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Coping Strategies in Natural Disasters and under Conflict: A Review of Household Responses and Notes for Public Policy

Yashodhan Ghorpade*

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*Marie-Curie Initial Training Network Doctoral Student Researcher
Institute of Development Studies
University of Sussex
Falmer, Brighton, UK

Introduction

This paper attempts to examine the broad theoretical and empirical literature on how poor households respond to shocks to their incomes and livelihoods brought upon by natural disasters and by conflict. Natural disasters and other crises present formidable challenges to the fight against poverty and to the development of human capital. Specifically, they pose serious threats to populations living below, and near levels of absolute poverty and survival. Households respond to circumstances brought upon by crises by altering several aspects of their lives; livelihood diversification, saving and dissaving, labour supply alterations to name a few. Underlying these observed changes are complex coping strategies that households employ based on the information and resources available to them, expectations of the future, and the opportunities and constraints operating in the external environment (such as the connectedness and functioning of markets, and public policy interventions). A vast and detailed literature on the subject of household coping strategies has emerged over the past twenty years in which initial theoretical forays have been complemented by rigorous empirical studies. While a comprehensive review of all the literature on this subject is far beyond the scope of the exercise at hand, the focus is on presenting key issues in household behaviour in the aftermath of shocks. This leads to Section 2 which specifically examines household coping strategies in response to conflict and its concomitant circumstances and shocks. An attempt is made to identify

similarities and differences in how households experience and respond to different sources of vulnerability. Section 3 provides an overview of the potential role of public policy interventions in protecting households from multiple shocks, and makes a case for a deeper understanding of how such interventions may be affected by pervasive violence and insecurity.

I. Household coping strategies during natural disasters and other crises

Seen from the household perspective, natural disasters and economic crises are external shocks that may have a strong and lasting impact on prospects of survival and development. The fact that these shocks cannot (always and entirely) be predicted – in terms of the timing of their onset or their severity – implies that households face a certain degree of risk with respect to these crises. The literature on the subject makes a useful distinction between two broad categories of such risks:

1. **Idiosyncratic Risk:** This refers to risks faced by particular individuals (households), and not more pervasively within the community.
2. **Covariate Risk:** These are risks associated with shocks that affect the entire community, even as they may affect members within the community in varying degrees.

In practice it is often hard to distinguish the two types of risk very clearly from each-other. Using a three-wave panel from rural Ethiopia Dercon (2002) finds that idiosyncratic risk is a large component of total risk. Morduch (2001) finds that in the case of ICRISAT villages in South India between 75 and 96 per cent of the total variation in income is explained by idiosyncratic risk. Using the 1985-86 LSMS dataset for Cote d'Ivoire, Deaton (1997) finds that common village characteristics explain a very small part of the total variation in rural household income changes.

We now shift focus to understanding the strategies employed by households in the face of such risk. Alderman and Paxson (1994) provide a theoretical framework for understanding these strategies; classifying them as risk management and risk coping strategies, respectively. The former refers to activities undertaken to ex-ante reduce exposure to shocks, while the latter includes self-insurance and group-based risk sharing. Fafchamps takes exception to the terminology of “risk management” in a development context and argues that the poor are unable, in fact, to “manage” risk, and therefore suggests an alternate classification. He propounds a classification based on the timing of the strategies pursued, and how risk is shared; classifying strategies as risk reducing (ex-ante), self-insurance (through accumulation and sales of assets and risk-sharing within a group. Specific strategies pursued under these are discussed below:

1. Risk- Reducing Strategies (Ex-ante)

This includes strategies that seek to achieve income smoothing (Morduch 1995); i.e. reducing households' exposure to more volatile sources of income and choosing more secure ones instead. One strategy under this heading is **diversification** of agricultural production. The basic rationale is that by spreading risk across a portfolio of livelihoods (or even crops), households maintain a link with activities/ crops that they can turn to in times of need when all of these activities/ options are not equally and directly exposed to the same severity of an external shock. Intercropping is a typical example, where along with the main crop, several households cultivate secondary crops that are more hardy and resistant to pest attacks, water shortages etc. Several agrarian households also combine agricultural and non-agricultural activities. Large percentages of rural labour in developing countries are engaged in off-farm labour; Reardon (1997) observes

this in the case of Sub-Saharan Africa, while Fafchamps and Quisumbing (1999) find similar reliance on off-farm labour in rural Pakistan. Kurosaki (2001) finds that less diversified households in Pakistan are more prone to risk. The strategy of diversification could even extend to seasonal migration to employment sites such as mines or plantations (Giles 1999). It is important to note, however, that individuals may face several constraints in diversifying income; for example specific skills and networks may be required to access certain jobs, and these may be unavailable to a majority of households affected by crises (see Reardon et al. 1988, Reardon 1997, Dercon and Krishnan 1996).

Alternatively, households may pursue **specialisation**, whereby they shift entirely to the pursuit of less-risky livelihoods (or crops). Fafchamps (2003) cites the example of several villages in West Africa where the cultivation of the hardy pearl millet is pursued. Within these areas, where there is too little water to support even pearl millet, households specialise almost entirely in nomadic animal rearing. Thus, “specialisation in a single, robust production technique is the main income smoothing...” strategy. Fafchamps further comments that whether households choose diversification or specialisation depends on stochastic dominance and presents a theoretical model to arrive at the conditions necessary for choosing one strategy over the other (ibid).

Another important strategy employed to reduce risk is to **pursue greater self-sufficiency**, to the extent possible. While self-sufficiency need not always enable households to achieve full food security, it is an important strategy for reducing risk. This strategy is often pursued when markets are not fully integrated and prices of food grains fluctuate considerably (Singh et al. 1986). The principle of seeking self-sufficiency applies not only to food but other markets too (such as markets for fodder, and farm labour), where households choose this to reduce external dependence and risk. For example, Kurosaki and Fafchamps (2002) show that volatility in fodder prices causes farmers in rural Punjab in Pakistan to grow their own fodder. Farm labour requirements in the context of higher wage rates in the peak season may cause households to have larger numbers of children and dependant adults (Delgado 1979).

Finally, households may choose to allow greater **flexibility** in their economic decisions depending on how situations unfold. This effectively means that households acknowledge the presence of risk and allow for leaving options open when such risks are realised. For instance, Fafchamps (2003) finds that in Burkina Faso farmers plant more crops than they can properly weed; and when there are shortages in rainfall, they offset crop losses with more intensive weeding. Thus they leave the option of stressing on one activity (weeding) open, and focus on it more when the risk (rainfall shortfall) on the main activity (crop production) is realised. This may be seen as a more tactical approach to reducing risk, in addition to strategic paths outlined above.

2. Self-Insurance (including the accumulating and selling assets)

The accumulation and sale of assets by poor households has long been commented upon as a strategy used by the poor to deal with shocks. Deaton (1991) provides a theoretical framework for understanding saving and dissaving when credit markets are imperfect; he presents the case where, assuming that (i) income is prone to risk; (ii) individuals have a greater preference for present (over future) consumption and (iii) that safe investments in assets is possible, yielding a low rate of return, the rate of interest is lower than the rate of time preference. Therefore, over a sufficiently long period of time (a dynasty in this case), it is rational for households to accumulate assets in high income years, and sell them in years when incomes are low. Assets that are typically sold in times of distress include land, livestock, draught animals, vehicles and implements (Rosenzweig and Wolpin 1993).

Asset sales during times of distress may itself contribute to the worsening of households' economic situation in the long run, as this tends to increase inequality in the future, even as it allows households to meet current consumption requirements (Carter and Zimmerman, 2000). Further, during times of distress, especially in the case of covariate shocks, many households may contemplate this strategy, which leads to a depression of asset prices. This reduces the terms at which household sell their assets. Secondly, the productivity of livestock may itself be directly affected by the external shock (such as droughts, floods) causing prices to plummet. Zimmerman (1993) shows that the prices of assets sold in times of distress are lower than that in other times. In addition to the problem of lower asset prices, another reason why asset sales is likely to have limited advantages is that assets are lumpy and their markets are often thin and not fully integrated in the rural economy. Dercon (2000) presents a theoretical model (drawing on Deaton's model discussed above) to demonstrate that asset lumpiness and the riskiness of asset prices result in asset accumulation and sales are an incomplete insurance mechanism. Needless to say, this is especially true in the case of households that are unable to ever accumulate, and therefore later liquidize assets.

Increasing household labour supply is another self-insurance mechanism employed by households in times of need. In Sen's (1981) seminal work on famine, he discusses how the 1973 drought in Ethiopia led several male members of households to migrate in search of wage employment. The strategy proved unsuccessful for many as the covariate shock had induced many men to adopt this strategy, leaving many unemployed. Their families also eventually migrated, in search of food aid, and this led to extreme distress including, in many instances, family separation. Increasing labour supply, or seeking wage employment in the agrarian context is also a possible strategy in response to idiosyncratic shocks. For instance, Kochar (1999) shows that in rural India labour market participation allows for risk mitigation following weather shocks. Public works programmes are often initiated by the state to help rural households cope with weather shocks. Imai (2000a) finds that public employment programmes (more than market-based labour participation) help poor households cope with negative shocks.

Reducing consumption is another means of dealing with a shock. Households may prefer to cut down expenses on non-necessary items, defer purchases and investments, and in some cases also cut down expenses on items such as children's schooling, healthcare and food. Dercon (2002) notes that during the 1984-85 famine in Ethiopia, households reduced their consumption to perniciously low levels, even when they held stocks of assets. The effects of reducing consumption are not always felt equally by all members of a household. Behrman (1988) shows that in the case of ICRISAT villages in India, in families unable to smooth consumption, the health status of children, especially girls is strongly affected. Behrman and Deolalikar (1990) show that in India, women bear a disproportionate burden of nutritional losses caused by rising food prices and reduced consumption.

In times of distress, households may also resort to **borrowing** to meet consumption needs. Inter-household borrowing may be practiced in times of idiosyncratic shocks, but is a limited option when the entire community is affected by some type of crisis. On the other hand, collateral is essential for obtaining loans from formal and informal institutions, and this implies that several asset-poor households face binding credit constraints and are unable to borrow to smooth consumption (Eswaran and Kotwal 1989). Consumption is more volatile when credit constraints are operational (Deaton 1990).

It is worth mentioning that the above strategies do not represent the entire gamut of self-insurance options exercised by households affected by shocks; there exist several more. The

above have been chosen due to their relative importance, as reflected in their predominance in the literature. Notably, this discussion has excluded the role of precautionary savings and labour bonding. The following section discusses risk-sharing strategies.

3. Risk Sharing Strategies

Thus far we have discussed strategies by which households reduce exposure, or directly insure against it. We now examine strategies employed to respond to crises which involve sharing risk within a group, either implicitly or explicitly.

Solidarity bonds link people with their friends, relatives and community members in ways that require members to come to each-others' aid in times of need. Support provided by such networks is a form of mutual insurance and can take on forms such as gifts, in-kind transfers, cash remittances and interest-free advances of money (Posner 1980, Ravallion and Dearden 1988, Ellsworth and Shapiro 1989, Reardon and Matlon 1989, Altonji et al. 1992). However, gifts and transfers of this type do not fully cover the losses suffered by households (Rosenzweig 1988, Lim and Townsend 1998, Imai 2000b).

Implicit risk-sharing strategies involve the trading (more precisely, the barter) of consumable items (such as foodgrain) and non-consumable items (such as livestock), as this enables households within a community/ village to share risk among themselves. This could extend to such barter between villages too (Udry 1990). However, this requires that the terms of trade of the two (groups of) items being bartered remains constant, which in reality is seldom the case. For instance Sandford (1983) and Fafchamps and Gavian (1997) show that relative price grain to livestock rises considerably during droughts, which renders livestock ineffective insurance against the drought. This reduces the ability to share risk within and between communities. Dreze and Sen (1989) suggest that this mechanism failing repeatedly can precipitate entitlement failure in the context of famine. In such cases, poor households tend to resist any such exchange mechanisms and insulate themselves from the market (Fafchamps 1992a).

Explicit risk-sharing, although much deliberated in the theoretical literature on risk sharing, is not very prevalently practiced in the real world. Some exceptions include sharing of risk among fishermen (Platteau and Abraham 1987), and joint cultivation (pooling of labour) among farmers in the Sahel region as a means of insuring against losses caused due to farmers' illnesses etc. (Fafchamps 1992b). More commonly, explicit interlinking of insurance is visible in the real world as patron-client relationships. Essentially, this refers to a situation where a patron offers insurance to peasants (clients) in exchange for labour, which is often bonded (Ray 1998, de Janvry 1981).

To summarize, rural households in developing countries face a number of risks from natural disasters and economic crises, over which they have limited control. These affect several aspects of human life, including food consumption, nutrition, health, education, choice of livelihoods and investment decisions. The negative impact of these sources of risks can be large and pose a big challenge to the fight against poverty. In response to such risks, households seek to protect their survival and sustenance through the pursuit of coping strategies. These include strategies that reduce households' exposure to risk, those that provide some kind of insurance against these risks, and finally measures to share risks with the wider community. Households display active agency, albeit with limited means and given low endowments, in the face of economic shocks, and seek to protect their and their households' interests.

More importantly, however, households are unable to fully cope with shocks induced by natural disasters and economic crises. Coping strategies, including risk-sharing, are not complete. Though useful in warding off the immediate threats posed to lives and livelihood, the often costly coping strategies employed by households may produce long-run negative results, and push households further into poverty. There is an obvious implication for the state to intervene in such situations where households remain exposed to a very high degree of risk.

II. The impact of conflict: How households are affected, and how they cope

This section provides an overview of the available literature on the impact of conflict on human development and how households respond to external changes in the context of conflict. It is critical to understand conflict as a distinct setting for understanding household and intra-household decisions. A broad reading of the literature on conflict and development strongly suggests that conflict does not constitute a singular shock (even though in many cases it may be experienced as one – forced displacement, for example). Conflict results in a marked set of situations/ conditions that impose several challenges to development processes, in ways that are often different from the effects of natural disasters or economic crises. For instance, while the poor are typically most vulnerable to natural disasters, in certain contexts conflict could disproportionately affect the rich, as they are made the targets of violence.

Far from being a comprehensive review, this section attempts to highlight key results on the relationship between conflict and development indicators that emerge from select papers in the nascent but rapidly expanding empirical literature on the subject. It reviews household coping strategies with regard to the various shocks induced by conflict, in a manner that situates the discussion in a similar theoretical framework as in Section I (focusing on risk-reducing, self-insurance and risk-sharing aspects). A deliberate emphasis is placed on strategies pertaining to children's education.

1. Risk-Reducing Strategies

Risk-reduction on the context of conflict refers to strategies that seek to eliminate or reduce households' exposure to conflict. Households may accomplish this by choosing to **relocate to areas less-affected by conflict**. It is very hard to distinguish between forced and voluntary displacement as a response to conflict; while relocation could be an active and rational choice made by households (in that they do so to escape persecution/ victimization), it is in fact a choice made under extremely compelling conditions. Further, even as displacement probably offers better survival and development prospects than staying on in a war-torn community¹, it is a costly coping strategy. Ibanez and Moya (2006) examine the welfare effects of displacement among IDP camps in Colombia and find that displacement results in asset losses, reduced income opportunities, earnings and consumption, and reduces households' access to informal risk-sharing. Korf and Silva (2003) find that in the case of the Sri Lankan civil war, displacement caused by the war created transitory poverty, and over the long run also precipitated households' decline into chronic poverty. The "risk-reduction" through displacement therefore is more notional, and relative to the less attractive/ feasible option of staying on in war-torn areas and facing greater survival risk.

Another strategy to reduce exposure to conflict risk (including direct victimization) is the **sale of visible assets** that are often used to identify the targets of violence. Assets such as livestock are

¹ Unfortunately no rigorous evidence is available on the impact of conflict-induced displacement per se, i.e. relative to the counterfactual case of staying on, to the best of the author's knowledge

often sold off so that they aren't used to identify targets, or are targeted (killed) directly by warring groups. This is distinct from distress sales of assets, as the primary motive is to reduce conspicuousness, and not to self-insure against income losses.

2. Self-Insurance

These strategies consist of measures taken to insure against income and other losses caused by shocks that households face in conflict. **Asset sales** may be one means through which households respond to conflict. In addition to the voluntary sales of assets to reduce conspicuousness (discussed above), and asset losses (of land, homesteads, livestock) due to displacement, households may resort to the sales of assets as a means of coping directly with conflict (Bruck 2004a, Donovan et al. 2003). This is a costly strategy as it reduces households' ability to deal with other shocks in the future. Unlike in the theoretical model presented in Section I, under conflict there may not always be certainty of when the household might return to "normal" conditions, in order to accumulate and sell assets strategically.

Another important coping strategy pertains to **reducing children's schooling**. A vast literature examines the relationship between conflict and human capital accumulation (see Justino 2011 for a review). Miguel and Roland (2006) find no effect of bombing during the Vietnam War on literacy rates in the country up to 2002. On the other hand, Chen et al. (2008) use a macroeconomic approach of cross-country studies and find that conflict affects secondary school enrolments but not primary-level schooling. Alderman et al. (2006) find that children exposed to the civil war in Zimbabwe in the 1970s had lower overall educational attainment and also entered the schooling system at later ages relative to those not affected by the conflict. Akresh and de Walque (2008) find that children exposed to conflict during the Rwandan genocide of 1994 completed on average half a year less of schooling than those who weren't exposed to the genocide, and were also significantly less likely to complete primary schooling. The effects are more pronounced for male children in non-poor households. In contrast, Shemyakina (2007) finds that in the case of Tajikistan exposure to conflict reduced the likelihood of school completion more for girls than for boys. Similar results are found by Chamarbagwala and Moran (2009) for Guatemala. The presence of armed groups is found to be associated with higher dropout rates, especially among the poorest households in Colombia (Duenas and Sanchez 2007). All these studies point to the fact that conflict induces strain on children's schooling and children's educational attainment is a casualty. Early dropout (suboptimal investment in schooling) is a costly coping strategy as it has grave consequences for long-term growth and development.

Several **mechanisms** underlie this response. Barerra and Ibanez (2004) set out the theoretical framework for understanding the channels through which conflict affects education outcomes and identify changes in household utility, the incidence of shocks and changes in the rates of return to education. Justino (2011) examines the literature on the mechanisms that link conflict with educational outcomes; specifically reviewing the role of child soldiering, intra-household labour reallocations, fear, changes in the returns to schooling, targeting of schools/teachers/students, and displacement. It is pertinent to note that the mechanisms identified in the literature pertain to both demand and supply side aspects of schooling. For example, the lower education attainment levels of conflict-affected girls in Tajikistan discussed previously (Shemyakina 2007) is explained as a result of heightened safety concerns for girls, and due to changes in the rates of return to girls' schooling; both factors affecting the demand for girls' education. On the other hand there is much evidence of conflict affecting supply-side factors lined to education; a recent Human Rights Watch report (HRW 2011) details the targeting of school infrastructure, teachers and students, and the use of school compounds as

hide-outs. While the impact of conflict on school capacity, in terms of overcrowding effects, disruptions and teaching quality has been commented upon in the literature, this topic has not been sufficiently explored through empirical analysis. Another vastly ignored area is the impact of conflict on children's resilience and cognitive abilities; factors that could potentially part explain the lower educational outcomes concomitant with the onset of violent conflict.

As in the case with natural disasters and economic crises, **altering household labour supply** is often a response to conflict, even as the exact motivations and mechanisms may vary. Jacoby and Skoufias (1997) find that in the case of India, negative income shocks (not driven by conflict) induce households to decrease children's schooling and enter the workforce to contribute to household income. The inadequacy of adult incomes is indeed mentioned as a main cause for the prevalence and persistence of child labour even when educational facilities are available (see Basu and Van 1998 for a theoretical explanation, and Edmonds (2008) for a comprehensive review of the empirical literature). However, the exact effect of a negative shock on children's work decisions depends not only on the negative income effect, but also on the direction and magnitude of the substitution effect (lowering of the opportunity costs of the enrolled child's time – i.e. the child wage) that operates on children's time use. For example McKenzie (2003) finds that during the Mexican economic crisis school attendance rates for 15 – 18 year olds in fact increased. Similar effects are found in the case of children in Peru who were in school during the 1988-1992 economic crisis (Schady 2004; Ferreira and Schady 2009). The exact direction and magnitude of child labour effects of shocks, including those induced by conflict need to be studied empirically in particular settings as they depend on several factors such as the level of violence and safety, the nature of the labour markets etc. Evidence on this specific coping strategy in conflict is sparse. Rodriguez and Sanchez (2009) find that in Colombia, while conflict has no effect on younger children's schooling and work decisions, for children above 12 a one standard deviation increase in the measure of lifetime exposure to armed conflict increases the joint likelihood of school dropout and workforce entry by 2.3%. Clearly more research is required to understand this relationship as child labour could be an additional source of vulnerability and reduction in future capabilities in the context of armed conflict. Equally important would be an understanding of children's participation in activities at home including domestic work, in-house production and caring, which through its effect of freeing up adult time can be thought of as an "invisible" workforce (Dodson 1999), and may also be induced by the need to substitute for roles of adults who are killed/ displaced by warfare.

Another route through which household labour allocations are altered in response to conflict is the **distribution of members across occupations and worksites**. Ibanez and Moya (2006) find that households displaced by conflict in Colombia switch jobs; moving from agricultural work in their home villages, to any available low-skilled work in urban centres that they relocate to, implying an ineffective livelihood switch as their skills in agriculture are not valuable in urban labour markets. Additionally, many households split up, lose members and face a heightened dependency burden. One means with which households deal with such effects of displacement is by distributing members between the more insecure hometown where traditional activities are pursued, and the safer destination where assured and remunerative employment opportunities may be limited.

Finally it is useful to note that labour supply responses in conflict may be conditioned additionally by the presence of **migration networks and households' access to remittance income**. Justino and Shemyakina (2010) find that remittances had a large negative impact on the labour hours supplied by men living in conflict-affected areas of Tajikistan. The two possible underlying mechanisms discussed by the authors include (i) the high fixed costs of workforce entry for women (which makes their employment status less responsive to external changes such

as remittances), and (ii) women's greater risk aversion. The role of remittances in supporting populations affected by conflict is important in many settings such as among Sri Lankan Tamils and in Nepal, although these have not been studied in much detail or very systematically. Further research is required to fully understand this coping strategy and

3. Risk-Sharing Strategies

Risk-sharing is a relatively under-researched theme in the literature on coping strategies under conflict. Two studies are notable exceptions. First, Bruck (2004b) finds that during the conflict in Mozambique informal risk-sharing mechanisms replaced market-based risk sharing. In fact, for many households, market-based coping mechanisms became so unattractive that they chose to exit markets entirely. However, he also notes that under conflict even informal risk-sharing mechanisms such as social exchange, may come under strain, especially for the poorest households. Similar results are found by Ibanez and Moya (2006) in Colombia; they observe that among populations displaced by conflict both formal and informal risk-sharing mechanisms break down.

The review above indicates that households face severe development challenges under conflict. We have discussed many of the impacts of conflict on several dimensions of human development (with a focus on children's education) and note that the damages caused to human development may be massive and irreversible. While the literature has identified many such effects, the exact mechanisms for many effects of conflict remain under-researched. This must remain a priority for future research. The review also indicates that **households adopt several coping strategies** in the face of conflict. These are often, though importantly not always similar to strategies employed under natural disasters and crises. The indicators of vulnerability to shocks induced by conflict may often be very different from conventional indicators of poverty and vulnerability.

III. Multiple shocks and the role of social protection programmes

The preceding sections emphasise that **coping strategies under conflict differ from those under other sources of shocks in that they are generally less effective in fully insuring against the shocks**. Populations affected by conflict are not fully able to reduce/insure against risks, face prolonged periods of uncertainty and also witness a breakdown of informal mechanisms. In specific cases they may also suffer from complete political and economic isolation and forced displacement. The latent stress and tension that result from exposure to violence (that may lead to the brutalisation of entire generations) can leave a legacy on several observable aspects of human life and endeavour. Mechanisms for coping with such effects are massively under-researched.

The **overlaps and differences in coping strategies** adopted under natural disasters and other shocks, and those adopted in the face of conflict are significant. While the theoretical and empirical literature so far examine these two sets of coping strategies in isolation, this distinction may often in fact be false. This is because several poor populations across the world simultaneously face natural disasters, economic crises and violent conflict and often respond to **multiple shocks** and adverse circumstances at the same time. A partial understanding of the hardships faced by such households by placing emphasis only on one source of vulnerability is problematic as it would also eventually translate into limited and ineffective public action to

address poverty and vulnerability in such contexts. The empirical literature on the subject of the joint effects of conflict and natural disasters on households is presently rather limited.

The role of **public action and social protection** is central to the actions of most governments and international development agencies for the purposes of redistribution, poverty reduction and human capital development. These efforts are also critical from the point of view of preventing the entitlement failure that results from successive shocks, alluded to in Section 1. Over the last few decades this concern has taken on several forms, ranging from global initiatives such as the Millennium Development Goals to national and local initiatives to create and strengthen safety nets and ropes. The details of such programmes and their effectiveness in general are far beyond the scope of the current study (for the interested reader, Grosh et al. 2008 provide a comprehensive review).

The above discussion makes an obvious invocation of the **role of the state and development agencies in supporting households in coping with the effects of war**. Without prejudice to the larger role of the state in providing security and preventing war, it is critical to also reflect on what governments/ agencies can do during and after war to support coping, building resilience and preventing, to the extent possible, damages to human capital. This is a problematic and complex responsibility, as governments are often active participants, inept bystanders or victims of war themselves. Their political/ moral legitimacy and ability to intervene to provide social protection during a conflict may be severely eroded. Nonetheless questions remain as to the role of governments, or at the very least, more “neutral” agencies including development and humanitarian organisations in supporting households in coping with the effects of war. Redistributive policies, to the extent that they are able to take off on the ground, may greatly reduce the burdens posed by violent conflict on populations rather than more military strategies alone.

It is however important to point out that the current understanding of the role and effectiveness of such programmes does not sufficiently engage with the **complexities present in violence-affected and politically fragile contexts**. Social protection systems in such contexts of multiple shocks often have an additional responsibility of seeking to “win hearts and minds”, whilst maintaining a modicum of humanitarian support in very challenging times. The preceding discussions on the susceptibility of the poor to multiple shocks, and exposure to conflict have shed light on some of the differences in responses and coping strategies to conflict viz. natural disasters and economic crises, indicating different models of household behaviour under different circumstances. Yet, when actors respond through social protection and other initiatives, the overwhelming homogeneity of such programmes, regardless of prevailing levels of strife, suggests that the models of change underlying these interventions assume equal validity in conflict-affected areas. The incongruence of the two (actual household behaviour – which varies, and the models of change underlying social protection initiatives – which do not account for such variation) can only be expected to result in sub-optimal if not entirely ineffective delivery, the non-achievement of development aims, and eventually in many cases, counter-productive outcomes.

Two examples of the rollout of post-disaster aid that did not sufficiently recognise the challenging political contexts include **post-Tsunami Sri Lanka** and in **Haiti after the 2010 earthquake**. The Post Disaster Needs Assessment conducted by the Government of Haiti (2010) with inter-agency support reported that the high level of political instability in Haiti before the 2010 earthquake intensified thereafter, and was accompanied by mistrust in the ability of the government’s administrative abilities to carry out relief efforts in the camps. The severe scale of death and destruction further encumbered the electoral process and the chances for

political reconciliation in the aftermath of the crisis. In post-Tsunami Sri Lanka, the Government had to strike a joint relief agreement with the warring LTTE in the North and East provinces of the country to be able to provide any relief to the Tsunami-affected populations of these provinces at all; whilst being aware of the very likely possibility of funds and material being diverted for other purposes. The joint relief mechanism would call for very high levels of political trust, and strategic coordination from neutral foreign governments; both of which were hard to attain in reality. Joint relief efforts did not fully succeed and several sections of the media reported mismanagement and diversion of funds in LTTE-held areas². These examples serve as a useful reminder to situate disaster coping and relief in the wider political economy framework that recognises the challenges of insecurity and instability. Similar evidence of **how levels of conflict affect public policy outcomes** is presented in two recent papers that examine heterogeneous impacts. Wald and Bozzoli (2011) examine the heterogeneous impacts of a Conditional Cash Transfer programme in Colombia across high and low conflict areas, and find that the programme was significantly more successful in increasing enrolment in conflict-affected areas than in others, but children from no conflict areas did more homework and missed fewer days at school. Alice Mesnard (2009) finds that in the Familias en Accion programme in Colombia, until a certain level of violence, the programme was able to prevent migration and encourages people to stay in their villages. However, as the level of conflict intensified, access to the programme enabled households to migrate outside. These are critical yet limited findings from a nascent literature that examines public policy outcomes across varying levels of conflict. These examples point to the general conclusion that providing humanitarian assistance, both short and long-term, in a setting of high violence and insecurity is often very different from more peaceful areas. These differences are not only in terms of the eventual outcomes of such programmes, but also involve administrative and operational aspects. In other words, the prevalence of high levels of violence can fundamentally reduce the capacity of the state to effectively deliver programmes to the “last mile” and the interaction between the state and citizens. This may take on several forms:

- Conflict may also fundamentally alter local social cohesion which may be critical to the success of several participatory programmes and also for microfinance initiatives.
- Community-based participatory targeting, or even administratively-designed poverty census surveys may be difficult to conduct in highly fractured societies in the presence/ immediate aftermath of violence. Doing so despite the straining circumstances (development programme administration “as usual”) would affect targeting efficiency, and ultimately, development outcomes.
- The non-availability of skilled and educated staff to deliver programmes as health workers, community volunteers, extension workers and other types NGO and project staff may be acutely felt as more educated people may migrate out of the-war affected areas.
- Further, these programmes are often themselves the targets of violence, as in the case of the ICRC in Pakistan. The INGO was compelled to scale back its activities due to repeated kidnappings of its ground staff and threats to more senior officials (ICG 2012). This precipitated withdrawal of many other INGOs and led to increased levels of fear among those that continued operations.
- Several assumptions that are implicit in the functioning of social protection programmes may not hold in conflict-affected areas. Most importantly the presence of well-functioning and integrated markets which is essential for the success of cash transfer programmes may not be true in such settings, and consequently cash receipts may not easily or automatically translate into higher consumption or better development

² See for example, ‘Where has the tsunami money to the east gone? Batticaloa lagging behind in relief efforts’ The Daily Mirror, 19 February 2005

outcomes. This is because conflict may directly affect the presence and functioning of markets, and in extreme cases result in economic isolation.

- Pre-existing deficits of physical and social infrastructure in conflict-affected areas, which are often exacerbated during conflict, may further prevent the rollout of programmes that increasingly require technology such as smart-cards, computerised beneficiary lists and electronic transfers of money.
- Conditions attached to several transfer programmes, most importantly Conditional Cash Transfer programmes to children for school attendance, may sometimes be impractical given the security considerations. Schools are often the targets of violence (see HRW 2011 for instance) and in such contexts conditioning cash transfers on an activity which essentially increases children's exposure to violence would be counter-productive.
- Similarly transfers of, or assistance for acquiring visible productive assets such as cattle may be well-meaning but could make the beneficiaries even more vulnerable to attacks. Alternatively, people may seek to liquidise such assets not to secure their livelihoods and consumption within the area, but to attempt emigration to escape from the conflict-affected areas. While this may enable the household, or at least some members to escape to safer places, it does not achieve the intended outcome of alleviating poverty and vulnerability in the area itself.
- Where the control of non-state armed actors over the general population is tight, even if the state is able to deliver benefits such as cash or in-kind transfers, there is a high risk of a part of the whole of such transfers being illegally appropriated by the armed groups, and any local elites that they may be aligned to. The well-meaning social protection programme could unwittingly become a source of revenue for the very forces that the state may otherwise seek to suppress militarily.

The above are among the main challenges that are likely to be faced in the design and implementation of development programmes in conflict-affected environments. While this list is mostly indicative, it signals the importance of a deeper understanding of the mechanics of programme implementation in fragile settings. While an emerging literature is addressing itself to these issues, on the whole they remain insufficiently explored in academic and policy spaces.

In **conclusion**, this review has surveyed a vast and growing literature on how poor households across the world face up to the challenges of poverty and vulnerability brought upon by idiosyncratic and covariate shocks. Many households simultaneously face shocks from multiple sources, including natural disasters, economic crises and conflict situations. Their responses to each type of shocks are similar in that several dimensions of household and individual well-being are gravely affected or threatened, even as households develop specific and different strategies to reduce or manage risks to different types of shocks. Conflict is a critical source of vulnerability for large populations, and notwithstanding a wealth of recent empirical contributions, remains an area for much-needed future study. Social protection programmes are seen as vital mechanisms to support households in coping with the effects of natural disasters, and to prevent entitlement failure. Their efficacy, however, depends greatly on the prevailing security situation. This is not sufficiently reflected in either academic debates or in policy action, and this review has attempted to argue for more focused study on the subject. It is hoped that future research will help researchers and policymakers better understand how the peculiarities of conflict can enable or impede the conditions for the successful implementation of social protection programmes. This would result in better informed policy interventions that effectively enable households to face up to the multiple sources of vulnerability that vast populations are confronted with.

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