentivizing workers to produce more, piece-rate payment systems can lead to significant increases in the levels of output (Lazear 1996; Heywood et al. 2013). However, an effective functioning of these systems requires strong administrative and managerial capacity.
- Relative to piece-rate, time-based systems are easier to implement although likely to cause major productivity losses and lead to a substantial increase in the cost of public works, mainly affecting the ability of programmes to create productive assets.
- If programmes aim at both supporting consumption and fostering economic growth, and the management capacity is relatively good, setting simple daily tasks and linking payments to their completion is a good compromise between both methods.

2.5.4 Selection of projects

The selection of projects is often affected by two contrasting public works outcomes: the creation of jobs and the generation of productive assets. To ensure that the balance between these two outcomes reflect the overall PWP objective, two aspects must be considered when selecting the projects: labour intensity and the suitability of created assets to address local productivity constraints.

- Labour intensity, namely the percentage of the labour cost on the overall cost of the project, is a key implementation feature of PWPs. Usually, PWPs tend to select high labour-intensity projects to maximize the number of people who can be employed and benefit from the wages provided by the programme. For example, the construction of roads is usually preferred to less labour intensive works, such as the construction of schools or housing. However, by ignoring considerations of cost effectiveness, quality of work and productive potential of assets, the prioritization of jobs creation usually serves a welfarist, rather than developmental function (Devereux 2002).
- A common concern is that an excessive focus on labour intensity might compromise the overall quality of the works. Design specifications usually include a cap on the share of programme costs that can be allocated to non-

labour costs. To save on non-labour costs, implementers might utilise cheaper but inferior inputs, or avoid completing capital-intensive components of the infrastructures, to the detriment of the overall quality and the functioning of the assets (Ravallion 1991). Examples of compromised assets quality due to caps on the capital cost component of PWPs include the construction of roads without bridges as a result of the higher capital cost of bridges, and the use of sub-standard inputs for road surfacing in order to reduce cost (McCord 2012).

The prioritization of jobs creation might also result in the construction of assets unable to address local productivity constraints. However, for PWPs to result in significant productivity gains and generate growth, assessing projects' consistency with the local development priorities is extremely important (McCord 2012). Where available, projects should be in line with local, regional and national development plans. A good example in this sense is PSNP, where projects are integrated into *woreda* development plans and planned on an intersectoral basis (Subbarao et al 2012). If development plans are not available, implementing agencies could conduct a macro analysis of the economic conditions in the region to identify the key productivity constraints. However, as a similar system would require strong administrative and analytical skills at all levels, a valid alternative is to directly involve communities in the selection of projects. If properly designed, community participation can ensure that the assets created through PWPs respond to the productive needs of the community. Additionally, by making communities responsible for the project, this strategy might promote community ownership of the asset and lead to a more accurate supervision of the works during the construction phase, as well as to better maintenance once the asset has been completed.

2.5.5 Training component

The two key design features of the training component of PWPs are the selection of the skills to be developed and the decision of whether to outsource training. As previously mentioned, providing public works participants with training can only promote their employability if the skills developed through the programmes are in line with what is demanded by the market (McCord and Slater 2009). Therefore, skills selection requires an analysis of the labour markets in which public works are to be implemented. However, such analysis might be costly and time consuming, as well as require a level of expertise that goes beyond governments' or implementing agencies' capacity.

The involvement of well-established training institutions and local entrepreneurs might be key both for the identification of the skills most needed in the market, and for the delivery of high quality training. Outsourcing this component to specialized training institutions is likely to significantly improve the quality of the training provided. Additionally, involving local entrepreneurs through consultations or internship programmes can facilitate the identification of skills shortages and improve the employability of individuals by connecting employers and employees. The main potential problems with outsourcing training are its direct costs, which tend to be substantial in most cases, and the fact that training becomes in fact a parallel programme, not directly related to the public works. This can lead to further misalignments with the original project objectives, and so rather than outsourcing training, it might be preferable to make the training component a separate programme altogether. This is likely to improve the way in which the training is implemented and managed, thus increasing its potential to generate productive skills in the local economy.

3 The link between public works and cash transfer programmes and violent conflict

It is a common claim that unemployment and poverty are causes of violent conflict (Goodhand 2001, Collier et al 2003, Justino 2012). In theory, PWPs and cash transfer programmes therefore have the potential to mitigate the risk of violent conflict through job creation and growth. However, in practice the relationship between these social protection interventions and violent conflict is complex, simultaneously working through multiple causal mechanisms that are not necessarily cumulative, linear or even positive.

This chapter examines four ways in which these social policy interventions are alleged to mitigate the risk of violent conflict. (i) Increasing employment and thereby increasing the opportunity cost of violence, (ii) by incentivising sharing information with the state, (iii) by fostering improved perceptions of state legitimacy, and (iv) influencing non-economic motivations to participate in conflict. The risk of 'unintended side effects' is also discussed. Each section provides a brief review of the evidence and highlights potential implications for how such programmes could be designed in fragile and conflict-affected contexts.

3.1 Explanation 1: influencing the opportunity cost of violence

The idea that individuals' decisions to participate in violent conflict is determined by a rational utility-maximising calculation of the options available has gathered a significant following over the past decades (Cramer 2002). A common example of this economic approach to understanding violent conflict is found in the literature examining the relationship between unemployment and violence. According to this logic, gainful employment makes individuals less likely to participate in violence because doing so would mean giving up the income associated with the sale of their labour. This intuition lies at the heart of the saying: 'idle hands do the devil's work'.

This 'opportunity cost' logic has exerted a significant influence over the design of public policy relating to criminal gangs in high-income countries and more recently fragile and conflict-affected contexts. Job creation is therefore seen as a priority in post-conflict economic development strategies, in the design of reintegration programmes for excombatants, and in the rationale for public works programmes.

3.1.1 Evidence

There is mixed evidence that social protection interventions, even where they are successful in creating jobs, have had a significant impact on violent conflict. It is important to note that the body of evidence is overall weak, with only a few studies adopting rigorous qualitative or quantitative research methods to examine issues of causality.

Study	Programme	Method	Finding
lyengar et al. (2011)	Commander's Emergency Response Programme (CERP), Iraq (2004-08) [community-driven development]	Diff-in-diff, district level	10% increase in labour-related spending generates a 15-20% decline in labour- intensive forms of insurgent violence
Dasgupta et al. (2014)	National Rural Employment Guarantee Scheme (NREGS), India [public works programme]	Diff-in-diff, district level	After 2 years of NREGS adoption, violent incidents and deaths per district fell by ~80%, with violence-reducing effect larger in districts experiencing negative rainfall shocks. Authors suggest this indicates opportunity cost mechanism links PWPs and violence.
Crost et al. (2014a)	Pantawid Pamilyand Pilipino (PPP) programme, Philippines (2008-09) [conditional cash transfer]	RCT	Treated villages experienced a substantial reduction in the number of conflict-related incidents compared to control villages. Authors suggest the cash transfer increased the opportunity cost of joining an insurgency <i>either</i> through stimulus to local economy that increased income from peaceful employment <i>or</i> through the fact that satisfying eligibility conditions is difficult for those actively participating in the insurgency.
Blattman and Annan (2015)	Action on Armed Violence (AoAV) programme, Liberia [package of agricultural training, cash transfer and counselling]	RCT	Men who accepted the programme had increased their farm employment and profits 14 months after programme ended, and were approximately a quarter less likely to report interest in mercenary recruitment in nearby war in Côte d'Ivoire. They suggest this was due to increased opportunity cost arising from increases in income from peacetime farming and <i>de</i> <i>facto</i> conditionality implied by expectation of a future CT. In practice, leaving the village would mean forfeiting access to the CT.
Berman et al. (2011b)	Cross-country study using district/province level data in Afghanistan, Iraq and the Philippines [no programme]	Observ.	Researchers found that, "contrary to the opportunity-cost theory there is no significant relationship between unemployment and the rate of insurgent attacks that kill civilians", and in general a

Table 1: Evidence on explanation 1

			negative correlation between unemployment and violence in each of the three conflicts.
Beath et al. (2012)	National Solidarity Programme (NSP), Afghanistan [public works programme]	RCT	Evaluation found a positive reduction in the number of security incidents recorded by the International Seurity Assistance Force (ISAF) a year or more after project implementation, but no effect on the number of incidents reported by villagers in surveys <i>or</i> in areas facing high levels of violence. Given that the NSP had no statistically significant effect on household income, consumption or employment, they conclude that their results "are not consistent with the opportunity cost of participating in an insurgency".
Mercy Corps (2015)	INVEST, Afghanistan [job-creation through vocational training]	Propensity score matching	Evaluators found that being employed was not significantly associated with either a willingness to engage in or support for violence against the state. ⁹ They urge policymakers to consider decoupling employment and stabilization interventions that may aim for two sets of objectives that are unlikely to be achieved through one programme.

In conclusion, there is no clear body of evidence that job creation – including through public works programmes or cash transfers – significantly influence individuals' decisions to participate in violent conflict by altering the opportunity cost. This finding is in itself important given the prevalence of this logic in the design of counterinsurgency and development interventions.

3.1.2 Explaining the mixed evidence

Despite the mixed evidence, policymakers can learn from the above literature in two ways. First, a theory-based approach can interrogate the logic underpinning the opportunity cost logic in order to understand why particular interventions may 'fail' to influence levels of violence. It does so by identifying the assumptions that must hold in order for the broader opportunity cost mechanism to operate. Second, findings of a positive impact on violent conflict among a sub-sample of those treated by an intervention may offer opportunities for understanding what is driving impact among some participants or in different contexts. This section deals with the first approach.

The opportunity cost logic implicit in many job-creation interventions depends on a number of assumptions:

⁹ However, the researchers found a disconnect between the findings of the quantitative survey and the qualitative focus groups. Unemployment was frequently cited as a root cause of political violence and criminality in focus group discussions. They note a possible explanation of this disconnect could be due to the existence of "a very real link between one's perception of their economic situation and their attitudes towards political violence" (MercyCorps 2015, p.21)

• It assumes that being a combatant in an insurgency is a full-time occupation, so that legitimate employment and active participation in an insurgent movement cannot be pursued at the same time.

If these two roles can be pursued simultaneously, then recruitment into an insurgent organisation would not necessarily entail any reduction in earnings. It is possible that this assumption holds more strongly in contexts where armed groups are more formalised into trained fighting units or move from place to place, and does not hold as strongly in contexts where armed groups are embedded in local communities for extended periods of time. Analysis of armed groups' organisational structures and movement patterns may therefore help identify contexts where job-creation programmes are more likely to result in violence reduction.

 It assumes that "insurgency is a low-skill occupation so that creating jobs for the marginal unemployed reduces the pool of potential recruits" (Berman et al 2011b)

If insurgency is in fact a skilled occupation then the low-skilled jobs often created through PWPs (or indirect employment opportunities generated through any growth triggered cash transfers) may not reduce the pool of potential recruits. **Tailoring the types of PWPs to ensure they absorb the same labour pool as that sought by armed groups** – which may require skilled as well as unskilled labour - could make programmes more likely to result in violence reduction.

• It assumes that insurgent organizations' ability to 'produce' violence is constrained by the supply of labour.

If armed groups are able to substitute 'labour' for 'capital' as inputs into the production of violence, then an increase in the recruitment cost may simply trigger a change in insurgent tactics rather than a significant reduction in violent conflict. This possibility is discussed in more depth in Section 3.6.

• It assumes that civilian decisions to commit violence or participate in insurgent organisations are driven by economic motives.

If individuals decide to engage in violent conflict on the basis of non-economic factors, then at best the increased opportunity cost triggered by increased employment opportunities may not be sufficient to override other factors and ultimately reduce violent. At worst, employment-generating programmes may exacerbate other drivers of individual participation in violent conflict. This possibility is discussed in more depth in Sections 3.4 and 3.5.

3.1.3 Design implications

The limited body of rigorous evidence on the opportunity cost logic makes it impossible to identify clear implications for how PWPs and cash transfer programmes could be designed to minimise the risk of violent conflict. The design implications discussed below should therefore be treated as suggested factors to consider in combination with conflict analysis of specific contexts, rather than concrete recommendations with universal applicability.

Box 2: Design implications of evidence on opportunity cost logic

1. Consider making cash transfers conditional rather than unconditional. Unconditional cash transfers do not directly increase the opportunity cost of participation in violent conflict, since beneficiaries do not need to forgo income when participating in an armed group. However, the explicit or implicit conditions on the receipt of cash may account for a significant proportion of the violence-reducing impact of the PPP and AoAV programmes respectively.¹

2. Tailor programme design on the basis of analysis of armed groups' organisational structures, behaviours and the drivers of violent conflict.

The opportunity-cost mechanism is likely to be more effective in reducing violent conflict where there is a sharp trade-off between participation in the peaceful labour market and violent conflict.¹ Where there is no such sharp trade-off, the risk of violent conflict could be more effectively reduced by placing greater emphasis on elements of programme design that maximise provision of public goods, improve public opinion of state legitimacy, or address non-economic drivers of conflict. In practice, this may mean prioritising capital-intensive projects that create assets that are of high value to local communities over labour-intensive but low value projects.

3. Consider the importance of scale in achieving impact, and potential dependence of such large-scale programmes on high state capacity.

The size of the programme may be an important factor in explaining the success of certain programmes.¹ It is unclear to what extent the significant violence-reducing effect of NREGS is due to the *inclusion* of a large number of households or the high *value* of the labour to which beneficiaries were entitled. Future research should try to shed light on this trade-off between breadth and intensity of coverage. Similar results to NREGS may be difficult to achieve in contexts where state capacity to implement large programmes is much weaker than in India.

Even if the evidence for the opportunity cost mechanism is limited, it does not necessarily follow that public works and cash transfer programmes cannot mitigate the risk of violent conflict in other ways. One of these has already been hinted at above: that the (public) asset accumulation function of public works programmes may have greater potential to reduce violent conflict than the cash transfer. The following sections review the emerging evidence for three alternative mechanisms and suggest design implications for each of these.

3.2 Explanation 2: information-sharing and violence reduction

Some recent studies of social protection in conflict-affected environments have focused on how service delivery may influence conflict dynamics by altering the flow of information used by both side in an armed conflict. Information is a critical component in improving the efficiency and effectiveness of a wide range of state functions that may influence violent conflict – including counterinsurgency, civilian policing and judicial proceedings. Being able to identify *who* a possible adversary is, *where* they are, *what* they want, *what* they are planning, and to *whom* they are networked are all important elements in developing a targeted counterinsurgency strategy.

3.2.1 Evidence

In theory, social protection or provision of public goods can influence information flows in at least two opposing ways. First, access to programme benefits is often implicitly conditional on the state's ability to deliver the programme in specific areas. This therefore incentivises civilians to inform against armed groups that threaten delivery of the programme, which in turn can improve the effectiveness of military operations against the armed group. Although CERP is not a social protection programme, the same underlying logic could apply to the asset accumulation aspect of PWPs: **improved targeting through community engagement increases the value of assets to local communities**, which in turn increases communities' incentives to share information that improves effectiveness of military or police operations that reduce violent conflict.

Second, however, increases in economic opportunity may make it more costly for the government to 'buy' information from informants. The second study below suggests the possible existence of this mechanism, but it is important to stress that this review does not explicitly test for this. However, if true, public works programmes have the potential to increase violent conflict by increasing the cost of information on which counterinsurgency operations rely.

Study	Programme	Method	Finding
Berman et al. (2011a)	Commander's Emergency Response Programme (CERP), Iraq (2005-08) [community-driven development]	Diff-in-diff, district level	Controlling for other factors, the effectiveness of CERP spending in reducing violent incidents became "substantially stronger from January 2007 onwards when operational changes meant that Coalition forces nation-wide had a better understanding of their communities' needs". They suggest the operational changes that led to this improved targeting of CERP projects included dispersal of forces, more dismounted patrols, and greater emphasis on engagement with local political leaders.
Berman et al. (2011b)	Cross-country study using district/province level data in Afghanistan, Iraq and the Philippines [no programme]	Observ.	Although they do not test for this hypothesis, they suggest one explanation for the negative association between unemployment and violence is that "as local economic conditions deteriorate, government forces and their allies are able to buy more intelligence on insurgents (i.e. the price of information falls)". ¹⁰

Table 2: Evidence on explanation 2

3.2.2 Design implications

The body of evidence is too limited to generate universal recommendations, however does highlight the importance of considering the potential interaction between social protection programmes and broader counterinsurgency efforts.

¹⁰ Their second explanation is that operations that enhance security actually damage the economy and thereby reduce unemployment. For example, reduced freedom of movement resulting from checkpoints and walls may undermine economic growth but could improve security.

Box 3: Design implications of evidence on information-sharing

Consider how to ensure asset accumulation meets local needs.

The one study reviewed above presents suggestive evidence that public works programmes that lead to asset creation tailored to local needs may be more effective at reducing the risk of violent conflict. However, some caution should be issued in generalising from the CERP findings.¹ Ensuring asset accumulation meets local needs may also improve perceptions of *performance legitimacy* (see Section 3.3).

3.3 Explanation 3: perceptions of state legitimacy and violence reduction

A third mechanism by which public works and cash transfer programmes may mitigate the risk of violent conflict is by influencing perceptions of state legitimacy. As with the mechanisms discussed above, there is limited evidence that explicitly examines this relationship. Despite this, the link between service provision, state legitimacy, and conflict prevention is a common theme in much donor and G7+ policy discussion. For example, DFID's peacebuilding and statebuilding framework notes that "states need to be seen to meet public expectations in order to maintain legitimacy" and that "building legitimacy is a primary requirement for peace, security and resilience over the long term" (DFID 2010, pp.7-16). Legitimacy is considered to reduce grievances and increase the likelihood of acceptance of public authority through the creation of a 'social contract'.

3.3.1 Evidence

There is a growing consensus that the relationship between service delivery and perceptions of state legitimacy is neither linear nor direct (McLoughlin 2015). Furthermore, the question of whether such perceptions of legitimacy have a causal role in the reduction of violent conflict is under-researched. This section briefly reviews the limited evidence of the impact of PWPs on perceptions of legitimacy, before situating this evidence in the broader literature in the following section.

Table 3: Evidence on explanation 3

Study	Programme	Method	Finding
Beath et al. (2012, 2013)	National Solidarity Programme (NSP), Afghanistan [public works programme]	RCT	Evaluation found evidence that NSP increases state legitimacy at midline and (to a lesser extent) endline, with the midline result "driven by increased visits by government officials and the Afghan National Security Forces to NSP villages" (Beath et al 2013, p.72). ¹¹ Despite this, they find no evidence that NSP affects reports of violent incidents.
			In a separate study the researchers find that the positive effect on state legitimacy and attitudes to government is not present

¹¹ This finding supports Corbridge's account of 'seeing the state' in India, in which he argues that encounters with the state through provision of local services are an important site at which people's expectations and interpretations of the states are formed (Corbridge 2005).

			in areas with pre-existing high levels of initial violence. Once these districts are removed, they find a strong positive impact of NSP on legitimacy, attitudes to government, <i>and</i> reduction in violent incidents. They conclude that "development projects can prevent the spread of violence in relatively secure regions , but they are not effective in reducing violence in regions already experiencing significant security problems" (Beath et al 2012). The effect on violent conflict is not necessarily driven by improved perceptions of state legitimacy.
Blattman and Annan (2015)	Action on Armed Violence (AoAV) programme, Liberia [package of agricultural training, cash transfer and counselling]	RCT	Researchers did not find any significant difference in attitudes towards violence or democracy between treatment and control groups. Although this is not an explicit measure of state legitimacy, the failure of the programme to influence these indicators is suggestive of the complex relationship between personal wellbeing and socio- political attitudes, especially where programmes are not implemented through the state.
Blattman et al (2014)	Youth Opportunity Programme (YOP), post- conflict northern Uganda [grants to groups of young adults who successfully submit business proposals]	RCT	Despite substantial and persistent increases in investment, work and income, the researchers find no impact on social cohesion, anti-social behaviour, violent unrest, or on support for the government. They conclude that "the case for public investments in employment should be made on the economic returns alone" rather than promotion of social cohesion and stability (p.749).

3.3.2 Discussion

The evidence above indicates that the relationship between social protection and perceptions of state legitimacy and the appropriate means to contest power is not clear cut. The broader literature on service provision, state legitimacy and violence supports this assessment. Why might service delivery not translate into improved legitimacy and hence stability?

One important consideration is the distinction between two ways in which people form perceptions of legitimacy. The common assumption amongst policymakers is that legitimacy is derived from perceptions of the performance of the state, rather than the procedures that determine this performance. However, citizens form judgements and attitudes on the basis of *how* services are delivered as well as the material benefits they derive from them. One review of the relevant literature thus concludes that "for any given institution to generate legitimacy, it must ultimately be *justifiable* by reference to core social values, and resonate with beliefs about what is right for society" (McLoughlin 2015, p.342). For example, one study of cash transfers in Nepal notes that the "being seen interacting with the government allowed people to feel a sense of equality, respect and inclusion" (Drucza 2016).

Another possible explanation for why service delivery may not boost legitimacy is the fact that people may not attribute improved performance to 'the state' as a whole. In reality, the state is an aggregated bundle of organisations with different mandates and visibility to individuals. This means that instead of a single 'social contract' between state and society, there is a complex set of relationships that mean that 'performance' of one agency may not directly translate into higher overall perceptions of legitimacy (Zaum 2015). A particular concern is the possibility of misattributing service delivery to NGOs, churches and donors, when in fact they are delivered by the government (Sacks 2009).

Finally, there may be trade-offs involved in tackling some drivers of conflict and bolstering general perceptions of state legitimacy. Although evidence from Liberia, Nepal and Colombia suggests that unequal access to public goods had a negative effect on citizens' perceptions of the state's rightfulness (Dix, Hussmann and Walton 2012), researchers found that distribution of services to previously excluded groups in Iraq actually led to a fall in overall perceptions of the state's overall legitimacy (Brinkerhoff, Wetterberg, and Dunn 2012). This raises the important question of whose perceptions of legitimacy ought to be prioritised when attempting to address the drivers of in influencing patterns of conflict. Furthermore, prioritising the improvement of excluded groups' perceptions of legitimacy may mean excluding the poorest households from the programme (Holmes 2009).

3.3.3 Design implications

There is an urgent need for further research into how and when PWPs and cash transfer programmes can boost perceptions of state legitimacy, and whether such improvements can led to reductions in violent conflict. Despite the limited evidence, Box 4 provides some tentative considerations that may increase the likelihood of achieving impact through this causal pathway.

Box 4: Design implications of evidence on boosting state legitimacy

1. Consider the procedural dimension of legitimacy.

Where possible, it is important to align programme design with the core social values of the beneficiary community in a particular context. These may relate to decisionmaking over beneficiary targeting, project selection, transparency of administrative procedures, or monitoring of projects. For example, in communities where consensus-based decision-making is highly valued, community based targeting of social protection interventions may be more likely to boost state legitimacy than targeting based on an externally-determined poverty line.¹

2. Maximise the 'visibility' of the state in order to boost state legitimacy.

The evidence discussed above suggests that one mechanism through which perceptions of state legitimacy are formed is through the everyday encounters between state officials and beneficiaries. This has potential to build trust and increases the likelihood that programme benefits are attributed to the state rather than non-state implementing partners. Maximising opportunities for personal interaction with state officials may, however, be incompatible with attempts to improve efficiency by delivering payments through mobile banking (Drucza 2016) or increase vulnerability of programme beneficiaries to attack by armed groups (see Section 3.6, also Crost et al 2014a).

3. Consider whose perceptions of legitimacy matter most when designing programmes to reduce the risk of violent conflict.

Legitimacy is a contested concept that will vary between and within contexts. Not every member of a community will share a view of what it is to be legitimate, and this may generate trade-offs that should be consciously addressed in programme design. For example, a community based targeting mechanism may be better at generating legitimacy with most community members, but could lead to the exclusion of marginalised (such as migrant or ethnic minority) groups from the programme that may be perceived by others as unjust.

3.4 Explanation 4: employment and social status

Alongside the economic, informational, and political effects, PWPs have the potential to mitigate the risk of violent conflict through their effect on the social status of beneficiaries. However, **employment has a complex relationship with violence.** As one leading thinker notes,

"It is very often the experience of employment – in demeaning and monotonous asks, with little prospect of promotion or skills development, in conditions that are often openly exploitative and coercive, and for piteiously little remuneration – just as much as, if not more than, unemployment that drive people to participate in insurgencies, militias, armies etc." (Cramer 2010, p.24)

This is an important reminder that the *type* of employment should not be overlooked when designing programmes to reduce the risk of violent conflict. Whilst gainful employment has the opportunity to nurture shared values, social support networks, and personal dignity, certain types of employment may undermine these.

3.4.1 Evidence

There is very limited evidence examining the relationship between PWPs in particular and possible social drivers of conflict. Instead, this section briefly outlines examples from the broader mainly qualitative literature on the link between employment and social status.

Study	Programme	Method	Finding
Breman (2005), cited in Cramer (2010)	India [no programme]	Case study	Changes in the labour market in cities in the state of Gujarat, India led to decline of trade union organisation and the rise of "irregular, poorly paid, unregulated, non-unionised service sector employment". This study argues that, in the resulting social dislocation and dissatisfaction, political entrepreneurs in the Hindutva movement were able to mobilise large numbers of people to engage in anti-Muslim pogroms.
Keen (2005); Fithen and Richards (2005)	Sierra Leone [no programme]	Case study	These two studies of participants in the RUF and other armed groups in Sierra Leone found that the negative impact of unemployment was amplified through its interaction with identity and dynamics of social exclusion. Young men's exclusion from land ownership and decent working and marriage opportunities was perceived as attributable to the control of these opportunities by older men (Keen 2005). In this context, armed groups were attractive because they provided a sense of belonging and supportive social networks to a disillusioned youth (Fithen and Richards 2005).
Gutierréz- Sanin (2008)	Colombia [no programme]	Case study	This research into recruitment into guerrilla (FARC) and paramilitary (AUC) groups in Colombia found that participation in military life offered status and excitement that could not be achieved through agricultural wage labour. Boredom, repression and sexual harassment were all factors that motivated agricultural labourers to swap their farming tools for guns. Indeed, "FARC members generally reported not only having worked before they joined the group (57 percent), but also earning tolerably well Many of them actually earned <i>above</i> the national average".
Wood (2003)	El Salvador [no programme]	Case study	This study of the factors influencing recruitment of <i>campesinos</i> into the FMLN in El Salvador found that participation in the armed group allowed them to assert their "dignity in the face of condescension, repression and indifference". Recruits were not primarily motivated by unemployment, but by their treatment by their employers.

Table 4: Evidence on explanation 4

3.4.2 Design implications

This evidence highlights that the experience of (un)employment often combines with other social dynamics, in particular regarding exclusion and agency, to influence patterns of violent conflict. Programmes should be designed in ways that mitigate the risk of resulting employment exacerbating grievances, however there is very limited evidence on specific measures that can achieve this. Box 5 provides some suggestions to consider.

Box 5: Design implications of evidence on addressing social drivers of violent

1. Consider how the *experience* of work may influence beneficiaries' social status and dignity.

The social drivers of conflict will vary between contexts, and so this element of programme design should be accompanied by a conflict analysis that determines individuals' motivation for participation in armed conflicts. Although evidence of the impact of specific elements of policy design is virtually non-existent in this area, considerations could include: combining public works programmes with training programmes or peer support sessions; informing beneficiaries of their rights and ensuring an effective mechanism for addressing any complaints; ensuring the wage is high enough to avoid perceptions that workers are being 'exploited'; and avoiding giving control of targeting or disbursement to community leaders in situations where young men already hold grievances against traditional authorities.

3.5 Unintended side-effect 1: corruption and grievance

As with any initiative where large amounts of cash are transferred, public works and cash transfer programmes are vulnerable to corruption. In addition to leading to possible efficiency losses, corruption has the potential to increase the risk of violent conflict in a number of ways. It can entrench existing imbalances of power and undermine checks and balances that seek to limit incumbents' exercise of power, including by compromising the independence of institutions intended to support the rule of law. Corruption can have negative effects on public revenue, thereby undermining efforts to increase state capacity. Perhaps most importantly in the context of social protection schemes, corruption can generate grievances that undermine public support for government (Zaum and Cheng 2011).¹²

3.5.1 Evidence

Although the relationship between corruption and conflict is not clear (Andvig 2007), there is some evidence to suggest that perceptions of corruption have eroded the positive impact of reconstruction and social protection programmes. The difficulties of identifying and measuring corruption mean that most evidence on corruption is generated through indepth case studies rather than (quasi-)experimental or observational quantitative analysis.

¹² It is important to note that some researchers have argued that certain types of corruption may reduce violent conflict by allowing incumbents to 'buy out' potential spoilers and thereby increase their stake in a peaceful status quo (Zaum and Cheng 2011, De Waal 2009).

Study	Programme	Method	Finding
Fishstein and Wilder (2012); Gordon (2011); Compelman (2011)	Afghanistan [multiple aid programme, including PWPs]	Case study	Corruption and poor governance is widely reported as a driver of violent conflict in Afghanistan (Fishstein and Wilder 2012). There is case study evidence that the perceived corruption arising from PWPs in Afghanistan have generated ill-will among certain parts of population that fuels support for insurgent groups. In Helmand province, one researcher noted "consistently negative perceptions of international development assistance and particularly that provided by the PRT [Provincial Reconstruction Team]" (Gordon 2011, p.44). In Faryab province, informants agreed that corruption had led to "a widespread sense of disillusionment" that provided the insurgency with fertile ground for recruitment (Compelman 2011, p.3). Forms of corruption included: interpreters acquiring and reselling contracts; the sale of contracts to fake construction companies; collusion amongst contractors to inflate prices; skimming of money when 'flipping' (i.e. re-selling) contracts; allegations of 'security guarantee' payments to militia; and perception that contracts were merely an extension of existing patronage politics that excluded incumbents' opponents. One observer noted that "our young men have no chance of a job and the projects don't help. The money goes to the wrong people and we see no result" (quoted in Gordon 2011, p.45, see also NGO official statements in Hofmann 2005). The lack of community engagement in defining priorities and overseeing disbursement of funds was seen as fuelling accusations of corruption. This may be in part explained by the short-term nature of cash-for-work contracts, which did not allow sufficient time for community mobilisation and selection of beneficiaries, and increased dependence on intermediaries to extend the geographical reach of programmes.

Table 5: Evidence on unintended side-effect 1

3.5.2 Design implications

Designers of public works and cash transfer programmes should seek to minimise the scope for corruption in order to mitigate the risk of violent conflict.

Box 6: Design implications of evidence on mitigating the risk of corruption

1. Adopt transparent targeting and procurement mechanisms that are clearly communicated to relevant stakeholders.

Both eligibility criteria for districts and beneficiaries, and administrative procedures for procurement of services, should be clear and simple.

2. Consider adopting electronic payments to deliver cash.

Electronic payments can in theory reduce the potential for diversion of funds by providing an electronic record of transfer/disbursement and reducing the number of intermediaries cash needs to pass through. Evidence from India suggests that "**small**, **regular and automated payments** are less likely to suffer from corruption than large, occasional and discretionary ones" (Chêne 2010). **Electronic fingerprint verification** has also been increasingly used to reduce scope for identity fraud. However, as already noted, electronic payments may reduce the 'visibility' of the state and therefore limit potential to improve perceptions of state legitimacy.

3. Implement robust management information systems (MIS) and monitoring and evaluation (M&E) practices to strengthen control and accountability.

Programme design should minimise the main risks associated with corruption, including service interruption, unauthorised access to information/data records, unauthorised changes, and creation of false information/transactions. Consider using existing frameworks to assess and build MIS capacity when designing a PWP/CT (Baldeon and Arribas-Baños 2008).

4. Introduce a complaints mechanism that provides beneficiaries with an opportunity to report suspected corruption.

The implementing agency must have the capacity to process and resolve complaints, enforce recommendations, impose sanctions and protect whistle blowers (Chêne 2010). It is important to clearly communicate beneficiaries' rights (both in terms of the value of transfers and operational dimensions of the programme) to encourage reporting of suspected corruption.

3.6 Unintended side-effect 2: insurgent responses to attacks

The implementation of public works and cash transfer programmes does not take place in a vacuum. Armed groups can respond to social protection programmes by adapting their tactics to the new threats and opportunities that a changing operating environment presents.

3.6.1 Evidence

This section examines the evidence for three mechanisms that link PWPs/CTs to changed insurgent tactics:

Study	Programme	Method	Finding		
			dermine successful implementation of a programme		
	that might undermine their support/recruitment base, therefore their short-term aim is to increase violence to prevent successful implementation.				
Crost et al. (2014b)	KALAHI-CIDSS, The Philippines [community- driven development focused on infrastructure]	Regression discontinuity	Districts that received community-driven development funding for infrastructure projects experienced a large increase in conflict casualties compared to barely ineligible districts. They find that the increase is due to insurgent-initiated incidents in the early stages of program preparation, and that this is "consistent with the hypothesis that insurgents try to sabotage the program because its success would weaken their support in the population".		
creation or					
al. (2014b)	The Philippines [community- driven development focused on infrastructure]	discontinuity	explanation for the increase in conflict arising from the KALAHI-CIDSS programme in the Philippines. However, the researchers tentatively dismiss this because they do not find an increase in attacks by criminally motivated opportunists in response to the programme.		
Berman et al. (2011b)	Cross-country study using district/province level data in Afghanistan, Iraq and the Philippines [no programme]	Observ.	The researchers consider the positive association between local economic conditions and violent conflict to be consistent with the 'spoils of war' (or what they call 'predation') hypothesis, but are unable to explicitly test for this.		

Table 6: Evidence on unintended side-effect 2

Mechanism 3: As increased employment opportunities push up the cost of labour as an input into armed groups' production of violence (the corrolorary of the 'opportunity cost' logic), insurgent groups will substitute capital for labour. In practice, this may mean using fewer, more highly trained recruits or using **investing in non-labour intensive means of violence**.

lyengar et	Commander's	Diff-in-	Researchers found a 30% increase in non-labour
al. (2011)	Emergency	diff,	intensive forms of explosive attack (e.g. roadside
	Response	district	bombings/IEDs) compared to 9.5% decrease in
	Programme (CERP),	level	non-explosive attacks and 40% decrease in
	Iraq (2004-08)		labour-intensive explosive attacks (e.g. vehicular
			bombings).
	[community-driven		
	development]		They also found a small but significant increase
			in the rate of deaths per attack, which they
			attribute to the fact that insurgents that decide
			not to leave armed groups due to increased
			employment opportunities tend to have a higher
			comparative advantage in producing violence
			(i.e. tend to be better at 'producing' violence).
			Finally, they find a significant decrease in attacks
			on civilian and increase in attacks on military
			targets, which they suggest may be attributable
			to increase presence of Coalition forces in local
			communities, project oversight by Coalition
			forces, or a strategic response to counteract the
			'hearts and minds' effect of CERP on civilians.
3.6.2 Design implications

This section outlines some points to consider based on the very limited evidence regarding insurgent responses to social protection schemes.

Box 7: Design implications of evidence on insurgent response to attacks

1. Consider how the speed of programme roll-out may mitigate vulnerability to attack.

The duration of the preparation and implementation phases of projects may account for part of the different results found in studies of CERP and KALAHI-CIDSS. Whereas projects funded through CERP were small and were implemented by the US Army, those funded by KALAHI-CIDSS were large and had longer lags between announcement and actual project implementation. Crost et al (2014b) suggest that the shorter preparation phases associated with CERP may have limited armed groups' ability to plan attacks to hinder project implementation.

2. Consider how programme visibility may influence vulnerability to attack.

Programmes that are more visible may be more vulnerable to attack. Crost et al (2014a) suggest that the **greater logistical infrastructure** associated with community-driven development and food aid may render them more vulnerable to attack than cash transfers in comparable contexts. They suggest this may be one factor driving the difference between the conflict-reducing effect of the PPP and KALAHI-CIDSS programmes in the Philippines. Wilder and Gordon (2009) also note that the increased visibility of civilian employees on PWPs may render them subject to intimidation or attacks. Another factor that influences programme visibility is the **degree of participation** in beneficiary and project selection and implementation. First, community involvement will likely increase broader awareness of a programme's plans and operations. Second, the gatherings of people involved in participatory processes may be a target for attack by armed groups. Again, trade-offs must be explicitly addressed in programme design: I this case, between the potential legitimacy-enhancing effects of visibility and the potential vulnerability that visibility represents.

3. Consider how military or police services may be used to increase security of programme operations.

Where programme vulnerabilities are identified, supervision of public works sites or cash disbursement points by military or police services may act as a deterrent to armed groups. However, such militarisation may also 'legitimise' armed groups' attacks on programme operations. Factors that should be considered when addressing this trade-off include: whether armed groups have an existing tendency to attack military rather than civilian targets; the capacity of military or police services to secure programme sites; and the opportunity cost of diverting scarce military or police resources from other functions towards providing security for programme implementation. Relevant government bodies should also be briefed on potential changes in armed groups' tactics in response to programme implementation, including the tendency to switch towards more capital-intensive forms of attack.

4. Consider providing potential 'spoilers' with an opportunity to share peacefully in prosperity gains.

Potential violent actors may be less likely to resort to violence to capture the benefits created through the programme if they can access such benefits through peaceful means. In practice, this means making sure programme success is seen by potential 'spoilers' as a win-win situation (a 'positive sum' game, in the jargon), rather than a win-lose situation (a 'negative sum' game). One potential way to achieve this is my simultaneously engaging insurgent groups in a process of dialogue or offering amnesties to current combatants.

3.7 Designing PWPs and cash transfers to mitigate the risk of violent conflict

Discussion of 'what works' when it comes to designing social protection programmes to mitigate the risk of violent conflict is subject to a number of challenges. The body of

evidence studying the link between the public works/cash transfer programmes and violent conflict is weak. This weakness is driven by the limited number of studies (and therefore triangulation of results), the tendency of studies to investigate just a small selection of the possible causal pathways, and the lack of variation in the design of similar programmes that might enable researchers to attribute variation in programme impact to specific elements of programme design. There is no doubt that underlying these factors is a scarcity of quality data at the level of individual beneficiaries and communities, especially regarding the incidence and intensity of violent conflict.

It would therefore be misleading to draw generalizable 'recommendations' from such a limited body of evidence. Instead, this report has focused on identifying the different causal pathways through which PWPs/CTs may mitigate the risk of violent conflict in different contexts. Based on this review, the following two sections outline likely trade-offs and highlight considerations for specific elements of programme design.

3.7.1 Trade-offs

There are significant trade-offs between the different ways in which programmes can mitigate the risk of violent conflict that should be consciously addressed in programme design. Although some trade-offs may be caused by resource constraints (i.e. more money for one element of programme implementation means less for another), others arise from the fact that 'not all good things go together': there are inevitable tensions in programme logic that mean maximising the impact through one causal pathway will necessarily limit impact through a different causal pathway.

• A common conclusion in the literature is that the poverty-reduction goal of social protection programmes should be separated from the goal of mitigating the risk of violent conflict (Johnson 2004, Holmes 2009, Mercy Corps 2015). This conclusion represents a recognition that the limited evidence available does not find poverty *per se* as the dominant driver of violent conflict, and therefore raises the possibility of trade-offs between these goals. In concrete terms, addressing the drivers of violent conflict may mean targeting beneficiaries that are not part of the poorest sections of the population, privileging the provision of public goods over labour-intensive works, or adopting 'inefficient' procedures that nonetheless boost the procedural legitimacy of the state.

There are also trade-offs *between* the different ways in which programmes may mitigate the risk of violence conflict, in addition to trade-offs between the poverty-reduction and violence-reduction goals. These have been noted throughout the text, but some examples of such trade-offs include:

- Increasing the 'visibility' of an intervention may also increase its vulnerability to attack by armed groups;
- Delegating implementation to NGOs may reduce the risk of corruption but also decrease potential boosts to perceptions of state legitimacy;
- Adopting electronic payment mechanisms may reduce the risk of corruption, but also reduce the potential for everyday interaction between state officials and beneficiaries that could increase perceptions of state legitimacy;
- Involving communities in beneficiary targeting and project selection may increase perceptions of legitimacy, but the resulting slower speed of programme roll-out may increase vulnerability to attack.

4 Considerations

Despite of the increasing interest in the productive roles of PWPs and cash transfers and their potential to mitigate the risk of violent conflict, the body of evidence is still weak. Although it is often claimed that PWPs can promote growth through the cash transferred, the assets created, and the skills developed, evidence to support these claims is scarce. The design of these programmes as well as their evaluation have focused on the short term poverty reduction / consumption smoothing effects, rather than on the productivity gains and wider growth impacts. The theoretical causal links by which PWPs could potentially promote growth do exist, although programmes have not exploited them sufficiently and their effects still need to be proved.

It is also usually claimed that PWPs and cash transfer programmes have the potential to mitigate the risk of violent conflict through job creation and growth. However, as it is shown above, in practice the relationship between these social protection interventions and violent conflict is complex, simultaneously working through multiple causal mechanisms that are not necessarily cumulative, linear or even positive. Evidence supporting these multiple causal pathways, with both positive and negative outcomes, is also scarce and mixed.

A core problem with social protection programmes and with PWPs in particular are the overambitious claims and expectations. It is clear, however, that PWPs cannot address short term poverty, medium to long term growth, and mitigate the risk of violent conflict at the same time. Programmes that aim at reducing short term poverty will need to be designed in a different way than those pursing the promotion of growth or the reduction of violent conflict. From the targeting criteria and methodology to the work requirements, programme features will differ based on the core goals.

Most PWPs in poor countries offer single short-term episodes of employment to prevent sudden reductions in consumption. It is rare to find PWPs that have been explicitly designed for either the promotion of growth or the mitigation of violent conflict. In this context, two high-level recommendations arise from the above discussion:

- 1 **Clearly identify a hierarchy of programme objectives** that will enable an informed approach to addressing trade-offs in programme design. This entails asking whether the programme aims to reduce poverty, generate growth *or* mitigate the risk of violent conflict. These overarching goals may lead to very different programme designs depending on the context.
- 2 **Conduct a context-specific analysis** to identify the main drivers of growth and violent conflict, with a particular focus on (i) local constraints to growth, (ii) the motivating factors that explain why individuals join armed groups and (iii) the organisational structure and tactics of armed groups.

Given the limited body of evidence, it would be misleading to draw generalizable 'recommendations' for programme design. Instead, the table suggests *considerations* that emerge from the limited evidence base. Combined with a clear vision for programme objectives and context-specific conflict analysis, consideration of these points should enable policymakers to improve future programme design.

Table 7: Summary of recommendations for designing public works and cash transfer programmes to mitigate the risk of violent conflict

Programme design element	To maximise jobs and growth	To mitigate risk of violent conflict
Targeting	 Consider combining self- targeting and community- based targeting if poverty reduction, as well as growth are the main objectives of the programme: Both reduce costs and time required to identify poor in the community, and improve programme ability to quickly respond to negative shocks. Community targeting promotes local ownership of the programme and the establishment of long- term relationship between implementers and communities. Need to take into account power relationships within communities as well as wage levels and other economic factors. 	 Consider appropriate levels of community engagement in identification of eligible beneficiaries [PWPs and CTs]. This should include consideration of how different forms of community engagement may: address the procedural dimension of legitimacy (including whose legitimacy (including whose legitimacy matters most); present opportunities to mitigate perceptions of corruption; risk potential for capture of programme benefits by local elites; and interact with non-economic drivers of violent conflict [PWPs & CTs]. Consider targeting low or moderately-insecure rather than highly-insecure districts, given evidence that social protection programmes may be better at reducing the risk of violent conflict in the former [PWPs & CTs].
Conditionality (CT only)	• N/A	 Consider attaching conditions to the receipt of cash transfers that may increase the opportunity cost of engagement in violent conflict [<i>CTs</i>]. Monitoring of compliance with conditions is costly and time-consuming and depends on the capacity of the implementing agency. Analysis of armed groups' movement patterns may identify implicit conditionalities (i.e. remaining stationery) that may lessen the added value of explicit conditions.

Wage rate/transfer value	 Set programme wage between the minimum and the market wage to induce self-selection of the poor into the programme. Set wage rate sufficiently high to enable households to meet consumption needs and leave margin for investments. The higher the wages, the larger the programme multiplier effects. Related risks: inflation and labour market distortions. 	 Clearly communicate eligibility criteria and size of transfer to relevant stakeholders to manage expectations and enable identification of corruption [PWPs & CTs].
Payment process	 Ensure timely delivery of payments to promote consumption smoothing. Consider introducing computerized payrolls and attendance sheets, as well as electronic payments. Consider complementing regular transfers with lump-sum payments. Delayed payments can increase productivity by reducing workers' incentives to decrease their work efforts. The transfer of big amounts of cash can reduce financial constraints to investments. If adequate capacity is in place, use performance-based payments system to incentivize workers to produce more and attract more productive individuals. Define simple, daily tasks to facilitate assessment and monitoring. 	 Vary distribution times and don't disclose time and date in advance Weigh up the opportunities for increased visibility of the state through direct disbursement of cash against the use of electronic payments to beneficiaries' bank accounts to increase security and reduce leakage through corruption [<i>PWPs & CTs</i>]. Consider including a deferred payment to incentivise future good behaviour [<i>PWPs & CTs</i>].

Type of work undertaken (PWP only)

- Consider trade-offs between employment creation and assets' productive potential.
- Labour intensity should reflect the relative importance of the programme objectives (social protection vs. growth). If growth is one of the main objectives:
 - Involve community members in projects selection to ensure their consistency with the local development priorities.
 - Consider integrating public works into local, regional and national development plans.

Clarify institutional roles and responsibilities, and make budget provisions for the **maintenance** of the community assets.

- Consider whether labour-intensivity or value of assets created should be prioritised in determining type of work undertaken [*PWPs*].
 - Labour-intensive work programmes may be more effective at mitigating the risk of violent conflict where there is a sharper trade-off between participation in legal labour markets and armed groups.
 - Analysis of armed groups' organisational structures and tactics may help determine this trade-off.
- Consider tailoring the type of work undertaken to absorb the same labour pool as that sought by armed groups. This may require providing opportunities for skilled as well as unskilled labour [*PWPs*].
 - Analysis of the profile of recruits into armed groups' may support this decision.
- Consider how the type of work undertaken and treatment of workers may influence non-economic drivers of violent conflict [*PWPs*].
 - Analysis of the motivation of civilians' decisions to join armed groups may support this decision.
- Consider appropriate levels of community engagement in identification of local public goods needs
 - Although community engagement may lead to selection of more needed public goods, in some contexts such engagement may represent a target for attack or increase lag times on implementation that allow for armed groups to plan more effective responses to programme implementation. Analysis of armed groups' tactics may help determine this trade-off [*PWPs*].
- Big projects are not necessarily better.
 Smaller projects can be better targeted to local needs and facilitate more

		engagement, despite incurring higher transaction costs [<i>PWPs</i>].
Choice of implementing agency	Consider outsourcing the design and delivery of skills trainings	 Weigh benefits of increased state involvement in implementation (including encounters between state officials and beneficiaries) on potential gains in state legitimacy against possible increased risk of corruption [<i>PWPs & CTs</i>]. Consider reducing NGO and donor branding to maximise likelihood that beneficiaries attribute programme outcomes to the state [<i>PWPs & CTs</i>]. Consider implementing agencies' capacity to rapidly roll-out programmes in order to mitigate vulnerability to attack [<i>PWPs & CTs</i>]. Consider how closer integration of social protection with counterinsurgency operations may increase ability to collect and utilise information to support counterinsurgency operations [<i>PWPs & CTs</i>]. Trade-offs may include greater vulnerability of programme operations to attack or not targeting the poorest areas.
Monitoring	 Create strong Monitoring and Evaluation systems – based on a programme Management Information System Create strong Grievances systems 	 Include conflict-related questions in monitoring and evaluation tools to maximise opportunity for learning [<i>PWPs & CTs</i>]. Ensure a complaints mechanism provides stakeholders with an opportunity to report suspected corruption [<i>PWPs & CTs</i>]. The agency managing the complaints mechanism must have the capacity to process complaints, enforce recommendations, impose sanctions, and protect whistle-blowers. The complaints mechanism must be clearly communicated to all relevant stakeholders.

References

- Ali, D, Toure, F, Kiewied, T. (2005) 'Cash relief in a contested area: lessons from Somalia', Network Paper No.50, London: ODI Humanitarian Policy Group, <u>odihpn.org/resources/cash-relief-in-a-contested-area-lessons-from-somalia/</u> [29 December 2015]
- Andvig, J C. (2007) 'Corruption and armed conflicts: some stirring around in the governance soup', *NUPI Working Papers*, Oslo: Norweigan Institute of International Affairs, <u>www.eldis.org/go/home&id=33053&type=Document#.VoKO103nk-Y</u> [29 December 2015]
- Azam, M. (2011) 'The impact of Indian job guarantee scheme on labor market outcomes: Evidence from a natural experiment', Oklahoma State University Working Paper. http://papers.ssrn.com/sol3/papers.cfm?abstract_id=1941959 [06 January 2016]
- Bangladesh Institute of Development Studies (2004) 'Poverty Impact of Rural Roads and Markets Improvement and Maintenance Project of Bangladesh'. Working paper, Bangladesh Institute of Development Studies, Dhaka.
- Barakat, S. (2006) 'Mid-term evaluation report of the National Solidarity Programme (NSP), Afghanistan', York: PRDU University of York, <u>www.cmi.no/publications/publication/?2446=mid-term-evaluation-report-of-the-national</u> [29 December 2015]
- Barrett, B., Clay, D. (2003) 'Self-Targeting Accuracy in the Presence of Imperfect Factor Markets: Evidence from Food-for-Work in Ethiopia, in *Journal of Development Studies* 39(5), pp 152-180.
- Barrett, C. B., Holden, S., Clay, D. C. (2002) 'Can food-for-work programmes reduce vulnerability?' WIDER Discussion Paper No. 2002/24, World Institute for Development Economics (UNU-WIDER). <u>http://www.rrojasdatabank.info/unudp02/dp2002-24_1.pdf</u> [06 January 2016]
- Beath, A, Christia, F, Enikolopov, R. (2012) 'Winning hearts and minds through development? Evidence from a field experiment in Afghanistan', *Policy Research Working Paper 6129*, World Bank, <u>dx.doi.org/10.1596/1813-9450-6129</u> [22 December 2015]
- Beath, A, Christia, F, Enikolopov, R. (2013) 'Randomized Impact Evaluation of Afghanistan's National Solidarity Programme: Final Report',
- Beazley, R., Vaidya, K. (2015) 'Social Protection through Work. Supporting the Rural Working Poor in Lower Income Countries', Oxford Policy Management, Oxford. <u>http://www.opml.co.uk/sites/default/files/Working%20Paper%202015-03%20-</u> <u>%20Social%20Protection%20through%20Work.pdf</u> [06 January 2016]
- Beegle, K., Galasso, E., Goldberg, J. (2014) 'Direct and Indirect Effects of Malawi's Public Works Program on
Food Security', University of Maryland Working Paper.
http://www.iza.org/conference_files/GLMLICNetwork_2015/goldberg_j5995.pdf [06 January 2016]
- Berhane, G., Hoddinott, J., Kumar, N., Taffesse, A. S. (2011) 'The impact of Ethiopia's productive safety nets and household asset building programme: 2006–2010'. Institute of Development Studies, Sussex. <u>https://www.ids.ac.uk/files/dmfile/Impact_Report_FINAL_JAN2012.pdf</u> [06 January 2016]
- Berg, E., Bhattacharyya, S., Rajasekhar, D., Manjula, R. (2015) 'Can Public Works Increase Equilibrium Wages? Evidence from India's National Rural Employment Guarantee', University of Bristol Working Paper. <u>http://www.erlendberg.info/agwages.pdf</u> [06 January 2016]
- Berman, E, Shapiro, J, Felter, J H. (2011a) 'Can hearts and minds be bought? The economics of counterinsurgency in Iraq', *Draft*, <u>econ.ucsd.edu/~elib/ham.pdf</u> [28 December 2015]
- Berman, E, Callen, M, Felter, J H, Shapiro J N. (2011b) 'Do working men rebel? Insurgency and unemployment in Afghanistan, Iraq and the Philippines', in *The Journal of Conflict Resolution*, Vol. 55, No.4, pp.497-528, jcr.sagepub.com/content/55/4/496.abstract [22 December 2015]
- Binswanger, H. P., Khandker, S. R., Rosenzweig, M. R. (1993) 'How infrastructure and financial institutions affect agricultural output and investment in India' in *Journal of Development Economics* 41(2), pp 337-366.
- Blattman, C, Emeriau, M, Fiala, N. (2013) 'Can't buy me love? Experimental effects of a state employment program on electoral behaviour in Uganda'. *Unpublished working paper cited in Blattman et al 2014.*
- Blattman, C, Fiala, N, Martinez, S. (2014) 'Generating skilled self-employment in developing countries: experimental evidence from Uganda', in *The Quarterly Journal of Economics*, Vol.129, No.2, pp.697-752, <u>gie.oxfordjournals.org/content/129/2/697</u> [28 December 2015]

- Blattman, C, Annan, J. (2015) 'Can employment reduce lawlessness and rebellion? A field experiment with highrisk men in a fragile state', <u>dx.doi.org/10.2139/ssrn.2431293</u> [22 December 2015]
- Bloom, D. E., Canning, D., Sevilla, J. (2001) 'The effect of health on economic growth: theory and evidence'. National Bureau of Economic Research Working Paper No. w8587. <u>http://www.nber.org/papers/w8587.pdf</u> [06 January 2016]
- Breman, J. (2005) 'Communal upheaval as the resurgence of social Darwinism', in Kaur, R (ed.), *Religion, Violence and Political Mobilisation in South Asia*, London: Sage.
- Brinkerhoff, D, Weterberg, A, Dunn S. (2012) 'Service delivery and legitimacy in fragile and conflict-affected states', in *Public Management Review*, Vol.14, No.2, pp.273-293, www.tandfonline.com/doi/abs/10.1080/14719037.2012.657958
- Bryceson, D. F., Howe, J. (1993) 'Rural household transport in Africa: Reducing the burden on women?' in *World development* 21(11), pp 1715-1728.
- Chêne, M. (2010) 'Corruption prevention strategies in cash transfer schemes', U4 Expert Answer No.244, Transparency International, www.transparency.org/whatwedo/answer/corruption prevention strategies in cash transfer schemes [29 December 2015]
- Coady, D., Grosh, M. E., Hoddinott, J. (2004) 'Targeting of transfers in developing countries: Review of lessons and experience', World Bank Publications, World Bank, Washington DC.<u>http://siteresources.worldbank.org/SAFETYNETSANDTRANSFERS/Resources/281945-</u> <u>1138140795625/Targeting En.pdf</u>[06 January 2016]
- Collier, P, et al. (2003) 'Breaking the conflict trap: civil war and development policy', Washington DC:World Bank, ipcc-wg2.gov/njlite_download.php?id=7203 [30 December 2015]
- Compelman, G. (2011) 'Winning hearts and minds? Examining the relationship between aid and security in Afghanistan's Faryab province', Medford, USA: Feinstein International Center
- Corbridge, S. (2005) Seeing the State: Governance and Governmentality in India. Cambridge: Cambridge University Press.
- Cramer, C. (2002) '*Homo Economicus* goes to war: methodological individualism, rational choice and the political economy of war', in *World Development*, Vol.30, No.11, pp.1845-1864, www.sscnet.ucla.edu/polisci/faculty/chwe/austen/cramer2002.pdf [30 December 2015]
- Cramer, C. (2010) 'Unemployment and participation in violence', *World Development Report 2011 Background Paper.* Washington DC: World Bank web.worldbank.org/archive/website01306/web/pdf/wdr%20background%20paper%20-%20cramer.pdf [29 December 2015]
- Crost, B, Felter, J H, Johnston, P B. (2014a) 'Conditional Cash Transfers, Civil Conflict and Insurgent Influence: Experimental Evidence from the Philippines', *HiCN Working Paper 174*, IDS, ideas.repec.org/p/hic/wpaper/174.html [22 December 2015]
- Crost, B, Felter J, Johnston, P. (2014b) 'Aid under fire: development projects and civil conflict', in *American Economic Review*, Vol.104, No.6, pp.1833-1856, <u>dx.doi.org/10.1257/aer.104.6.1833</u> [29 December 2015]
- Dasgupta, A, Gawande, K, Kapur, D. (2014) 'Anti-poverty Programmes Can Reduce Violence: India's Rural Employment Guarantee and Maoist Conflict', Indian Statistical Institute, www.isid.ac.in/~epu/acegd2014/papers/AdityaDasgupta.pdf [22 December 2015]
- De Waal, A. (2009) 'Fixing the political market place: how can we make peace without functioning state institutions?', *The Chr. Michelsen Lecture 2009*, <u>http://www.cmi.no/news/?557=fixing-the-political-market-place</u> [29 December 2015]
- Del Boca, D. (2002) 'The effect of child care and part time opportunities on participation and fertility decisions in Italy' in *Journal of Population Economics* 15.3, pp 549-573.
- Del Ninno, C. D., Subbarao K., Milazzo, A. (2009) 'How to Make Public Works Work: A review of the experiences', Working Paper No. 48567, The World Bank, Washington DC. <u>https://ideas.repec.org/p/wbk/hdnspu/48567.html [</u>06 January 2016]
- Devereux, S. (2002) 'From Workfare to Fair Work. The Contribution of Public Works and other Labour-based Infrastructure Programmes to Poverty Alleviation', Issues in Employment and Poverty Discussion Paper, 5, International Labour Organization, Geneva. <u>http://ilo.org/wcmsp5/groups/public/---</u> ed emp/documents/publication/wcms 120741.pdf [06 January 2016]

- Devereux, S., Sabates-Wheeler, R., Slater, R., Tefera, M., Brown, T., Teshome, A. (2008) 'Ethiopia's Productive Safety Net Programme (PSNP): 2008 Assessment Report'. Institute of Development Studies, Sussex. <u>http://www.cashdividend.net/wp-content/uploads/2013/05/Devereux-et-al.-2008.pdf</u>[06 January 2016]
- Devereux, S., Sabates-Wheeler, R., Tefera, M., Taye, H. (2006) 'Ethiopia's productive safety net programme: trends in PSNP transfers within targeted households'. Institute of Development Studies, Sussex.
- Devereux, S., Solomon, C. (2006) 'Employment Creation Programmes: The International Experience'. Issues in Employment and Poverty Discussion Paper No. 24, International Labour Organization, Geneva. <u>https://www.ids.ac.uk/files/disc24.pdf</u>[06 January 2016]
- DFID. (2010) 'Building Peaceful States and Societies: A DFID Practice Paper', London:DFID, www.gov.uk/government/publications/building-peaceful-states-and-societies-a-dfid-practice-paper [30 December 2015]
- DFID (2011) 'Cash Transfers: Evidence Paper'. Department for International Development, Policy Division, London. <u>http://webarchive.nationalarchives.gov.uk/+/http://www.dfid.gov.uk/Documents/publications1/cash-transfers-evidence-paper.pdf</u>[06 January 2016]
- DFID (2011) 'Cash transfers. Literature Review'. Department for International Development, London.
- Dix, S, Hussmann, K, Walton, G. (2012) 'Risks of corruption to state legitimacy and stability in fragile situations'. *U4 Anti-Corruption Resource Centre.* <u>www.u4.no/publications/risks-of-corruption-to-state-legitimacy-and-stability-in-fragile-situations/</u></u>
- Drucza, K. (2016) 'Cash transfers in Nepal: do they contribute to social inclusion?', in *Oxford Development Studies*, Vol.44, No.1, <u>www.tandfonline.com/eprint/pmkvHm6SGvzZgxG8sIds/full</u> [28 December 2015]
- Duflo, E. (2000) 'Schooling and labor market consequences of school construction in Indonesia: Evidence from an unusual policy experiment' in *The American Economic Review* 91(4), pp 795-813.

Englebert, P. (2002) State legitimacy and development in Africa. Boulder, CO: Lynne Rienner.

- Farrington, J., Slater, R. (2006) 'Introduction: Cash transfers: Panacea for poverty reduction or money down the drain?' in *Development Policy Review* 24(5), pp 499-511. http://onlinelibrary.wiley.com/doi/10.1111/j.1467-7679.2006.00344.x/epdf [06 January 2016]
- Fishstein, P, Wilder, A. (2012) 'Winning hearts and minds? Examining the relationship between aid and security in Afghanistan', Medford, USA: Feinstein International Center
- Fithen, C, Richards, P. (2005) 'Making war, crafting peace: militia solidarities and demobilisation in Sierra Leone', in Richards, P (ed.), No Peace No War: an Anthology of Contemporary Armed Conflicts, Oxford: James Currey.
- Gannon, C. A., Liu, Z. (1997) 'Poverty and transport' World Bank, Washington DC. http://siteresources.worldbank.org/INTURBANTRANSPORT/Resources/twu-30.pdf [Accessed 06 January 2016]
- Gehrke, E. (2014) 'An employment guarantee at risk insurance? Assessing the effects of the NREGS on agricultural production decisions'. BGPE Discussion Paper No. 152. <u>https://www.die-gdi.de/uploads/media/152_Gehrke.pdf</u>[06 January 2016]
- Global Insights (2013) 'Employment Guarantee as Social Protection: Lessons from Tamil Nadu, India'. Policy Brief 06, University of Sussex. https://www.sussex.ac.uk/webteam/gateway/file.php?name=employment-guarantee-as-socialprotection.pdf&site=11_[Accessed 06 January 2016]
- Goodhand, J. (2001) 'Violent conflict, poverty and chronic poverty', *CPRC Working Paper 6*, <u>www.gsdrc.org/document-library/violent-conflict-poverty-and-chronic-poverty/</u> [30 December 2015]
- Gordon, S. (2011) 'Winning hearts and minds? Examining the relationship between aid and security in Afghanistan's Helmand province', Medford, USA: Feinstein International Center
- Gutierréz-Sanín, F. (2008) 'Telling the difference: guerrillas and paramilitaries in the Colombian war', in *Politics and Society*, Vol.32, No.2, pp.257-85, <u>pas.sagepub.com/content/36/1/3.abstract</u> [29 December 2015]
- Hartwig, R. (2013) 'The short-term impact of public works on household welfare in rural Rwanda: A mixed methods approach'.<u>https://editorialexpress.com/cgi-bin/conference/download.cgi?db_name=CSAE2013&paper_id=705_[</u>06 January 2016]
- Hashemi, S., Rosenberg, R. (2006) 'Graduating the poorest into microfinance: linking safety nets and financial services' CGAP focus note No. 34, World Bank, Washington

DC.<u>https://www.cgap.org/sites/default/files/CGAP-Focus-Note-Graduating-the-Poorest-into-Microfinance-Linking-Safety-Nets-and-Financial-Services-Feb-2006.pdf</u>[06 January 2016]

- Haushofer, J., Shapiro, J. (2013) 'Household response to income changes: Evidence from an unconditional cash transfer program in Kenya' Massachusetts Institute of Technology Working Paper. https://www.princeton.edu/~joha/publications/Haushofer Shapiro UCT 2013.pdf [06 January 2016]
- Heywood, J. S., Siebert, S., Wei, X. (2013) 'The Consequences of a Piece Rate on Quantity and Quality: Evidence from a Field Experiment'. IZA Discussion Paper 7660. <u>http://ftp.iza.org/dp7660.pdf</u> [06 January 2016]
- Hoddinott, J., Berhane, G., Gilligan, D. O., Kumar, N., Taffesse, A. S. (2012) 'The Impact of Ethiopia's Productive Safety Net Programme and Related Transfers on Agricultural Productivity' in *Journal of African Economies* 21(5), pp 761-786.
- Hoffman, C. (2006) 'Cash transfer programmes in Afghanistan: a desk review of current policy and practice', *Humanitarian Policy Group Background Paper*, London:ODI, <u>odi.org/resources/docs/430.pdf</u> [29 December 2015]
- Holmes, R. (2009) 'Cash transfers in post-conflict contexts', *Project Briefing No.32*, London:ODI, odi.org/resources/docs/4608.pdf [29 December 2015]
- Holmes, R, Uphadya, S. (2009) 'The role of cash transfers in post-conflict Nepal', London:ODI, www.odi.org/resources/docs/5743.pdf [29 December 2015]
- Iyengar, R, Monten, J, Hanson, M. (2011) 'Building Peace: The Impact of Aid on the Labor Market for Insurgents', Working Paper 17297, NBER, www.nber.og/papers/w17297, [22 December 2015]
- Jones, B. (2004) 'Evaluation of Oxfam GB's ECHO funded Cash for Work Project in Hazarajat.' http://www.alnap.org/resource/3374_[06 January 2016]
- Johnson, C. (2004) 'Final Evaluation Report of the LIWP (Labour Intensive Works Programme)'. Care, Kabul.
- Justino, P. (2012) 'War and poverty', IDS Working Paper Volume 2012 No.391, Brighton:IDS, www.ids.ac.uk/files/dmfile/Wp391.pdf [30 December 2015]
- Kardan, A, Farhat, M. (2014) 'Review of FAO cash for work programme in Somalia: process review', Oxford: Oxford Policy Management, <u>www.opml.co.uk/publications/review-fao-cash-work-programme-somalia-process-review</u> [29 December 2015]
- Kessides, C. (1993) 'The contributions of infrastructure to economic development: A review of experience and policy implications'. World Bank Publications, Vol. 213, Washington DC.
- Khandker, S. R., Bakht, Z., Koolwal, G. B. (2009) 'The poverty impact of rural roads: evidence from Bangladesh' in *Economic Development and Cultural Change* 57(4), pp 685-722.
- Kidd, S., Freeland, N., Khondker, B. (2014) 'International Best Practice in Social Protection: Implications for Bangladesh'. PRI, SANEM, Development Pathways, London. <u>http://www.developmentpathways.co.uk/downloads/projects/international-best-practice---bangladesh--</u> -2014feb03.pdf [06 January 2016]
- Koohi-Kamali, F. (2010) 'Public works and social protection'. Background paper for European Report on Development, European University Institute. <u>http://erd.eui.eu/media/BackgroundPapers/Koohi-Kamali.pdf</u> [06 January 2016]
- Lazear, E. P. (1981) 'Agency, earnings profiles, productivity, and hours restrictions' in *The American Economic Review* 71(4), pp 606-620.
- Lazear, E. P. (1996) 'Performance pay and productivity' National Bureau of Economic Research Working Paper No. w5672. <u>http://www.nber.org/papers/w5672.pdf</u>[06 January 2016]
- Lembani, M., Mandala, C. (2006) 'Malawi: Some Targeting Methods in Public Works Programs'. MASAF Policy Infobrief, 1 (1) Lilongwe: MASAF. <u>http://documents.worldbank.org/curated/en/2006/10/7145035/malawi-some-targeting-methods-public-works-programs</u> [06 January 2016] [Accessed 06 January 2016]
- Levy, H. (1996) 'Kingdom of Morocco: Impact Evaluation Report, Socioeconomic Influence of Rural Roads'. Operation Valuation Department, World Bank, Washington DC.
- Lokshin, M., Yemtsov, R. (2005) 'Has Rural Infrastructure Rehabilitation in Georgia Helped the Poor?' in *World Bank Economic Review* 19(2), pp 311-333.
- Mahapa, S. M., Mashiri, M. (2001) 'Social exclusion and rural transport: gender aspects of a road improvement project in Tshitwe, Northern Province' in *Development Southern Africa* 18.3, pp 365-376.

- Mahapa, S. M., Mashiri, M. (2002) 'Social exclusion and rural transport: a road improvement project' in *Balancing the load: women, gender and transport,* Zed Books, London.
- Mattinen H, Ogden, K. (2006) 'Cash-based interventions: lessons from southern Somalia', in *Disasters*, Vol.30, No.3, pp.297-315
- McCord, A. (2005) 'A critical evaluation of training within the South African National Public Works Programme' in *Journal of Vocational Education and Training* 57(4), pp 563-586.
- McCord, A. (2012) 'Appraising productivity enhancing Publics Works Programmes', Social Protection Toolsheet, Overseas Development Institute, London <u>http://www.odi.org/sites/odi.org.uk/files/odi-assets/publications-opinion-files/7683.pdf</u>[06 January 2016]
- McCord, A., Farrington, J. (2008) 'Digging Holes and Filling Them in Again? How Far Do Public Works Enhance Livelihoods. Overseas Development Institute, London. <u>http://www.odi.org/sites/odi.org.uk/files/odi-assets/publications-opinion-files/3435.pdf</u> [06 January 2016]
- McCord, A., Slater, R. (2009) 'Overview of public works programmes in sub-Saharan Africa'. Overseas Development Institute, London. <u>http://www.odi.org/sites/odi.org.uk/files/odi-assets/publications-opinion-files/5764.pdf</u> [06 January 2016]
- McLeod, D, Dávalos, M. (2008) 'Post-conflict employment creation for stabilization and poverty reduction', *Manuscript* commissioned by UNDP, www.academia.edu/3106701/Postconflict employment creation for stabilization and poverty reduction [29 December 2015]
- McLoughlin, C. (2015) 'When does service delivery improve the legitimacy of a fragile or conflict-affected state?', in *Governance*, Vol.28, No.3, pp.341-356, <u>dx.doi.org/10.1111/gove.12091</u> [28 December 2015]
- Murgai, R., Ravallion, M., Van de Walle, D. (2013) 'Is Workfare Cost-Effective Against Poverty in a Poor Labor-Surplus Economy?' Policy Research Working Paper 6673, World Bank, Washington DC. <u>https://www.openknowledge.worldbank.org/bitstream/handle/10986/16888/WPS6673.pdf?sequence=1</u> [06 January 2016]
- Ravallion, M. (1991) 'Reaching the rural poor through public employment: Arguments, evidence, and lessons from South Asia' in *The World Bank Research Observer* 6(2), pp 153-175
- Rodey, B. (2003) 'A 2003 evaluation fo the MEDAIR Kabul vulnerables programme and recommendations for future directions'
- Sacks, A. (2009) 'Non-state actor provision of services, government legitimacy and the rule of law', paper presented at the annual meeting of the American Sociological Association Annual Meting, Hilton San Francisco, San Francisco, CA
- Samson, M., van Kiekerk, I., Mac Quene, K. (2006) 'Designing and implementing social transfer programmes' Economic Policy Research Institute, Cape Town. <u>http://www.unicef.org/socialpolicy/files/designing_and_implementing_social_transfer_programmes.pdf</u>
- Srinivasan, S. (2014) 'Impact of Public Works on Household Occupational Choice: Evidence from NREGS in India'. RAND Corporation Working Paper WR-1053, Los Angeles. <u>https://www.rand.org/content/dam/rand/pubs/working papers/WR1000/WR1053/RAND WR1053.pdf</u> [06 January 2016]
- Subbarao, K. (2003) 'Systemic shocks and social protection: role and effectiveness of public works programs' Social Protection, World Bank. <u>http://siteresources.worldbank.org/SOCIALPROTECTION/Resources/SP-Discussion-papers/Safety-Nets-DP/0302.pdf</u> [06 January 2016]
- Subbarao, K., Del Ninno, C., Andrews, C., Rodríguez-Alas, C. (2012) 'Public works as a safety net: design, evidence, and implementation'. World Bank, Washington DC.
- Teskey, G, Schnell, S, Poole, A. (2012) 'Beyond Capacity Addressing authority and legitimacy in fragile states', Draft, <u>siteresources.worldbank.org/PUBLICSECTORANDGOVERNANCE/Resources/285741-</u> 1343934891414/8787489-1347032641376/GettingBeyondCapacity.pdf [28 December 2015]
- Van de Walle, D. P., Mu, R. (2007) 'Rural roads and poor area development in Vietnam'. World Bank Policy Research Working Paper Series, World Bank, Washington DC. <u>http://papers.ssrn.com/sol3/papers.cfm?abstract_id=1012218 [</u>06 January 2016]
- Von Braun, J., Teklu, T., Webb, P. (1999) 'Famine in Africa: Causes, responses, and prevention'. International Food Policy Research Institute, Washington DC.
- Wilder, A, Gordon, S. (2009) 'Money can't buy America love', *Foreign Policy Briefing Book*, <u>foreignpolicy.com/2009/12/01/money-cant-buy-america-love/</u> [29 December 2015]

Wiseman, W., Van Domelen, J., Coll-Black, S. (2010) 'Designing and implementing a rural safety net in a low income setting: Lessons learned from Ethiopia's Productive Safety Net Program 2005-2009'. World Bank, Washington <u>http://siteresources.worldbank.org/SAFETYNETSANDTRANSFERS/Resources/EthiopiaPSNPLessonsLearne</u> <u>dLite.pdf</u> [06 January 2016]

Woods, E J. (2003) 'Insurgent collective action and civil war in El Salvador', Cambridge: CUP.

- World Bank (2006) 'Republic of Zambia, the Emergency Drought Recovery Project'. Implementation Completion Report 34926, World Bank, Washington DC. <u>http://documents.worldbank.org/curated/en/2006/01/6610412/zambia-emergency-drought-recoveryproject [06 January 2016]</u>
- Zaum, D, Cheng, C. (2011) Corruption and Post-conflict Peacebuilding: Selling the peace? Routledge
- Zaum, D. (2015) 'Legitimacy, Statebuilding and Conflict', *GSDRC Professional Development Reading Pack No.11*. www.gsdrc.org/professional-dev/legitimacy-statebuilding-and-conflict/ [28 December 2015]

Annex A: List of public works programmes and cash transfers reviewed

Country	Programme	Study
Afghanistan	National Solidarity Programme (NSP) [public works programme]	Barakat (2006) Beath et al (2013)
	Oxfam GB's cash-for-work project in Hazarajat [public works programme]	Jones (2004)
	Mercy Corps INVEST job creation and training initiative	Mercy Corps (2015)
	Labour Intensive Works Programme (LIWP) [public works programme]	Johnson (2004)
Bangladesh	Rural Maintenance Programme (RMP) [public works programme]	Hashemi and Rosenberg (2006)
Ethiopia	Productive Safety Net Program (PSNP) [public works programme]	Berhane et al (2011) Devereux et al (2006, 2008) Wiseman et al (2013)
India	Mahatma Gandhi National Rural Employment Guarantee Act (MGNREGA) [public works programme]	Azam (2011) Berg et al (2015) Dasgupta et al (2014) Gehrke (2014) Global Insights (2013) Murgai et al (2013) Srinivasan (2014) Subbarao (2013)
Iraq	Commanders Emergency Response Programme (CERP) [public works programme]	Berman et al (2011) Iyengar et al (2011)
Kenya	Give Directly Cash Transfer Programme [unconditional cash transfer]	Haushofer and Shapiro (2014)

Liberia	Action on Armed Violence [elements of conditional cash transfer]	Blattman and Annan (2015)
Nepal	Multiple	Holmes and Uphadya (2008)
Philippines	KALAHI-CIDSS [CDD infrastructure/public works programme]	Crost et al (2012b)
	Pantawid Pamilyand Pilipino (PPP) [a conditional cash transfer]	Crost et al (2014a)
Rwanda	Vision 2020 Umurenge [public works programme]	Hartwig (2013)
Somalia	Emergency Cash Response Programme (ECRP) [cash transfer programme]	Ali et al (2005)
	ACF cash-for-work scheme [public works programme]	Mattinen and Ogden (2006)
	FAO cash-for-work programme [public works programme]	Farhat et al (2014)
South Africa	Tshitwe Road Upgrading project [public works programme]	Mahapa and Mashiri (2002)
	Expanded Public Works Programme (EPWP) [public works programme]	McCord (2005)
Zambia	Emergency Drought Recovery Project [public works programme]	World Bank (2006)

Annex B:List of sources by research type, design and method

Study	Research Type	Research Design
Ali et al (2005)	Secondary	Other review : Project document review, also cites project evaluation findings based on key informant interviews and focus group discussions
Azam (2011)	Primary	Quasi-experimental : natural experiment; difference-in-differences estimation
Berg et al (2015)	Primary	Quasi-experimental : natural experiment; difference-in-differences estimation
Barakat (2006)	Primary / Secondary	 Observational: mixed methods approach Quantitative – survey Qualitative – key informant interviews, focus group discussions, project document review
Beath et al (2012, 2013)	Primary	Experimental: randomised control trial
Berman et al (2011a)	Primary	Observational : test an economic model of insurgency using regression analysis of district-level panel data
Berman et al (2011b)	Primary	Observational : regression analysis of district-level panel data
Berhane et al (2011)	Primary	 Observational: mixed methods approach Quantitative - analysis of time trends on a panel dataset comprised of three rounds of surveys Qualitative - key informant interviews, focus groups discussions
Blattman et al (2014)	Primary	Experimental: randomised control trial
Blattman and Annan (2015)	Primary	Experimental: randomised control trial
Breman (2005)	Primary	Observational: case study
Crost et al (2014a)	Primary	Experimental: randomised control trial
Crost et al (2014b)	Primary	Quasi-experimental: regression discontinuity design

Dasgupta et al (2014)	Primary	Quasi-experimental: natural experiment, difference-in-differences estimation
Devereux et al (2006)	Primary	 Observational: mixed methods approach Quantitative - cross-sectional comparisons between programme beneficiaries and non- beneficiaries Qualitative - interviews and discussions in the field
Del Ninno et al (2009)	Secondary	Other review
Devereux et al (2008)	Primary	 Observational: mixed methods approach Quantitative – panel data analysis using fixed effects estimators on a dataset comprised of two rounds of surveys; comparison of time trends between programme beneficiaries and non beneficiaries Qualitative – key informant interviews, focus group discussions, household case studies
Farhat et al (2014)	Primary	Observational: process review based on key
Fishstein and Wilder (2012); Gordon (2011); Compelman (2011)	Primary	Observational : multiple case studies of different Afghan provinces
Fithen and Richards (2005)	Primary	Observational: case study
Gehrke (2014)	Primary	Quasi-experimental : natural experiment; fixed effects regression models
Global Insights (2013)	Secondary	Other review: policy brief
Gutierréz-Sanin (2008)	Primary	Observational: case study
Hartwig (2013)	Primary	Quasi-experimental : nearest neighbour matching combined with difference-in-differences estimation
Hashemi and Rosenberg (2006)	Secondary	Other review: case study
Haushofer and Shapiro (2013)	Primary	Experimental: Randomized control trial

Holmes and Uphadya (2009)	Primary / Secondary	Observational : key informant interviews, project document review, institutional analysis
Iyengar et al (2011)	Primary	Quasi-experimental : natural experiment, difference-in-differences estimation
Johnson (2004)	Primary	Observational : qualitative study - review of project documents, interviews with key informants and programme beneficiaries
Jones (2004)	Primary	Observational : qualitative study - review of project documents, discussions and interviews with key informants and programme beneficiaries
Keen (2005)	Primary	Observational: case study
Mahapa and Mashiri (2002)	Primary	Observational : qualitative study – key informant interviews and observations
McCord (2005)	Secondary	Other review
McCord and Slater (2009)	Secondary	Systematic review
Mercy Corps (2015)	Primary	Quasi-experimental: propensity score matching
Murgai et al (2013)	Primary	Quasi-experimental: non-parametric estimation relying on counterfactual questions to participants
Ravallion (1991)	Secondary	Other review
Srinivasan (2014)	Primary	Quasi-experimental : natural experiment; difference-in-differences estimation
Subbarao (2003)	Secondary	Other review
Subbarao et al (2012)	Secondary	Other review
Wiseman et al (2010)	Secondary	Other review
Wood (2003)	Primary	Observational: case study
World Bank (2006)	Secondary	Other review

Note: Studies highlighted in pink do not refer to specific cash transfer or public works programmes, but provide insights relevant to understanding the dynamics explored in the review.