

# COURTING CATASTROPHE? HUMANITARIAN POLICY AND PRACTICE IN A CHANGING CLIMATE



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## **Courting Catastrophe? Humanitarian Policy and Practice in a Changing Climate**

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Aditi Bhonagiri and Lutgart Lenaerts**

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# Introduction: Courting Catastrophe? Can Humanitarian Actions Contribute to Climate Change Adaptation?

Siri Eriksen,<sup>1</sup> Lars Otto Naess,<sup>2</sup> Ruth Haug,<sup>3</sup> Lutgart Lenaerts<sup>4</sup> and Aditi Bhonagiri<sup>5</sup>

**Abstract** Climate change introduces new challenges for humanitarian aid through changing hazard patterns. The linkages between climate change and humanitarian aid are complex. While humanitarian organisations deal directly with vulnerable populations, interventions and actions also form part of global politics and development pathways that are currently generating climate change, inequities and vulnerability. This *IDS Bulletin* represents a call for increasing engagement between humanitarian aid and adaptation interventions to support deliberate transformation of development pathways. Based on studies carried out as part of the ‘Courting Catastrophe’ project, we argue that humanitarian interventions offer several entry points and opportunities for a common agenda to drive transformational adaptation. Changes in political and financial frameworks are needed to facilitate longer-term actions; additionally, transformational adaptation demands moving from a mode of delivering expert advice and solutions to vulnerable populations, to taking up multiple vulnerability knowledges and making space for contestation of current development.

**Keywords:** humanitarian policy and practice, climate change, adaptation, transformation.

## 1 Introduction

Humanitarian crises appear dramatic, overwhelming and sudden. Aid is required immediately to save lives. On the face of it, linkages to longer-term climate change and adaptation appear far-fetched. However, the causes for humanitarian crises – such as the current food shortages in Ethiopia and on the Horn of Africa – are rarely sudden. Rather, they are the result of a multitude of factors and processes that cause and compound people’s vulnerabilities, built up over time. In many cases, academic researchers, humanitarian and development organisations have been warning about the risks – and increasing likelihood – of crises for months or even years before they take place.

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Drought or flood-related crises, like most other humanitarian and refugee crises, have fundamental social, political and economic drivers.

This *IDS Bulletin* examines the link between such short-term crises – and the humanitarian responses that follow – and adaptation to climate change. The articles form part of research carried out under the project 'Courting Catastrophe? Humanitarian Policy and Practice in a Changing Climate', funded by the Norwegian Research Council.<sup>6</sup> The research has been the result of joint thinking between academic and humanitarian organisations across the global North and South. Together, we have studied the practical ways in which humanitarian responses are affecting the prospects for adaptation to climate change in different geographic and policy contexts. Various types of humanitarian interventions – and the institutional and policy context in which they have taken place – were studied in seven countries across Asia and Africa (Bangladesh, Ethiopia, Kenya, Pakistan, Malawi, Nepal and Zambia). The two main overarching questions that framed the case studies were: What is the level of convergence between humanitarian interventions and efforts to support adaptation to climate change? And, what lessons can we draw from current experience on the prospects for reducing the risk of climate change causing increased burdens on humanitarian interventions in the future?

We start from the premise that vulnerability to climate change is driven by multiple and diverse social processes, such as dispossession of land, conflict, and loss or lack of employment opportunities. At its core, vulnerability can be considered a failure of entitlements (Ziervogel *et al.* 2017; Eriksen, Brown and Kelly 2005; Chambers 1989), linked to fundamental rights and access to resources. To adapt to climate change, there is increasing realisation that it is therefore not enough to focus on small, incremental changes that simply tinker with current processes and systems. While such action may give short-term respite, it will do little or nothing to remove the causes for vulnerability, and is ultimately insufficient to address the challenges we are facing (Ribot 2014), ultimately reproducing or even increasing the problem (O'Brien *et al.* 2015; Pelling, O'Brien and Matyas 2015). Thus, it is increasingly clear that deeper, more fundamental and *transformative* changes in the structures and processes that drive vulnerability are also needed (O'Brien 2012; Bassett and Fogelman 2013).

Transformation has become a prominent term in climate change discourse over recent years, but used in many different ways (Feola 2014). Following O'Brien (2012) and Nelson, Adger and Brown (2007), we here distinguish between two major types: 'outcome transformation' and 'deliberate transformation'. 'Outcome transformation' refers to how current development trajectories and greenhouse gas emissions are causing systemic change, often over short time periods, which in turn influences the ability or inability of people to cope with climate-related risks. Forced resettlement by governments, or migration due to sea-level rise, exemplifies such outcome transformation.

'Deliberate transformation' is about contesting rather than accommodating structural change, by striving to deliberately alter development pathways away from those that are fossil-fuel intensive, amassing wealth in the hands of the few, while producing inequity, poverty, disempowerment and environmental degradation (O'Brien *et al.* 2015). This *IDS Bulletin* calls for deliberate transformation as an approach to making humanitarian action and adaptation more closely aligned in tackling short- and long-term challenges brought about by a changing climate. This means going beyond current humanitarian efforts to strengthen coping or protect livelihoods, while focusing adaptation attention on addressing underlying root causes of vulnerability.

Our focus places us at the centre of a long-standing debate over reform of the humanitarian sector, and specifically on whether or not humanitarian aid should remain focused on its core mandate – saving lives in the time of crises – or also engage in longer-term concerns, including climate change (Bennett, Foley and Pantuliano 2016). Concerns have been raised that a widening remit for humanitarian aid may entail humanitarian organisations risking over-stretching funding and capacity, thereby diluting and weakening their core mandate. Others are pointing to the fact that unless broader concerns are addressed, humanitarian organisations will fail in their core mandate. The latter view is reinforced by substantial evidence of how humanitarian responses may be part of the problem, reinforcing or increasing vulnerability to climate-related and other hazards (Wisner 2001; OCHA 2009; Red Cross 2009). Over recent years, a number of humanitarian organisations have been shifting into longer-term activities, notably through extensive (if underfunded) work on disaster risk reduction (DRR), and more recently, a growing focus on strengthening resilience to climate change as a cross-cutting goal among various humanitarian actors (OCHA 2009; Red Cross 2009; Sphere Project 2011). While there is an increasing acknowledgement of the need to make such linkages, it is also clear that there are cultural, institutional and financial obstacles for making this work in practice. Our argument here is thus that there is a need to reinforce current efforts, while also going one step further. A focus on deliberate transformation is necessary because the 'perfect storm' of climate change and other large-scale changes means an increasing risk of being trapped in a disaster response mode and of being held 'hostage' to outcome transformations.

Adaptation policy and practice has a lot to learn from humanitarian practice. Humanitarian actors have decades of experience working directly with vulnerable populations in complex settings, which forms a good entry point for a deep understanding of the types of changes in social and political relations that deliberate transformation would require. At the same time, humanitarian aid, like any aid, inherently forms part of development pathways generating (or reducing) vulnerability. Critical here is that the form of transformation we envisage is about tacit political dimensions of empowerment, giving space to the voices of the most vulnerable. It is not about using crises

to push through top-down decision-making such as resettlement, land privatisation or decisions that forcibly shift people out of particular livelihoods. What is required is increased understanding of the way that humanitarian actions form part of development agendas, and in turn the opportunities for fundamental shifts to address root causes of vulnerability. Generating such transformative change is no small task. The articles in this *IDS Bulletin* intend to contribute to a better understanding of the challenges and opportunities of linking humanitarian aid with and supporting change towards sustainable and transformative pathways. Taken together, the articles show that the linkages between climate change adaptation and humanitarian aid are complex, context-specific and challenging.

The remainder of this introduction is structured as follows. Section 2 unpacks the intersections between climate change and humanitarian assistance, and the ways in which they overlap or differ in their responses to these twin challenges. Section 3 follows with a discussion of the types of transformations that may be needed, linked to experiences from case study countries. Section 4 concludes by highlighting the potential for, and elements of, a common agenda for change.

## **2 Articulating linkages between humanitarian assistance and adaptation to climate change**

What are the connections between climate change adaptation and humanitarian assistance? While humanitarian assistance is intuitively focused on the short term, the definition offered by Good Humanitarian Donorship (GHD) also refers to the longer-term aspects of strengthening preparedness for disasters: the aid and action designed to save lives, alleviate suffering and maintain and protect human dignity during and in the aftermath of man-made crises and natural disasters, as well as to prevent and strengthen preparedness for the occurrence of such situations (GHD 2003). Humanitarian assistance in this way overlaps with adaptation, which is commonly defined as 'the process of adjustment to actual or expected climate and its effects' (Agard and Schipper 2014: 1758).

Adaptation similarly has a short- and long-term aspect. While ultimately focusing on the long term, adaptation processes typically start with identifying current vulnerabilities and ways of reducing those, increasing the options and flexibility for responding to new and changing climate patterns. Managing climate risk, including changes in variability as well as longer-term shifts in climatic conditions, has been argued to be a necessary part of climate change adaptation (IPCC 2012). In particular, it is increasingly argued that adaptation is a process of managing interacting climatic and non-climatic stressors and changes, and that adaptation must target the social, political and economic conditions and processes that drive vulnerability (O'Brien *et al.* 2007). Often vulnerability to climate change is manifested in suffering and loss of livelihoods when faced with climate variability and events.

The *first* key intersection between humanitarian assistance and climate change adaptation is thus grounded in the fact that many disasters are climate-related. Climate change will act as a ‘risk multiplier’. For example, there is concern that climate change will lead to an increase in humanitarian crises linked to extreme events such as cyclones, droughts and floods (Challinor *et al.* 2016). There are particular concerns around migration, although the exact linkages are contested. Nevertheless, this intersection highlights that changes in variability and changes in extreme events will expose more people to hazards, leading to increased need for humanitarian aid. Any such aid must ensure that short-term measures do not undermine longer-term vulnerability reduction to climatic events.

*Second*, people are not only affected by disasters, but also how the disasters are responded to. How a disaster is handled is critical for how vulnerable a community may be to future climatic events. As pointed out by Wisner (2001), a climatic event that comes on top of or after a disaster, such as an earthquake or conflict, often intensifies a humanitarian crisis. For example, the earthquake in Nepal in 2015 killed around 9,000 people and destroyed several hundred thousand buildings (Reuters 2015). According to the Red Cross, 4 million people were still living in sub-standard temporary shelters a year after the disaster, making them very vulnerable to climatic events (IFRC 2016).

*Third*, climate change may contribute to social changes such as patterns of poverty that influence the nature of humanitarian crises. The fifth IPCC assessment report described how climate change, through undermining livelihoods and destroying physical and social infrastructure, may reinforce poverty traps and send transient poor groups into chronic poverty, as well as create new vulnerable groups, also in non-poor countries (Olsson *et al.* 2014). Such poverty and inequity often increases social vulnerability to any type of disaster, whether climate-related or not. This implies that humanitarian aid will often have to operate in an altered vulnerability landscape, such as in terms of new poverty and migration patterns in part driven by climate change.

*Fourth*, there is increasing recognition that climate change is a fundamental development problem because it is generated by development pathways that simultaneously produce greenhouse gas emissions, inequity and vulnerability. These same development pathways also drive humanitarian crises. Many argue that what is required is to move towards more climate-resilient development pathways, or development trajectories that combine mitigation of emissions, equitable development and reduced vulnerability (O’Brien *et al.* 2015; Pelling *et al.* 2015). There is a need to turn the policy focus to the underlying causes of vulnerability and risk, but also the development pathways themselves that create these risks. This highlights in turn that humanitarian aid is shaped by particular development paradigms, but also that actions contribute to particular development pathways, either reinforcing particular developments or supporting climate-resilient pathways.

While humanitarian actions often have the short-term saving of lives as a goal, and are intended to be 'politically neutral' in nature, not favouring any party, they inherently contribute to particular development trajectories by reinforcing or altering practices, social structures and norms. For example, the way that a humanitarian action such as food aid or DRR is implemented may either support local elite power relations or create alternatives through empowering marginalised groups in decision-making. Efforts to build resilient livelihoods may, for example, promote particular agricultural practices and support the sedentarisation of pastoralists, or it may create alternatives to such a development trajectory through supporting livestock and livelihood recovery. This has implications both for the social vulnerability of a population and for emissions in the longer term.

These issues have implications for how individual actions are carried out, but they also raise questions about whether changes are required to the way in which the humanitarian system operates. The normative principles of sustainable adaptation (Eriksen *et al.* 2011; Eriksen and Marin 2015) formed a backdrop for the various case studies described in this issue and their assessment of the extent to which the investigated actions and approaches contributed towards longer-term vulnerability reduction and more sustainable development pathways. These principles include: (1) recognise the context for vulnerability, including multiple stressors; (2) acknowledge that differing values and interests affect adaptation outcomes; (3) integrate local knowledge into adaptation responses; (4) consider potential feedback between local and global processes; and (5) empower the most vulnerable groups in development decision-making. Each of the studies used different methods relevant to the particular context and intervention that they were following, however. Together, they inform our understanding of the potential for humanitarian actions to contribute to adaptation that is transformational rather than incremental.

### **3 What transformations are required, and where**

To draw out the challenges and identify areas for more joined-up thinking around humanitarian aid and adaptation to climate change, we consider here the implications of recent changes in the humanitarian system. Over recent years, the humanitarian sector has been subject to wide-ranging debates over fundamental changes and reforms (Bennett *et al.* 2016). Marin and Naess (this *IDS Bulletin*) describe some of the shifts that have happened of relevance to adaptation, including an increased focus on building resilient livelihoods, DRR and early warning. Such shifts are taking place within a global context of multiple and increasingly complex uncertainties around climate change, social inequality, political instability, migration and refugees as well as a general disillusion with globalisation. Recent increases in the need for humanitarian assistance, with funding unable to keep pace with demand, have contributed towards renewed attention both on the question of efficiency of humanitarian interventions and of the future of the humanitarian system as a whole.



From the above, the question is whether these shifts ensure that humanitarian actions contribute to reducing, rather than exacerbating, longer-term social vulnerability and open up space for more sustainable development pathways. Talbot and Barder (2016) discuss to what degree the humanitarian system is not only 'broke' but also 'broken'. If the problem is that the system is broken, as opposed to just 'broke', there is a need for a fundamental reform. Evidence for the latter is in the fact that while humanitarian organisations are good at saving lives, there are persistent challenges in saving livelihoods. According to Talbot and Barder (2016), most of the humanitarian aid is spent on long-lasting, protracted crises rather than short-term emergencies, and humanitarian aid is not successful in having people graduate from being aid receivers to moving on to safer and more productive lives. Similarly, Marin and Naess (this *IDS Bulletin*) find that, among others, inertia of organisational cultures and financial models hamper humanitarian efforts in achieving their full climate change adaptation potential.

Thus, it is increasingly clear that adaptation to climate change requires a rethink, where adaptation is not treated as a benign exercise that can benefit all, or simply an extension of the humanitarian principles of non-partisanship (Marin and Naess, this *IDS Bulletin*), but as a process that benefits different people very differently, creating winners and losers in the process (Eriksen *et al.* 2011). There are many suggestions for how humanitarian policy and practice may be altered in ways that would coincide with the need for transformational adaptation. Clarke and Dercon (2016) recommend pre-agreed, pre-financed, rules-based emergency preparedness plans that are implemented immediately after a disaster. According to their view, such a standby financing model could be quicker, less expensive, better coordinated and probably contribute more towards longer-term resilience. This kind of pre-financed preparedness plan is not a new concept, but the timing and context, given climate change and other challenges, might now be more conducive for scaling up the idea of upfront preparedness planning accompanied by funding commitments. Costella *et al.* (this *IDS Bulletin*) describe how a forecast-based financing mechanism, which triggers pre-defined actions when an extreme event is likely to happen, enables anticipatory capacity at the scale of national strategies and planning.

Another potentially important measure in humanitarian interventions is social protection, which has been increasingly linked to adaptation and resilience (Béné 2011; Davies *et al.* 2009, 2013). Social protection programmes include a whole range of different activities such as cash transfers, food relief, public works programmes, input subsidies, food subsidies, school-feeding programmes, crop and livestock insurance and grain reserves (HLPE 2012). A study by the Overseas Development Institute (ODI) of 200 social protection programmes found that cash transfers in general give good results on many livelihood security indicators (Bastagli *et al.* 2016). Haug and Wold (this *IDS Bulletin*) argue that to reduce the future need for humanitarian assistance in Malawi, lessons learned from their social protection programme in the form of

input subsidies can prove useful in relation to multiple efforts towards achieving sustainable climate change adaptation.

Worldwide, better emergency preparedness is another topic of huge and increasing interest. The UN-negotiated Sendai Framework for DRR (2015–2030) provides a guide as to how countries can address disaster risk, emergency preparedness and recovery. This framework emphasises the need to understand disaster risk, the need to strengthen disaster governance, the need for investing in DRR for resilience and the need for enhancing disaster preparedness for effective response and recovery (UNISDR 2015). Creativity and action are needed in relation to ensuring that the humanitarian system has the capacity and capability to perform well in accordance with its mandate area. According to Talbot and Barden (2016), in the humanitarian field, there is little rigorous evidence about what works, few independent assessments and little information about what happened to the money as compared to long-term development assistance. Multiple institutions and organisations, with their related policies, strategies and action plans, often have different vulnerability understandings and priorities, as described in Pakistan (Nyborg and Nawab, this *IDS Bulletin*). It is often unclear how government institutions and policies prioritise their short- and long-term focus and how they coordinate with humanitarian and development organisations, and what the outcomes are for vulnerability reduction.

Hence, we can see that the humanitarian sector includes a diversity of approaches that can contribute to longer-term vulnerability reduction, but there is less understanding about how they may contribute to deliberate transformative adaptation. The studies in this issue highlight that there is a need for not only integrating longer-term approaches such as preparedness, resilience building and social protection, but that there is also a need to alter the way that any measure is carried out, with a clear view of their differential effects on groups and their contribution to transformative change. The studies in this *IDS Bulletin* illustrate that spaces exist within current humanitarian operations to increase consciousness of the effects of these operations on vulnerability contexts and development pathways. Widening the scope of existing vulnerability assessments is one such opportunity. There is rich knowledge of the drivers of vulnerability at the local level, but this information is not systematically incorporated into the decision-making processes of government, humanitarian and development organisations when designing adaptation activities. Most responses to disaster focus on the physical risk and pay little attention to the social drivers of vulnerability (Nyborg and Nawab, this *IDS Bulletin*).

It is critical that space is given, within each action and programme, for identifying the assumptions about what is good development that underlie an action (and which alternative views of development are ruled out). An important part of such reflection is questioning how 'vulnerable groups' are identified, including the assumptions about the most important factors that make people vulnerable in that specific context. Several studies in this issue suggest that distinguishing whose

authority is legitimised and which power relations are reinforced or challenged through an intervention is important in designing humanitarian actions. Mosberg *et al.* (this *IDS Bulletin*) question whether increased funding and focus on climate at county level in Kenya will necessarily help support adaptation; while humanitarian approaches in Isiolo County are changing in part due to climate change concerns, there is a lack of emphasis on differential vulnerability.

Benefiting from humanitarian and adaptation interventions is dependent on having access to networks of actors operating within both formal and informal channels of authority. Nagoda (this *IDS Bulletin*) similarly observed for the case of Nepal that food aid and accompanying development programmes tended to legitimise unequal power relations at the village level and dependence of the food insecure households on the wealthier households. Both Mosberg *et al.* and Nagoda (this *IDS Bulletin*) highlight that there is an urgent need, in adaptation and humanitarian actions alike, for a deeper understanding of the socio-political context in which these actions are deployed, else they risk entrenching power structures and the processes creating vulnerability in the first place. Practical ways to enhance such understanding is to give space within planning and implementation for multiple vulnerability knowledges and understandings of the problem to emerge. Furthermore, the influence of vulnerable groups in decision-making processes can be strengthened, such as ensuring participation at the village level of people of diverse social, economic and ethnic backgrounds, such as in committees administering food aid, in local DRR groups and in the governing of preparedness and anticipatory actions.

#### **4 Towards a common agenda for deliberate transformation?**

We have seen that the humanitarian sector shares many concerns and challenges with the adaptation and development communities in tackling climate-related hazards and risks: namely, a lack of attention to social drivers of vulnerability and multiple vulnerability knowledges; little (albeit growing) consideration of the socio-political context in which they are implemented; and a lack of explicit thinking about how interventions affect – and are affected by – power relations and development trajectories. It is clear from the project case studies that lasting solutions to humanitarian crises require that the root causes of vulnerability are identified and addressed, and that power relations – such as along gender, caste, and ethnicity dimensions – are vital drivers of vulnerability, and shape policy processes and outcomes. The studies also reiterate that without considering climate change, humanitarian interventions risk enhancing vulnerability rather than reducing it (Nagoda *et al.*, this *IDS Bulletin*).

The question is then, where are the opportunities for humanitarian action to contribute to deliberate transformation in order to support adaptation? Transformation means that in addition to change in practices, changes must take place to the way that decisions are made, and in world views, beliefs and understanding of the challenges that

drive decisions. Hence, identifying the opportunities for transformation demands reflexivity about 'the natural order of things' and the questioning of assumptions. For example, how do humanitarian actions reinforce or challenge ideas about who is considered 'vulnerable' or 'capable' in a society, and what is considered 'good development'? How can humanitarian actions contribute to or support the authority and legitimacy of the interests of particular actors while ignoring others? Are 'vulnerable populations' seen as helpless recipients of outside help and expertise, or do their understandings of the causes of vulnerability form the basis of humanitarian actions and real involvement in development decision-making?

We have argued that shifts within the humanitarian sector give new opportunities for long-term, joined-up approaches to support climate change adaptation. However, a change is needed in the political and financial frameworks within which humanitarian actors work, so that longer-term actions are possible. Rigid funding mechanisms tend to reinforce sector-wide approaches to vulnerability reduction. Donors often focus on measurable results from certain sectors, each with their own priorities and reporting requirements. The focus on measurable results also tends to favour technology-type and short-term 'measurable' actions rather than longer-term vulnerability reduction.

Beyond such a shift, however, a shift in thinking within organisations involved in both humanitarian and adaptation actions is required, from viewing adaptation as merely being 'longer-term', and to recognise vulnerability reduction measures – whether short-term or long-term in nature – as contested, political and with highly differentiated effects. Critical here is a recognition in the design and implementation of all actions that local vulnerability is highly socially differentiated, as are the causes of that vulnerability. There are no blueprint solutions as to how to 'do humanitarian aid' to support climate change adaptation. We need to go beyond thinking about a particular practical action – to thinking about the process behind that particular action; in particular, whose values, ideas, knowledge and decision-making power contributed to that action. Humanitarian interventions land in a context of what is politically possible, in terms of prevailing ideas of who is vulnerable and why, and what constitutes 'good and desirable development'. The actions are also shaped by conflicting ideas, priorities and interests of government, donor and civil society organisations with which they interact.

Transformative adaptation demands moving from a mode of delivering expert advice and solutions to vulnerable populations, to taking up multiple vulnerability knowledges and making space for contestation of current development. The case studies presented in this issue illustrate some ways in which humanitarian actions can do this. If successful in instituting such changes, the humanitarian system could be a driving force in creating transformative adaptation, showcasing to the development and climate change communities what adaptation that lets vulnerable groups participate actively in defining more

sustainable futures looks like, i.e. an emancipatory process as proposed by Manuel-Navarrete (2010) and Tschakert *et al.* (2016). The alternative to such proactive and deliberative vulnerability reduction is the risk that local adaptation is reduced to reactive measures to changing climatic conditions driven by rising emissions among wealthier populations.

Nevertheless, humanitarian action – even if effective in local vulnerability reduction – does not on its own constitute adaptation. It is only one of several types of actions in many spheres of societal development that make up adaptation. It is not our argument that humanitarian aid could or should ‘take over’ responsibility for climate change adaptation, but rather that humanitarian interventions inevitably contribute to affecting the prospects for transformational change, whether intentional or not. Actions either support or undermine climate-resilient development pathways. This does not mean that humanitarian aid necessarily has to be part of formal adaptation programmes, although that may be appropriate in some contexts. In many cases, in particular in sensitive conflict settings, humanitarian aid must remain politically neutral and distinct from government actions. There is also a danger that a focus on humanitarian actions and their interaction with adaptation places responsibility for responding to climate change on the most vulnerable groups. A delinking of adaptation from mitigation and the way that high emission and inequitable development pathways emerge both locally and globally easily leads to a bolstering – rather than a transformation – of the existing development pathways that can contribute to vulnerability and climate change. It is by illustrating alternative pathways locally and practical ways to support such alternatives, and the critical debates around them, that humanitarian actions can most usefully contribute to transformation.

### Notes

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# Climate Change Adaptation Through Humanitarian Aid? Promises, Perils and Potentials of the ‘New Humanitarianism’

Andrei Marin<sup>1</sup> and Lars Otto Naess<sup>2</sup>

**Abstract** A major reform of the humanitarian sector is currently under way, focusing increasingly on the prevention of crises rather than on providing relief once crises have occurred. This article examines whether and how this new humanitarian approach can also improve people’s ability to adapt to climate change. We identify three approaches central to this ‘new humanitarianism’, namely resilience, disaster risk reduction and early warning systems, and discuss them in relation to broad principles for adaptation to climate change. We find that, despite encouraging potential and a lot of common ground, key barriers and hindrances still exist, such as inertia of organisational cultures and existing financial models. We suggest that realising this potential will require acknowledging and addressing the multitude of local social, historical and political inequities that drive both humanitarian crises and vulnerability to climate change.

**Keywords:** ‘new humanitarianism’, resilience, disaster risk reduction, early warning systems, inequality, climate change, climate change adaptation.

## 1 Introduction

Over the past decade, international humanitarian aid has undergone major structural reform, aimed at responding more effectively to changing, and steadily more complex, humanitarian crises (Bennett, Foley and Pantuliano 2016; UNOCHA 2011). Climate change represents one of the key factors that has challenged traditional humanitarian aid, in that it is changing the nature and severity of humanitarian emergencies. There is increasing recognition among humanitarian actors of the importance of adaptation to climate change, and in particular resilience. Resilience features prominently across all major post-2015 frameworks, including the Sustainable Development Goals (SDGs), the Sendai Framework for Disaster Risk Reduction (Sendai Framework), the Paris Agreement on Climate Change, and the

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World Humanitarian Summit framework (WHS) (Peters *et al.* 2016). In response, humanitarian actors – government, intergovernmental and non-governmental – are increasingly integrating support to adaptation and resilience in their policies and programmes (e.g. UNOCHA 2011).

The background for this change is an increasing acknowledgement that traditional, response-driven actions are no longer appropriate; on the contrary, they may reinforce or increase vulnerabilities to climate-related hazards (Anderson and Woodrow 1998; Wisner 2001). Examples may be rebuilding houses in areas exposed to increasing climate-related risks, or providing seeds that are inappropriate to future climate change. However, we know less so far about whether and how these approaches are contributing to long-term adaptation goals. This article examines some common approaches to adaptation among humanitarian actors and their implications for adaptation.

Our inquiry comes at a time when the long-standing separation between the traditional province of humanitarian work (post-disaster response), and the normal purview of development interventions (poverty reduction, in the context of vulnerability and risk) is gradually being removed. Our guiding research question is whether and how this new humanitarian approach may contribute to climate change adaptation, and what implications this may have for research as well as policy.

The article investigates this question by examining whether current interventions (by humanitarian agencies and governments) match criteria usually identified as essential in facilitating climate change adaptation. We look at adaptation as ultimately being about addressing the social, economic and political root causes of vulnerability to climate variability and change. To do this, we use written (published and 'grey') sources from humanitarian agencies on approaches, programmes and practices, and compare these with recent academic literature on climate change adaptation.

## **2 The 'new humanitarianism': its roots and present form**

Weather-related events are increasingly seen by humanitarian actors as occurring against a background of other debilitating circumstances (GHAR 2013). An estimated two thirds of current disasters are related to climate hazards (*ibid.*). Climate-related hazards were, for example, responsible for 98 per cent of all displacements caused by disasters in 2012, and 93 per cent in 2011 (*ibid.*). Monsoon floods in India and rainy season floods in Nigeria displaced 7 million people in 2012.

The recognition of deeper social, political and economic factors acting as drivers of vulnerability and causing disasters has a long history (O'Keefe, Wisner and Westgate 1976; Hewitt 1983; Blaikie *et al.* 1994), yet for the humanitarian sector this acknowledgement is relatively recent. In the late 1980s, the term 'complex emergencies' was coined in humanitarian and development circles in order to signal the appearance of a new kind of complex humanitarian crisis, characterised by unprecedented levels of

poverty, political insecurity, internal conflict, state disintegration and internal population displacement (Duffield 1994). It became increasingly obvious at the time that in order to address such complex issues, a normative and theoretical reform was necessary, one that would account for the political decisions connected to humanitarian interventions (or lack thereof).

The changes in the humanitarian agenda and mandate should also be seen in the context of an increasing number of humanitarian crises that require radically increased and extended interventions. This situation has had an impact on humanitarian policies and strategies over recent decades (Borton 1993; Duffield 1994; Macrae 2002; Nan 2010; Taylor *et al.* 2012; Bennett *et al.* 2016). Humanitarian actors have come to look at themselves in a different context, as perhaps more important actors than previously, with the ability to prevent such crises if involved over a longer period of time in a given location.

The present impetus to abandon linear, non-systemic approaches to humanitarian emergencies (Ramalingam 2014) takes the insights of the 1990s further and builds on some key elements increasingly acknowledged in humanitarian practice, namely that (1) more preventive action is needed, moving from reaction to prevention and preparedness; (2) there is a need for improved collaboration with development aid, to help address underlying vulnerabilities and prevent crises from escalating into acute situations of need; and (3) multi-year humanitarian funding cycles as well as new programming ideas, such as cash transfers at scale in times of crisis, are necessary (GHAR 2013).

This type of thinking has already been implemented in some concrete ways. For example, the so-called ‘Nairobi Strategy’ identified the 2011 crisis in the Horn of Africa as having been ‘partly determined by a prolonged under-investment in drought-prone areas’ and the solution to similar crises to be the building of resilience to economic and climatic shocks’ by combining relief, recovery, reconstruction, innovation, and long-term sustainable development (TNS 2011: 3).

A series of key humanitarian actors have already followed the general strategy laid out in Nairobi within their own specific efforts. For example, OXFAM supports longer-term development programmes and responses to forecasts (GHAR 2013), the United Nations Office for the Coordination of Humanitarian Affairs (UNOCHA) focuses on early warning and resilience-building projects (including cash transfer programming), while the EU has launched its ‘Supporting the Horn of Africa’s Resilience (SHARE)’<sup>3</sup> in response to the delayed response to the 2011 crisis, and in the UK, the Humanitarian Emergency Response Review (HERR) was a key policy document (HERR 2011).

These concrete efforts are a direct effect of the Humanitarian Reform Process begun in 2005 by the UN Emergency Relief Coordinator and the Inter-Agency Standing Committee (IASC). The reform aimed to improve the response capacity, accountability, predictability and partnership of

the humanitarian system. It is against this background (and a few major 'failures' of the humanitarian system in fresh memory: the 2010 Haiti earthquake, and the Pakistan floods the same year, as well as the Horn of Africa drought in 2011) that the so-called 'Transformative Agenda' (TA) was developed in December 2011 and the 'Transformative Agenda Protocols' in December 2012. The TA was developed by the IASC as a set of concrete actions aimed at changing the way in which the humanitarian community responds to emergencies, by improving the strategic planning, timeliness and effectiveness of the collective response, more effective coordination and improved accountability to affected people.

This new thinking acknowledged that future large-scale emergencies will also be connected to climate change. At the same time, it underlined that the impacts of these emergencies (and indeed their emergence) are to a large extent also affected by violent conflicts, communicable diseases and pandemics (e.g. HIV/AIDS), and a general increase in vulnerability due to poverty, hunger, unemployment, displacement and migration (IASC 2011).

In Section 3, we discuss how the general principles of the integrative, preventive humanitarianism is practised and envisioned in relation to broad principles for adaptation to climate change. We illustrate this with a range of humanitarian conceptualisations of humanitarian work that hold potential synergies with climate change adaptation.

### **3 Approaches used by humanitarian actors relevant to climate change adaptation**

#### **3.1 The resilience approach**

Resilience is an increasingly popular term among humanitarian actors, central to the reform agenda and present humanitarian thinking. Resilience originates from ecological systems work (Holling 1973), but its use has over recent decades been extended to social-ecological systems, defined as 'the capacity of a system to absorb disturbance and reorganize while undergoing change so as to still retain essentially the same function, structure, identity, and feedbacks' (Walker *et al.* 2004: 5). Over the past 10–15 years, resilience has become increasingly dominant as the policy goal for work on adaptation to climate change, albeit with a wide variety of definitions (Brown 2015; Bahadur, Ibrahim and Tanner 2010). Similarly, resilience has a wide range of definitions and understandings across the humanitarian landscape. One definition, used by UNOCHA, refers to resilience as the ability of communities and households to endure stresses and shocks. Resilience, in this understanding, is an end state that implies that vulnerable communities and households have (1) the capacity to maintain basic functions and structures during stresses and shocks; (2) access to a range of skills and resources that allow them to adapt to changing circumstances; and (3) the ability to anticipate, prevent, prepare for and respond to stresses and shocks without compromising their long-term prospects (UNOCHA 2011).

Nevertheless, programmatic activities that aim to build resilience of vulnerable communities and households are not new. They may include activities that fall into one or several of the categories of: disaster risk reduction and emergency preparedness, livelihood support, or social protection, including the provision of basic services (*ibid.*).

Despite continued critical theoretical evaluations of the term and its political implications for humanitarian actions (e.g. Levine 2014), resilience is already being applied practically in humanitarian work. The government of Australia started an ambitious reform of their humanitarian efforts in 2009. This is illustrated for example in their DRR policy for Australian aid programmes (GHAR 2013). The stated goal of the policy is to reduce vulnerability and enhance resilience of countries and communities to disasters, and Australia's Pacific Risk Resilience Programme aims to reduce the Pacific Islands' climate change-related risk and improve their resilience.

The EU has embraced a similar approach in its resilience policy (EC 2012) and its follow-up Action Plan for 2013–20 (EC 2013), identifying resilience as a necessary connection between development and humanitarian assistance, and an analytical linchpin to both emergency and development support. Japan is also important in agenda-setting for resilience. Its earlier leading role on DRR within the work of the Japan International Cooperation Agency (JICA) is now being focused on connecting DRR to resilience. This is also reflected in Japan hosting the Third World Conference on Disaster Risk Reduction in 2015,<sup>4</sup> which aimed to establish resilience as a key element of the post-Millennium Development Goals framework. The German Federal Ministry for Economic Cooperation and Development (BMZ) also has resilience as a central guiding principle enabling the integration of humanitarian aid and development cooperation into medium-term programming (up to four years) (Levine and Mosel 2014). Finally, Britain's Department for International Development (DFID) also uses resilience thinking in testing different approaches for longer-term (also up to four years) humanitarian programming in protracted crises (for example in Ethiopia, Yemen, Democratic Republic of the Congo or Sudan) (DFID 2015).

There are also more specific efforts of long-term engagement in humanitarian assistance thinking, with or without clear connections to resilience. For example, the UN launched in 2012, for the first time, a three-year Consolidated Appeals Process (CAP) for Somalia, aimed at allowing humanitarian agencies to invest more in relatively longer-term planning and preventive measures. The Somalia CAP has a planning horizon of three years (2013–15), allowing for more predictable financing against chronic crises and resilience building. Usually, such CAPs are annual, and although they may also reflect the new rhetoric and focus on resilience (e.g. FAO 2013), they do not have the same possibility to plan for 'long-term' resilience building or vulnerability reduction. Nevertheless, we should also observe that a three-year programme may be too short to significantly improve the

**Table 1 Important differences and signs of convergence of disaster risk reduction (DRR) and climate change adaptation**

Differences		Signs of convergence
DRR	Adaptation	
All hazard types	Climate and weather-related hazards	DRR integrating climate change impacts on hazard frequency and magnitude and on vulnerability and planning interventions
Practice of DRR strongly influenced by post-disaster humanitarian assistance	Origin in natural science/international climate policy process	Mainstreaming into development sectors and increasing number of specialists working on both adaptation and DRR
Present and near future: existing risks based on assessment of local experience and history	Short-, medium- and long-term future – uncertainty and new risks from the impacts of climate change	DRR increasingly forward-looking and CCA increasingly using existing climate variability as the entry point
Traditional and local knowledge is the basis for community-based DRR and resilience building	Traditional and local knowledge insufficient? Climate change introduces new/changed risks	Growing number of examples where local knowledge and meteorological/ climatological knowledge being considered side-by-side to inform DRR interventions
Risk a function of hazard, vulnerability, exposure and capacity	Vulnerability often used interchangeably with physical exposure	IPCC SREX* special report on managing the risks of extreme events and disasters for advancing adaptation (2012)
Full range of established and developing tools	Range of tools under development	Significant progress made in integrating learning from DRR into adaptation tool development
Incremental development, moderate political interest	New, emerging agenda, high political interest	Disasters more often seen as linked to climate change, and actors recognising the need to consider both simultaneously
Funding streams often <i>ad hoc</i> , unpredictable and insufficient	Funding streams increasing, though problems of delivery	DRR community demonstrating signs of being increasingly savvy in engaging in climate change adaptation funding mechanisms

Note SREX stands for Special Report on Managing the Risks of Extreme Events and Disasters to Advance Climate Change Adaptation.

Source Mitchell, van Aalst and Silva Villanueva (2010).

long-term resilience of vulnerable groups, even if it can significantly affect the pathways that are chosen and the possibility for meaningful adaptation. Such longer-term CAPs have surely added some leeway to humanitarian programmes in relation to major events, but since the end of 2013 have also been discontinued and replaced instead with appeals through the Humanitarian Programme Cycle (HPC), which is an explicit part of the Transformative Agenda. The HPC approach is still new, so it is not clear to what extent it can actually facilitate longer-term funding for protracted crises. There is at least some evidence that the 'needs assessment' element of the HPC is not yet being implemented by some major humanitarian organisations (Olin and von Schreeb 2014).

Still, even if the needs assessment is going to be implemented at large scale, there is little encouragement to believe that funding horizons for protracted crises can easily extend beyond a few years (perhaps three, as in the case of CAPs).

### 3.2 Disaster risk reduction

Disaster risk reduction (DRR) is another important and long-standing approach in humanitarian interventions. Disasters are seen herein as the outcome of continuously present conditions of risk, while disaster risk comprises different types of potential losses, of lives, health status, livelihoods, assets and services (UNISDR 2009). Disaster risk *reduction* is seen as reducing disaster risks through managing the causal factors of disasters, for example by reduced exposure to hazards, lessened vulnerability of people and property, and improved preparedness for adverse events (*ibid.*).

Some examples of current humanitarian approaches are illustrative of the approach. The governments of Netherlands and Sweden specifically mention DRR as a priority in their humanitarian policies. The Swedish International Development Cooperation Agency (SIDA), for instance, considers reducing risk as a key component of humanitarian work to be achieved by linking relief, recovery and development interventions. Resilience for SIDA (Örnéus and Magnusson 2012) is to be based on this linking at both field and policy level. The connection between DRR and the resilience approaches are also illustrated in DFID's approach (DFID 2005). Their scaling up of aid in Pakistan, for example, included a US\$50 million project called 'Resilience Support to Pakistan', aimed at supporting a better response to natural disasters by building resilience (*ibid.*).

Nevertheless, integration may be difficult due to significant differences between DRR and climate change adaptation. Some of the identified difficulties include their focus on different spatial and temporal scales, their knowledge bases and their norm systems (Birkmann and von Teichman 2010). Other challenges are incentives, institutional and funding structures that operate differently in humanitarian aid and development planning (*ibid.*). Further challenges include wrong assumptions about the capacity of development programmes to reduce risk, as well as inadequate exposure to, and information about, disasters among development workers (DFID 2005; Mitchell *et al.* 2010). Table 1 summarises some important differences and convergences between the two approaches.

Some have argued that post-disaster humanitarian assistance can in fact *increase* vulnerability in the long term (Anderson and Woodrow 1998; Wisner 2001). This can happen if there are conflicts of interest between the will to prevent and reduce risk on the one hand, and the political and economic incentives of national governments to pursue development strategies that expose some categories of people to risks on the other. We know from studies of climate change adaptation that this is a challenging overlap, as climate change adaptation is often

mainstreamed *into* the current model of development, rather than challenging intrinsic forms of structural inequity and vulnerability (Eriksen and Marin 2014).

Still, there are encouraging developments in the humanitarian sector. The potential for addressing both humanitarian crises and climate change adaptation, through the DRR approach, is clearly recognised by some major humanitarian actors (e.g. IFRC 2014), who propose a mainstreaming of these concerns into policies and planning of their National Societies. One remaining challenge may be to match these concerns with national development strategies and priorities.

### 3.3 Early warning systems

Early warning systems are another commonly used approach among humanitarian actors, and an integral part of the Transformative Agenda. They comprise a range of forecasting initiatives used to identify the likelihood of specific threatening events or conditions to occur in specific locations in the near future. Much of the early warning focus has traditionally been placed on forecasting climate-related and other 'natural' disasters, with more recent attention being given to humanitarian crises such as ethnic conflicts, political violence or forced migration. Despite obvious differences between 'natural' and 'social' phenomena to be forecast, there is a significant overlap between the approaches used to forecast both types of phenomena (Schmeidl and Jenkins 1998). The early warning systems first came to prominence during the 1980s, with increased efforts from the late 1990s in the wake of more variable and extreme weather, notably related to El Niño events. Among the early warning initiatives relevant to the Transformative Agenda are the United Nations IASC's Humanitarian Early Warning Service (HEWS), the Food and Agricultural Organization of the United Nations' (FAO) Global Information and Early Warning System (GIEWS), the Forum on Early Warning and Early Response (FEWER), and the Famine Early Warning System (FEWS).

All these initiatives bring together academics and policy analysts involved in humanitarian relief to develop early warning signals and information. These systems and initiatives are reflected in the work of most major humanitarian actors, at least in some of their programmes and specific units. Briefly, the approach is that 'forewarned is forearmed', meaning that UN agencies have invested in early warning systems that can give them the information they need, delivered in the best possible way.

Preparedness buys the humanitarian community valuable time, allowing them to respond swiftly and effectively to save lives, crops, property, important infrastructure (e.g. in education and health care), thus stopping a bad situation from becoming worse (Standley 2011).

In practice, the strategy can be to have supplies stocked in key points of a region, accessible to all partners, as the quickest way to get emergency relief to a disaster zone. For instance, the UN has established a Humanitarian Response Depot for Latin America and the Caribbean in



Panama City, as well as the International Federation of Red Cross and Red Crescent Societies (IFRC), and the Spanish Cooperation also has a depot in the city. Among others, this strategy has enabled more rapid delivery of relief supplies such as food, medical help and infant formula immediately after the earthquake that hit Haiti in January 2010 (*ibid.*).

In other cases, this type of preparedness takes the form of bilateral or multilateral government agreements for contingency/emergency plans. UNOCHA collaborated with the Southern African Development Community (SADC), establishing a regional inter-agency response plan which was used when several SADC members (Mozambique, Malawi, Zimbabwe and Zambia) were hit by severe floods in 2008 (Standley 2011). Others have shown that early warning systems for disease outbreaks or impacts of heatwaves can be developed based on weather indicators such as seas' surface temperatures and rainfall (Patz *et al.* 2005).

It is clear, however, that while they play an important role in averting humanitarian crises, early warning systems are far from sufficient. Evidence from the 2001 famine in the Horn of Africa is rather telling with respect to the functioning of early warning systems. While these systems seemed to have provided actionable high-quality information many months in advance, there was a lack of incentives to act upon them due to a combination of factors that included decision-makers' discomfort with the probabilistic nature of the warning, the Al Shabaab presence in the area, and US anti-terrorist legislation (Hillbruner and Moloney 2012). Importantly, there were also significant failures in the adequacy of information provided by some early warning systems: in some cases, because they did not provide sufficiently analysed or interpreted data (only 'raw' data); in other cases, because they were not timely enough or not sufficiently integrated across the region (Ververs 2012).

The above examples illustrate two shortcomings of the potential of early warning systems to support adaptation to climate change. On the one hand, a dichotomy seems to persist between forecasting for 'natural' disasters relief and forecasting humanitarian crises (Schmeidl and Jenkins 1998; de Leeuw, Vis and Jonkman 2012). There is still an assumption that 'natural' disasters are easier and more straightforward to both predict and respond to effectively. If climate change adaptation is treated as reacting to natural, objective events, it is likely to encourage a type of early warning that treats hazards as natural phenomena that are equally distributed among geographical units of different sizes, or among different categories of local inhabitants. We know today that this is not the case, and that neither disasters nor adaptation are in any way 'natural', benign or equally distributed.

#### **4 Filling two needs with one deed? Humanitarian approaches and climate change adaptation**

Complex humanitarian crises have now for three decades exposed the fact that traditional relief packages and staff-intensive single interventions are inadequate in themselves. This has led to calls for new

approaches that instead of re-supplying disaster-struck areas to 'get back to normal', aim at long-term support, while at the same time accepting some state of lasting turbulence and acknowledging the culture, history and fast-moving politics inherent in the crises (Slim 1995). The author called this approach 'development relief' (*ibid.*: 121).

The conceptual affiliation between such new humanitarianism and recent approaches to both development and adaptation is also underscored by the centrality of 'resilience' across both areas. Moreover, 'resilience' thinking has also become an important element of thinking around climate change adaptation. Resilience is often specifically presented as a potential bridging concept between climate change adaptation and sustainable development (IPCC 2012; Denton *et al.* 2014; USAID 2014). With the emergence of the so-called third generation of adaptation studies, which consider climate change adaptation as robust decision-making under uncertainty (WRI 2011), climate change adaptation and development have started to become more integrated particularly through the idea of resilience.<sup>5</sup> Resilience can be understood narrowly as the ability of a system to maintain its structures and functions in the face of shocks and stressors, or more broadly, as is increasingly the case also in humanitarian policy and practice, in terms of the ability of people, communities and systems to transform in the face of shocks and stressors (Béné *et al.* 2012; Peters *et al.* 2016). While resilience is a contested concept, one of its strengths is arguably as a 'boundary object' in its ability to communicate across the DRR and adaptation communities, with numerous efforts towards a better integration between the two (Baggio, Brown and Hellebrandt 2015; Harris and Bahadur 2011; Schipper and Pelling 2006).

The increasing popularity of resilience may also be seen as a recognition of the necessity of integrating the short- and long-term perspectives, the systemic and the local. Underpinning the everyday use of resilience are useful theoretical reflections that point to resilience as relying on both fast and slow variables and adaptive cycles (e.g. Walker *et al.* 2012; Holling and Gunderson 2002). This is also reminiscent of what Ramalingam identified as a pressing need for humanitarianism to move away from 'short-term, linear, and "non-systemic" thinking' (2014: 20).

Others have also pointed to the need for integrating the current three most important global processes for development-related topics: (1) the redesigning of the framework for disaster risk reduction; (2) the drafting of the SDGs; and (3) the United Nations Framework Convention on Climate Change (UNFCCC) attempt to draft a legally binding treaty for dealing with climate change (Kelman 2015). It is perhaps this convergence of interests and the timeliness of such efforts to interrogate and reform current development pathways that hold the greatest promise and potential for re-orienting humanitarian aid at this particular socio-historical juncture. Yet, for this to happen, there are some substantial discussions that are needed, but which do not as yet figure prominently, at least publicly, on the humanitarian agenda.

Some of these discussions will have to interrogate fundamental principles that have always guided humanitarian work. Other discussions will have to address structural reforms. From the first category, one obvious element is the principle of impartiality and the focus on ‘communities’. This is potentially problematic in that it obscures varied and complex inequities between a range of actors who are differently exposed to proximate causes of disasters (droughts, floods), as well as variously constrained by the structural, root causes of vulnerability.

Although impartiality as a principle is moderated with assessments of needs, there are potential pitfalls there too. The main technical approach to deliver aid based on differentiated needs, is the Needs Assessment Framework and Matrix (NAFM). One limitation of the NAFM is that needs may be assessed in relation to a particular ‘disaster’, and it may therefore be difficult to use the NAFM preventively. This is sometimes recognised by aid agencies and funders, which acknowledge that the NAFM has a sectoral view, based on indicators that may not provide an accurate enough picture of the dynamics in the communities: ‘[P]ockets of need are identified which support a specific project proposal, but the overall picture of relative need across a crisis is very patchy’ (Willitts-King 2006: 27). Other technical tools for assessing needs are Rapid Assessment Format, and Capacities and Vulnerabilities Assessments (CVAs). While the former is rather reactive and geared towards relief, CVAs have the potential to address structural vulnerabilities by investing in supporting longer-term development programmes, as suggested in more recent approaches (e.g. UNOCHA 2007: ix). Still, in order to achieve this, an elaborate assessment of the social context is required, and therefore funding and programming models have to allow for these kind of analyses that perhaps entail closer collaboration with social scientists.

If humanitarian interventions (or indeed, adaptation interventions) focus on building the resilience of a ‘system’, there is a risk that interventions may overlook the socially differentiated nature of vulnerability and reinforce entrenched inequities and other root causes of vulnerability, even though the resilience of the overall system may be increased. After all, resilience does not tell us much about any normative principles underlying the interventions. Addressing this conundrum may also run counter to the humanitarian principle of operational independence, i.e. that humanitarian actions must be autonomous from the political, economic or military objectives of other actors. We propose that long-term humanitarian engagement is more likely to succeed by engaging with larger-scale development strategies and structures, including challenging structural constraints such as government development policies and programmes.

The second category of discussions that are needed are those concerned with the operation of funding and programming. Part of this discussion is the time-horizon that is needed for engaging meaningfully with resilience building, livelihood security, or climate change adaptation

goals of humanitarian interventions. The way we perceive the situation today is that, despite intentions to be involved in the long term, many humanitarian actors are still constrained by the funding mechanisms of project-based interventions that run for a few years only.

## 5 Conclusion

This article has examined whether and how recent changes in humanitarian approaches, from responsive to increasingly preventive modes and ways of working, can contribute to climate change adaptation.

Our review suggests that the 'new humanitarianism' emerging over recent decades holds important potential for contributing to climate change adaptation due to a close conceptual match between humanitarian principles that focus on vulnerable groups, and adaptation approaches that address underlying vulnerabilities. At the same time, realisation of this potential is limited by the operation of humanitarian organisations within their current negotiated spaces at national and international levels, and by power struggles over influence and resources.

We argue that humanitarian approaches emerging from the UN-led Transformative Agenda make it necessary to address local social, historical and political contexts in new and different ways from previous one-time efforts aimed at 'restoring order'. Such involvements engender power negotiations and struggles over the meaning of what is desirable both in terms of development pathways and of climate change adaptation. These meanings will inescapably have different arrays of supporters and varying degrees of implementation. The boundaries between such categories as vulnerable, resilient or adapted should therefore be understood as permeable, shifting and open to contestation. Such processes of contestation are also influenced by national and international dynamics. This, we propose, begets difficulties for humanitarian interventions that often ignore the root causes of humanitarian crises, or of vulnerability to climate change.

In addition, we propose that for humanitarian interventions to play a role in climate change adaptation, they need to reflect critically on their influence on domestic development pathways. Humanitarianism cannot be assumed as removed from everyday political struggles and insulated from them due to its principles of non-partisanship and operational independence.

The humanitarian reform of the last decade contains the theoretical possibilities, practical leverage power, and knowledge for progressive change located at the interface between humanitarian aid, development aid and climate change adaptation. The current challenge is to include in this reform some difficult discussions regarding the political nature of humanitarianism.

## Notes

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- 2 IDS (l.naess@ids.ac.uk).
- 3 A €270 million joint humanitarian-development programme aimed at building resilience through recovery from drought and building resilience against acute and lasting emergencies.
- 4 [www.wcdrr.org](http://www.wcdrr.org).
- 5 First generation adaptation studies focused on discrete adaptation to specific climatic change, while second generation studies focused on ‘vulnerability first’.

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# Scalable and Sustainable: How to Build Anticipatory Capacity into Social Protection Systems\*

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**Abstract** Climate shocks contribute to a significant share of the humanitarian burden, and are a key factor in increasing poverty and food insecurity. Social protection is increasingly recognised as an instrument to help build resilience to climate risks through long-term, large-scale national systems. However, most experiences to date have focused on social protection's role for chronic needs, or at best, shock-response, rather than on anticipation and prevention. This article argues that social protection can support more effective resilience building at scale by integrating early action and preparedness. We propose a concrete solution, namely linking a Forecast-based Financing mechanism to a social protection system to enable anticipatory actions based on forecast triggers and guaranteed funding ahead of a shock. Such a system may enhance scalability, timeliness, predictability and adequacy of social protection benefits. Key considerations for success of this emerging approach include sound analysis of forecast, risks, cost and benefits, and ring-fenced funding.

**Keywords:** social protection, Forecast-based Financing, early warning, early action, anticipatory capacity, climate risk management, resilience.

## 1 Introduction and rationale

Climate shocks represent a significant part of the humanitarian burden and are a key factor in increasing poverty and food insecurity. Current trends in climate change could contribute to doubling humanitarian needs and some estimate that it could force more than 100 million people into extreme poverty by 2030 (UN 2016; Hallegatte *et al.* 2016).

Social protection is becoming increasingly recognised as a tool to help households and communities prevent, cope with and adapt to the impacts of climate shocks through longer-term, more sustainable systems (Davies *et al.* 2008; Kuriakose *et al.* 2012; OPM 2016). The Sustainable Development Goals and the World Humanitarian Summit identify social protection as a key, nationally-owned instrument for building climate resilience.

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While much of the research and operationalisation of 'climate-smart' social protection has focused on the ability of these programmes to support shock-response, there have been limited experiences and learning on the role it can play to anticipate and adapt to climate risks. Building climate resilience will require a stronger focus on anticipatory and preventative actions that can mitigate the impacts of shocks before they happen. The benefits of early action, including cost-effectiveness, are well recognised. In addition, our capacity to anticipate many extreme weather events is increasing, while innovations in the humanitarian system, such as forecast-based action, are being tested to find ways to reach more people, faster. Social protection can support anticipatory action as part of long-term, sustainable, country-owned systems.

This article argues that scalable social protection systems can support climate risk management by focusing on risk mitigation and preparedness measures that increase the capacity of the system to anticipate shocks. The article proposes a mechanism linked to a social protection system that (1) *enables actions at a large scale in advance of a weather-related shock*, and (2) *guarantees funds for those actions*, enhancing scalability, timeliness, predictability and adequacy of social protection benefits, ultimately protecting development gains and contributing to increased resilience of vulnerable households and communities.

The article focuses on Forecast-based Financing (FbF), an innovative instrument currently being piloted as part of humanitarian operations to support improved anticipation and mitigation of climate shocks. The article aims to contribute to a nascent area of work and to serve as one of the first, non-exhaustive explorations of the potential for integrating forecast-based action mechanisms into social protection. We draw from lessons learned from ongoing FbF pilots implemented by the Red Cross Red Crescent and its partners.

Section 2 provides an overview of the ways in which social protection can help build climate resilience, with a focus on shock anticipation at scale. Section 3 details FbF mechanisms, including lessons from current implementation. Section 4 proposes ways to link FbF and social protection systems, and explores potential synergies as well as key considerations for such integration. Finally, Section 5 provides conclusions and a way forward.

## **2 The role of social protection in building resilience to climate risks at scale**

Social protection consists of a system of policies and programmes that aims to reduce poverty, deprivation and vulnerability by providing support to individuals throughout their life cycle (World Bank 2001).<sup>7</sup> The last two decades have seen a substantial increase in social protection interventions in the developing world; in Africa alone, the number of countries with safety net programmes doubled between 2010 and 2015 (World Bank 2015).

At the same time, there has been increased interest in how social protection can help households and communities cope with, mitigate

and adapt to climate risks and, ultimately contribute to climate resilience (Kuriakose *et al.* 2012; Davies *et al.* 2008; Bastagli and Holmes 2014; OPM 2016). Focusing on resilience,<sup>8</sup> Ulrichs and Slater (2016) research several social protection programmes in Kenya, Uganda and Ethiopia to understand how they contribute to three key resilience capacities developed by Bahadur *et al.* (2015): absorptive, anticipatory and adaptive capacity.

Evidence shows that social protection makes a strong contribution to households' absorptive capacity (i.e. the ability to manage adverse conditions after a shock) by providing direct support after a shock, in addition to increasing incomes and livelihoods in the long term. These benefits help beneficiaries maintain consumption levels and avoid negative coping strategies after a shock occurs (Ulrichs and Slater 2016). For instance, in Ethiopia, the Productive Safety Nets Programme (PSNP) helps beneficiaries experiencing drought maintain a higher level of welfare and recover more rapidly than non-beneficiaries (Knippenberg 2016).

Evidence also shows that social protection can make contributions to building anticipatory capacity (i.e. the ability to *anticipate* shocks and stresses and *take adequate measures* to reduce their impact) both at household level and system level. At household level, some evidence points to an increase in households' savings in anticipation of a shock, even if most programmes do not encourage beneficiaries to save (Ulrichs and Slater 2016). At the system level, the research finds stronger evidence of social protection's contribution to building anticipatory capacity, particularly in the cases where programmes have evolved to include contingency plans and financing as part of a stronger preparedness system. In 2011, Ethiopia's PSNP established a Risk Financing Mechanism that allowed financial repositioning and disbursement of benefits when a shock occurred (Ulrichs and Slater 2016). The system was able to deliver benefits to households affected by drought six weeks after a request was made for its activation, while the existing emergency response mechanism took nine months from the launch of the humanitarian appeal (Hobson and Campbell 2012).

Finally, social protection's contribution to building adaptive capacity (i.e. the ability to adapt and to have in-built flexibility to manage long-term climate risks) is less clear. The ability of social protection to support long-term graduation and transformation in the face of climate risks is limited if not integrated with additional interventions (Ulrichs and Slater 2016).

In this article, we focus on the contribution social protection can make to building anticipatory capacity at scale through the integration of FbF. Anticipatory capacity is understood here as the ability to take proactive action before a foreseen event to avoid or minimise disruption, in contrast with the more reactive actions that take place after a disturbance (Bahadur *et al.* 2015).<sup>9</sup>

Social protection often relies on large-scale, long-term, nationally-owned systems. These systems reach significant sectors of the population: in 2015, more than 1.9 billion people in 136 low- and middle-income countries were on beneficiary rolls of social safety net programmes (World Bank 2015). Moreover, in recent years, governments and donors have made significant investments in setting up social protection systems that increase coordination, reduce duplication of programmes and deal with crises and shocks (Devereaux, Roelen and Ulrichs 2015; Marzo and Mori 2012). These efforts are underpinned by a strong focus on building supporting structures (staff, tools, resources) as well as robust systems for targeting and registration of beneficiaries, delivery of benefits and management of information.

Social protection platforms can be used during emergencies to efficiently expand response, delivering additional benefits to programme beneficiaries affected by a disaster, as well as identifying and enrolling new beneficiaries that have been made eligible because of the shock (Slater, Bailey and Harvey 2015; OPM 2016). For example, in Lesotho, after three successive humanitarian disasters in 2012, the unconditional cash transfer Child Grant Programme increased benefits for its beneficiaries while expanding to additional disaster-affected households (OPM 2016).

By focusing on risk mitigation and anticipatory action, these scalable social protection systems may also be able to more effectively prevent the impacts of climate shocks. While a number of climate risk management tools can support this goal, in this article, we explore how a forecast-based system for early action and financing can enable more timely action when a climate shock is imminent.

### **3 Increasing anticipatory capacity for managing climate risks through Forecast-based Financing**

#### **3.1 Why focus on early action and Forecast-based Financing?**

There is significant evidence in the climate and disaster risk management sectors of the benefits of preventative action to avoid disaster losses (Ebi *et al.* 2004; Braman *et al.* 2013; Coughlan de Perez *et al.* 2014; Pappenberger *et al.* 2015). However, while investments in early warning systems have increased, and there are some compelling success stories, effective early action is still rare (Lautze *et al.* 2012; Clarke and Dercon 2016).

Several challenges limit the effectiveness of early warning systems: technical capacity to issue warnings, the ability of responsible agencies to receive and understand the warning, and the willingness or capacity of people and institutions to take appropriate action (Glantz 2009). Since forecast information cannot provide complete certainty, the risk of 'acting in vain' and, consequently, the perception of 'wasting funds', often prevents early action (Braman *et al.* 2013; Coughlan de Perez *et al.* 2014). Political interest also constrains action by donors and government, as the public's support for action can often only be rallied once the impacts of a disaster are visible (Cárdenas, Cotterill and Wrabel 2016).

FbF acts as a mechanism that enhances early warning systems by catalysing early action measures based on pre-agreed forecast triggers, supported by protected funding. Upon actualisation of a forecast trigger, an FbF mechanism automatically releases funding to take anticipatory, pre-defined actions *before* a potential hazard event materialises. For instance, in 2016, based on a five-day forecast of cold waves, the Peruvian Red Cross supported the vaccination efforts and distribution of veterinary kits to reduce the risk of mortality of Alpacas in the Puno region of Peru (Peruvian Red Cross, German Red Cross and Red Cross Red Crescent Climate Centre n.d.).

FbF mechanisms advance traditional early warning approaches towards an impact-based forecasting approach. Risk analysis, understanding of potential impacts and analysis of forecast reliability are combined to provide a set of options to trigger actions when a specific forecast threshold is reached. In addition, each pre-agreed action embedded in a pre-defined standard operating procedure is tied to pre-defined funding sources – this is key to ensuring that, once a threshold is surpassed, funding will automatically be used to take early action. While it will not fully eliminate uncertainty, if calibrated well, an FbF system ensures that the cost of sometimes acting in vain is outweighed by the value of reduced impacts when an extreme event does materialise (Coughlan de Perez *et al.* 2014).

### 3.2 Forecast-based Financing: challenges and opportunities

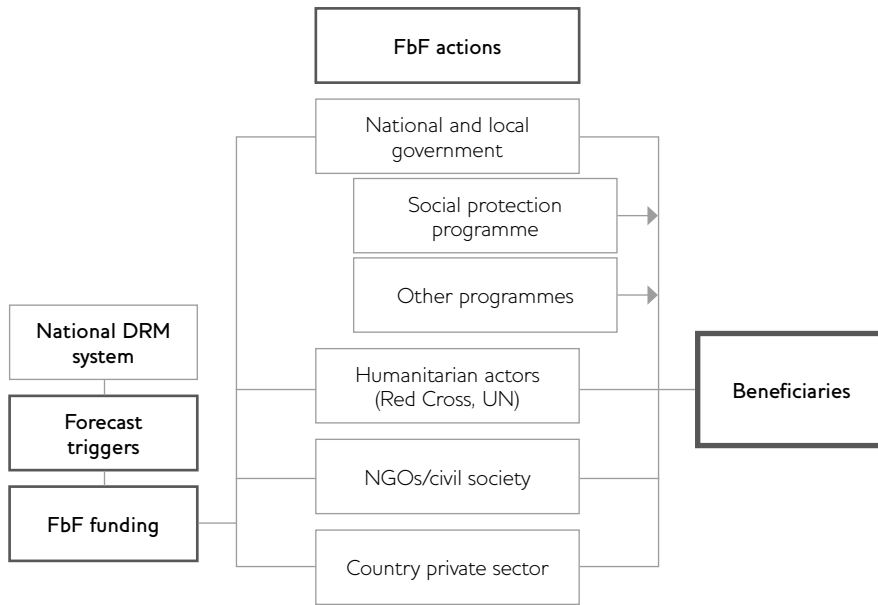
Since 2008, the FbF concept has been piloted by humanitarian actors in over 15 countries, primarily at a local level, with actions triggered in several countries, including Togo, Peru and Uganda. Key lessons that have emerged so far provide insights to opportunities and challenges.

In Bangladesh, where the mechanism is expected to provide a one-off cash transfer in advance of floods, a cost-benefit analysis based on an analysis of literature found that every dollar invested in the programme would save three dollars in beneficiary losses (Urrea *et al.* 2016). Cash transfers in advance of the flood would help households avoid negative coping strategies when a disaster materialises.

While this is a promising finding, implementation of such a system has several operational constraints: a successful activation of forecast-based cash transfer depends on the capacity of the system to identify and pre-register beneficiaries, as well as the capacity of the service provider to execute the distribution in the short window of time between a forecast and the occurrence of the hazard. The process of establishing an FbF system can often be quite lengthy; therefore, in some locations triggers for action were reached before the systems were able to respond and deliver early actions.

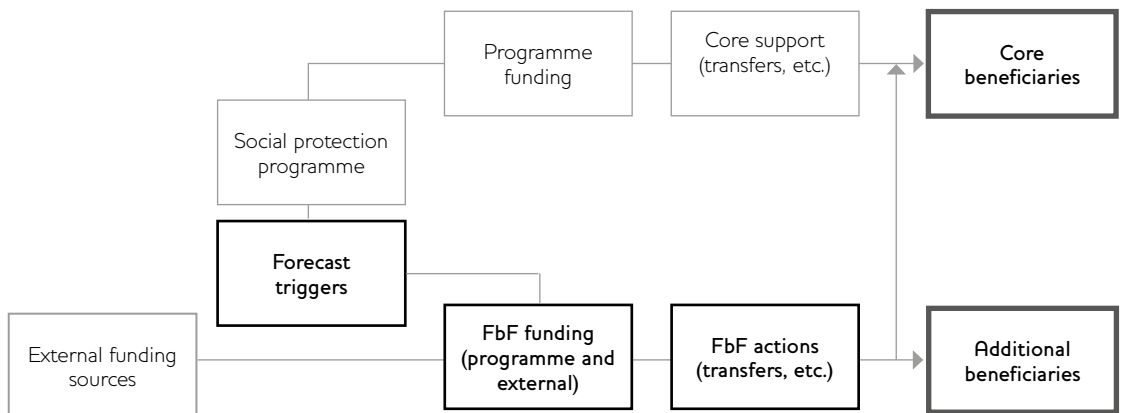
In addition to cash distributions, there are several other early actions that could be taken based on forecast information, which should be selected based on effectiveness. In Uganda, jerrycans and water purification tabs were distributed based on a flood forecast with an aim to reduce diarrhoea.

Figure 1 Social protection linked to a system-wide FbF mechanism



Source Authors' own.

Figure 2 FbF mechanism integrated into a social protection structure or programme



Source Authors' own.

The people receiving these interventions saw a drop in rates of diarrhoeal diseases and losses compared to neighbouring communities, but the intervention was not able to eliminate disease and other impacts. These actions are now being revised to improve the impacts of the mechanism.

Ongoing projects have demonstrated the potential for effective use of scientific inputs in decision-making, enabling the allocation of funds based

on rigorous analysis. However, it is also important to consider forecast skill in the identification of actions, to ensure an effective cost-benefit ratio.

While the limited geographic scale of most pilots to date has provided an opportunity for more focused interventions, it has also reached a limited number of people. It has become clear that the sustainability and effectiveness of the FbF approach requires embedding it in broader risk management structures, for instance at country or regional level.

#### **4 Integrating Forecast-based Financing into social protection: key considerations, challenges and opportunities**

##### **4.1 What would the integration of Forecast-based Financing and social protection look like?**

FbF consists of three key elements that enable early action: (1) a set of pre-agreed triggers (or danger levels); (2) pre-defined actions to be taken when those triggers are met; and (3) a financing mechanism to automatically fund those actions (RCCC and GRC 2017).

Conceptual frameworks for linking forecast-based action and financing with social protection are beginning to evolve, and this article is an effort in that direction. Figure 1 shows a potential method for integrating a climate-smart social protection structure or programme into a system-wide FbF mechanism. Alternatively, FbF mechanisms could be integrated into an existing social protection system, triggering support to existing or new beneficiaries (Figure 2). In this case, new and additional funding could be allocated and disbursed through a social protection system to core or new beneficiaries.

The two models presented in this article are based on ongoing discussions among humanitarian and development practitioners and will no doubt evolve. In both cases, however, the integration of FbF and social protection would use the existing ability of the social protection programme to reach a large segment of the vulnerable population and help minimise the impacts of shocks.

In the first model (Figure 1), a wider range of actions and funding could potentially be mobilised by other actors, in addition to the social protection actions, thus reaching more people with tailored support. An FbF system linked to a social protection structure (Figure 2) might be easier to implement in the short term and serve as an initial departure point. This model would be particularly relevant for social protection programmes that already have a system for shock-response, where a logical next step would be to move from response to anticipation of shocks by embedding such a mechanism into their existing systems. Nevertheless, this model will also require strong coordination and consistency with national and regional contingency plans and actions.

Forecast-based triggers for action (thresholds) can be established for one or multiple hazards, and actions can be defined according to different levels of probability of the risk materialising. As a contribution to a country or regional disaster risk management system, an FbF

mechanism might be linked to early actions in multiple sectors. Specific actions for a social protection programme (for instance, expansion of transfers, public works, etc.) would be triggered when the pre-agreed thresholds for those actions are reached. If an FbF mechanism is built as part of the social protection structure system (Figure 2), it would be important that the triggers and the actions are consistent with government contingency plans. Roles and responsibilities for those actions would need to be established in standard operating procedures.

Depending on lead time, there are a number of social protection actions that can be triggered. For example, on the 1–3-month time frame, public works efforts could be expanded to reinforce critical infrastructure. On the 3–7-day time frame unconditional cash transfers could be released to support the evacuation of people and assets, or avoid negative coping strategies such as taking high-interest loans. When a forecast points to a likely increase of rain, the mechanism can also capitalise on this information, for instance by distributing seeds for additional planting to take advantage of potential asset gains from a bumper harvest (Smith 2016).

A financial instrument guaranteeing funds for each of the actions is crucial. It requires a financial protocol that indicates where the funds will be physically placed (e.g. international, regional or national level), roles and responsibilities for managing the funds, and how funds can be accessed once the FbF mechanism is triggered.

#### **4.2 What are the potential synergies and gains?**

Recent literature agrees on a number of features that can make social protection systems more effective in managing climate risks: (1) climate-aware planning and targeting; (2) ability to scale up support during shocks, supported by flexible systems and adequate financing; (3) timeliness and predictability of benefits; and (4) appropriate interventions that support households' livelihoods (Kuriakose *et al.* 2012; World Bank 2013; Bastagli and Holmes 2014). Integrating an FbF mechanism would bring practical improvements to social protection systems in all these areas. The following list is not exhaustive and the scope for expanding research and testing of these concepts is large.

##### **4.2.1 Climate-aware planning and targeting**

Social protection systems must hedge against uncertainty and plan for more frequent and more severe disasters when designing interventions, including considering direct and indirect impacts on vulnerable populations (World Bank 2013). Improvements in forecasting capacity have extended the ability to anticipate extreme weather events. When combined with risk analysis, forecast and weather information may allow for selection of operational areas based on an analysis of climate risks that considers needs for both long-term support and additional scale-up. This information may also allow for dynamic prioritisation of early action and response operations, if robust enough systems for scale-up are in place.



In addition, because FbF focuses on different levels of danger and thresholds, it can support scale-up of social protection intervention to deal with different ‘layers of risk’. These can range from the frequent but less damaging events to the rare but catastrophic disasters, a key feature of climate-smart social protection (Kuriakose *et al.* 2012).

Forecast information and risk analysis for a target area, combined with other measures of vulnerability might provide supporting information for identification and pre-registration of potential beneficiaries. This can be used to reduce disaster impacts as well as facilitate faster response after the shock occurs and is a documented way to make social protection systems climate-aware (Kuriakose *et al.* 2012).

#### 4.2.2 Scalable systems and financing

A key feature of climate-smart social protection systems is their ability to support affected households in the face of shocks. For this, programmes must be able to rapidly scale up during a crisis and back down once the crisis is over. An FbF mechanism would be a key piece of such a system, helping to establish objective indicators and agreed plans of action as well as ring-fenced financing. In particular, FbF might provide the impetus for the establishment of contingency financing as it links funding to credible forecasts and a plan of action. Understanding pre-existing constraints for effective early action and contingency financing is still critical for the design of an effective FbF system.

Where they exist, FbF can build on and enhance social protection’s programmatic and administrative systems that support the delivery of long-term benefits as well as scalability, providing an additional layer of risk coverage through a post-forecast, pre-disaster mechanism.

#### 4.2.3 Timeliness and predictability of support

Timely support of beneficiaries is a key element of a climate-smart social protection programme or system. The faster support reaches people affected by an extreme event, the less likely they are to resort to negative coping strategies (Hillier and Dempsey 2012). Experience from social protection programmes has shown that, even if a programme has shock-responsive mechanisms in place, response can still take time due to the need to agree on coordinated actions with the humanitarian actors and to have solid mechanisms in place well before the shock (Hobson and Campbell 2012).

In some instances, a forecast-based mechanism would be able to offer additional lead times to enable more timely action. By placing an emphasis on actions triggered by objective indicators and supported by protected financing, it can enable action as soon as the threshold is reached. However, the political will to establish a standardised and objective system of action would still need to be in place from the beginning for the FbF mechanism to be designed and implemented successfully.

Similarly, an important feature of well-implemented social protection is its predictability (reliability and regularity). The ability to take timely

action can be embedded through standard operating procedures that reach social protection beneficiaries more predictably and reliably once objectively triggered, if these are appropriately resourced.

#### 4.2.4 Increased adequacy of interventions

An established, well-functioning social protection programme can offer a platform to implement targeted, pre-defined actions more effectively when a forecast trigger of a certain risk is met, whether this is as part of a larger system for disaster risk management or as one specific function within the social protection programme. Understanding how households' assets and livelihood strategies are affected by climate risks is critical for identifying appropriate interventions (Kuriakose *et al.* 2012). By placing an emphasis on risk analysis and impact forecasting, an FbF mechanism can enable pre-selection of actions that are appropriate to context. Cost-benefit analysis of actions is also key to ensure that the right actions are triggered at the right time, based on differential levels of risk.

In Bangladesh, an in-depth analysis of communities' coping strategies for flood, combined with cost-benefit analysis, helped select cash transfer as the most effective action. It was clear that several of the negative strategies households use for evacuation could be prevented by making a cash transfer in advance of a shock.

### 4.3 Key considerations for sustainably linking Forecast-based Financing and social protection

The opportunities and limitations of FbF are currently being tested in several countries, supported by analysis and research (Coughlan de Perez *et al.* 2014; Stephens *et al.* 2015; Cárdenas *et al.* 2016). Stephens *et al.* (2015) provide an overview of technical considerations for forecast-based action frameworks and develop corresponding research priorities. Here we highlight some of those key issues and their relevance for linking FbF with social protection, fully recognising the need for further research and analysis beyond this article.

#### 4.3.1 Forecasts and risk analysis

The success of an FbF mechanism depends, to a certain extent, on forecast skill, i.e. the accuracy in correlating the prediction of an extreme event to the actual occurrence of one. Forecast skill varies across countries and is limited in many cases. Despite investments being made all around the world, the ability of meteorological services to systematically provide impact-based forecasting information is still limited (Stephens *et al.* 2015).

This means that the geographic scale and the level of confidence in the ability to act at each scale will vary, depending on the skill of the forecast. A forecast-based action mechanism that is part of a social protection system will need to grapple with these limitations.

#### 4.3.2 Actions and impacts

If actions do not reach the most vulnerable people, they will not be effective. While understanding the risks vulnerable populations are

exposed to is essential, the impacts of climate shock are also a function of underlying vulnerabilities, many of which are rooted in structural inequalities. Discovering and understanding these vulnerabilities is essential for prioritising actions.

Similarly, differential vulnerabilities at the community level might have an impact on whether agreed actions and their expected consequences materialise. i.e. FbF may identify relevant triggers, plans and assured funding, but this does not necessarily mean that those at risk will use the advance funding to follow the agreed plans.

In addition, if targeting information is not available for a region, an FbF system might not be able to act when that region receives an early warning. In small-scale pilots, identification and targeting of recipients is time- and resource-intensive. While a social protection system might offer a larger, more sophisticated platform for identification and targeting, a substantial part of these processes would need to be completed as the FbF mechanism is being established, so that the mechanism can be triggered effectively. The pre-identification and pre-registration of beneficiaries will need to consider the constraints on effective actions outlined previously.

Finally, it is important to note that a forecast-based action is not likely to eliminate the need for *ex-post* response, but it should significantly reduce it. Appropriate, timely response will need to deal with the residual risks to ensure that further suffering is avoided.

#### 4.3.3 Financing

The emerging experience on FbF and social protection shows that financing of these systems requires overcoming significant challenges in the way aid funding is structured. While there is agreement that long-term, more sustainable systems are desirable, it still requires several funding agencies to be convinced of its cost-effectiveness through available evidence and data. While many organisations are already acting early to mobilise resources based on available data and evidence, what is missing is a country-wide approach to resource mobilisation.

Funding for ongoing FbF pilots has largely come from dedicated project funding to support innovations at relatively small scale. The next step requires identifying more sustainable sources of funding. Clarke and Dercon (2016) identify instruments that can be used to finance disaster risk *ex-ante*, either for risk retention (contingency funds, ring-fenced budget allocations, or contingent credit lines) or risk transfer (traditional and indexed insurance or reinsurance, derivatives and capital markets instruments such as catastrophe bonds).

While social protection programmes could potentially establish contingency funds or budget allocation from programme funds, additional sources of financing would be required. Existing global relief pooled funds, preparedness funds, as well as risk transfer instruments have also the potential to be sources of funding in the framework of FbF.

A financial instrument for FbF will need to enable rapid release of funding as soon as thresholds are reached, thus requiring alignment between the FbF mechanism's triggers and those for releasing the funds. Finally, layering of different financial instruments might offer more flexibility and affordability in dealing with different levels of risk (Clarke and Dercon 2016).

#### 4.3.4 Coordination with climate and disaster risk management actors

Successful implementation of both climate-smart social protection and FbF approaches requires partnerships and coordination among diverse stakeholders in the climate and disaster risk management sectors; from civil society to research institutes to government agencies at all levels (World Bank 2013). Coordination across sectors is often difficult because of the need to harmonise different mandates, interests and priorities. For instance, understanding of risks and forecast science respectively are often managed by different government institutions.

When integrating FbF, social protection specialists will have a key role in early action identification, prioritisation and implementation. Prioritisation of forecast-based actions requires a rigorous analytical and consultative process in order to guarantee use of funds in an uncertain environment.

The delivery of forecast-based actions will require strong pre-established commitments and agreements. For example, in order for a social protection programme to deliver cash in anticipation of a shock, it is critical that roles, responsibilities and the necessary administrative agreements for delivery agents are established in the design phase, to ensure activation between the forecast and the potential disaster.

## 5 Conclusions and recommendations

The fact that most disasters are related to weather and climate presents an opportunity and a challenge. On the one hand, it means we can anticipate many extreme events before they occur – thus enabling the choice of early action. On the other hand, we can expect many of these extremes to become more intense and frequent in the warming climate (IPCC 2013), significantly taxing an already strained humanitarian system.

The role of social protection in helping anticipate, absorb and adapt to climate risks and extremes is becoming increasingly recognised. While efforts have been focused on how social protection supports households in the aftermath of shocks, we argue that social protection can also support increased anticipation, risk mitigation and overall preparedness at system level. One way to do so is by more effectively integrating climate risk management tools that are being tested in the humanitarian sector to reach more people faster, even before the impacts of foreseeable extreme events materialise.

To achieve this goal, we propose an innovation: integrate FbF mechanisms into social protection systems. This would enable actions in advance of a shock, and guarantee funds for those early actions. Such an approach may help increase timeliness of interventions, likely

resulting in improved efficiency and ability to scale up actions to address avoidable losses and suffering. It could also support more predictable and sustainable anticipation at scale. This can help increase the reach of humanitarian action and help protect development gains from extreme weather and climate events.

We recommend that the design of new social protection systems or programmes include a feasibility study for the integration of FbF mechanisms from the outset. Such a study should take into account several considerations, including the skill of forecasts and the need for comprehensive risk analysis as well as the selection and prioritisation of worthy early actions. FbF mechanisms should subsequently be designed and implemented in a coordinated way; and should include sustainable, ring-fenced funding that can be automatically released when the pre-agreed risk triggers are reached.

Regarding existing social protection systems, we suggest that social protection actors and disaster managers and scientists converge to discuss the elements listed previously. Depending on the local situation, an FbF system could be introduced in phases, first targeting the most predictable hazards with relatively simple and affordable early actions, and then expanding to more complex actions or less predictable events. It will be important that donors and governments commit to fund this and design the outcome assessments of their social protection investments to assess whether early actions were taken and what difference they made. Ultimately, if properly designed and implemented, people at risk can benefit from FbF-infused social protection systems.

### Notes

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- Department of Science, Technology, Engineering and Public Policy, University College London, London, UK.
- 7 Typical forms of social protection include social assistance (also called social safety nets), social insurance, social services and labour market interventions. In this article, we use the term social protection with a focus on social safety nets, i.e. programmes that help households manage chronic and transitory poverty and vulnerability by providing non-contributory support based on need. The term refers to programmes such as school feeding, unconditional and conditional cash transfers, and public works (cash/food for work) where resources, either cash or in-kind, are transferred to vulnerable individuals or households with no other means of adequate support as part of a predictable system of support.
  - 8 Climate resilience here refers to the ability of a system (national, community or individual level) to anticipate, avoid, plan for, cope with, recover from and adapt to climate-related shocks and stresses (Bahadur *et al.* 2015).
  - 9 Anticipatory capacity is part of the overall system's preparedness. Preparedness is understood as 'the knowledge and capacities developed by governments, response/recovery organisations, communities and individuals to effectively anticipate, respond to, and recover from, the impacts of likely, imminent or current hazard events or conditions' (UNISDR 2009).

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# Climate Change and Disasters: Institutional Complexities and Actors' Priorities for Mitigation, Adaptation and Response

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**Abstract** Over the last decade, Pakistan has faced several major disasters, involving both natural hazards and conflict. These crises prompted tremendous national and international response, and triggered the Government of Pakistan to establish new institutions, policies, strategies and action plans. Donors, humanitarian and development organisations, however, tend to follow their own policies, plans and interests, which may be quite different from the government entities dealing with humanitarian efforts, climate change and disaster. To what extent do these different perspectives affect the ability of the government to respond effectively and coordinate with humanitarian and development organisations during different phases of a crisis? This article examines the existing institutions, policies and perspectives that guide how government, humanitarian and development organisations, and community members understand risk and vulnerability, and respond to climate changes. It suggests how knowledge sharing and coordination might be improved to better face the challenges of risk and vulnerability reduction in the future.

**Keywords:** climate change, vulnerability, disaster risk reduction, humanitarian response, humanitarian policy, knowledge sharing, coordination, Pakistan.

## 1 Introduction

Since its independence in 1947, Pakistan has experienced 16 major disasters that have caused severe human and economic loss (Government of Pakistan 2010). The location and topography of the country together with institutional, social and economic vulnerability have contributed to Pakistan's frequent and severe experiences of natural hazards in the form of earthquakes, floods, droughts, cyclones, glacier lake outburst flooding, landslides, avalanches and resultant disasters (Government of Pakistan 2012). While not all of these have been triggered by climatic events, the occurrence of such frequent and severe hazards weakens Pakistan's

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ability to prevent disaster, putting it as the eighth country most vulnerable to climate change (Maplecroft 2012; Malik *et al.* 2012). The effects of recent hazards have been particularly devastating. Heavy monsoon rains in 2010 triggered floods that affected 20.5 million people, leaving at least eight million homeless, and causing massive damage to infrastructure countrywide (*ibid.*). Before resettlement of affected households, the country had consecutive floods between 2011 and 2015 which badly affected agriculture, as well as infrastructure of health, education and other sectors. These floods are not merely a result of more frequent and heavy precipitation; deforestation throughout Pakistan contributes significantly to increases in the occurrence and intensity of floods (Mahmood, Khan and Ullah 2016; Ahmed *et al.* 2015; Government of Pakistan 2014, 2010). Also, the 2013–15 drought in Sindh resulted in huge losses in agricultural production, affecting people's income due to less production and agricultural labour. These occurrences revealed the vulnerability of Pakistani society and economy to disaster.

While damages and losses have been massive, they could have been significantly reduced if disaster risk reduction measures had been incorporated into physical, social and economic development to address both the proximate and root causes of vulnerability. The lack of attention to high levels of social vulnerability and weak institutions in particular have led to most of the hazards in Pakistan becoming complex disasters with long-term consequences. For example, Pakistan has been confronting grave humanitarian challenges since 2010, due to consecutive floods across the country, and militancy and counter-military operations in Swat and the Federally Administered Tribal Areas (FATA) (2010–16). Military offensives against militant groups have displaced hundreds of thousands from FATA, bordering south-eastern Afghanistan, which has greatly increased people's vulnerability to further hazards. While government capacity to respond to such complex challenges has gradually improved, the sheer scale and frequency of the crises demands significantly more investment in human, financial and technical resources for strengthening both civil society institutions and the relatively weak state apparatus.

The links between climate change and sustainable development are particularly important to understand. In Pakistan, climate change poses a major risk to achieving the social, economic or environmental sustainable development goals (Khan *et al.* 2016; Government of Pakistan 2012). Disasters in the recent past have, for example, had far-reaching implications on the food security of the country in terms of reduction in crop production and harmful effects on livestock health (Task Force on Climate Change 2010). They have also destroyed the livelihoods of countless rural households whose land has been rendered useless, sometimes indefinitely. Reducing risk and vulnerability to climate change must therefore also include investments in social, political and economic development.

Current climate change risk reduction approaches in Pakistan are, however, not sufficient to address the complexity of climate-related

disasters. Lack of institutional support and low adaptive capacity to climate change have been cited as some of the main reasons for this (Shahbaz *et al.* 2014). Climate change and disaster-related institutions and policies in Pakistan are new, and therefore, relatively weak. During the major floods in the 1970s and 1990s and up until the large-scale earthquake in 2005, for example, the Pakistan Army carried out rescue and relief activities as there was no institutional arrangement for disaster risk management in the country. At the same time, increasingly frequent floods, drought, glacier lake outburst floods (GLOFs), and landslide hazards motivated the government to join the international discourse on climate change and disaster management and develop comprehensive policy and measures for disaster response, risk management and preparedness. Interest in longer-term risk reduction and climate change adaptation also emerged in government ministries dealing with environmental, agricultural, forestry and water issues. The main government institutions or line departments with some mandates to deal with climate change, adaptation and disaster risk management or reduction in Pakistan are now:

- Ministry of Climate Change (MoCC)
- Pakistan Climate Change Authority (new, inter-ministry)
- National Disaster Management Authority (NDMA)
- Earthquake Rehabilitation and Reconstruction Authority (ERRA)
- Provincial Disaster Management Authority (PDMA)
- Pakistan Red Crescent Society (PRCS)
- Ministry of Agriculture and Food Security (MoAFS).

This list reflects a recognition of the need for a broader approach to climate change and disasters. These institutions have developed explicit policies, strategies and action plans to address short- and long-term aspects of climate change in several ministries. However, these interventions remain more reactionary than visionary, and have not included any long-term consultative process to formulate clear goals and objectives commensurate with ground realities. They also do not address the need for broader social and economic reforms that might contribute to reducing longer-term vulnerability. As a result, they have different and sometimes conflicting priorities and response mechanisms.

In this article, we look at the ways in which different actors such as government, humanitarian and development organisations understand key concepts such as climate change adaptation (CCA), disaster risk reduction (DRR) and vulnerability, and explore how this has formed their development of policy and approach. We then look closely at how power and politics impact their ability to support longer-term adaptation processes. We end with a discussion of how

a better understanding of context, power and politics could lead to improvements in both humanitarian policy and practice in reducing the vulnerability of people to climate change.

## **2 Methods**

The research was qualitative, based mainly on interviews and document analysis. As a first step, all the climate- and disaster-related documents in Pakistan since 2000 were thoroughly reviewed. In addition, we have also examined the policies of selected humanitarian and development organisations.<sup>3</sup> Heads of the most relevant national climate change and disaster management institutions and those involved in formulating and executing policies, strategies and action plans were carefully identified and selected. Ten federal, provincial and district government officials from Khyber Pakhtunkhwa (KP) and Sindh were interviewed to understand their working model and how they coordinated with other institutions. The heads of five selected humanitarian organisations and their relevant field staff (eight) were interviewed to learn how they prioritise their interventions and contribute to government demands and initiatives.

To understand ground realities, three villages in Swat KP in the north and two villages in Thatta, Sindh in the south were chosen. The criteria used to select the villages included topography and geography of the districts, the intensity of the flood/drought and its consequent damages, as well as the government and humanitarian interventions. In each selected village, ten interviews with the village leadership (both individually and in groups), a minimum of six focus groups (formed according to wealth, gender and livelihoods) and key informants (nine in Swat and eight in Thatta) using semi-structured question guides and life stories were conducted. Also, a workshop was organised in Islamabad where almost 40 representatives of different humanitarian and development organisations participated and shared their activities and views of their work in disaster risk management (DRM) and DRR.<sup>4</sup> Secondary data provided by the government and humanitarian organisations on their policies and activities in DRR and DRM were also consulted and analysed.

## **3 Key concepts and approaches**

A major focus of this article is on analysing climate change-induced disasters and the role of the institutions which are relevant in designing policy and implementing practice. The literature helps us in better understanding how institutions and organisations are framed and how they work. For example, institutions, according to Hasan (2001), are the frameworks within which human behaviour, environment and resource use patterns are structured through mutual interactions. They can range from formal legal organisations to informal patterns of practice (Leach, Mearns and Scoones 1999). They can represent 'rules of the game' (North 1990), provide frameworks in which people resolve conflicts and peruse their objectives (Commons 1970), and structure the relationships of people in various units of polity and economy (Hall 1986).

According to Scott, institutions are ‘cognitive, normative and regulative structures and activities that provide stability and meaning to social behaviour. These are transported by various carriers – cultures, structure and routines – and they operate at multiple levels of jurisdiction’ (Scott 1995: 33). Different state, humanitarian and development actors perceive the roles of institutions dealing with climate change disasters quite differently. Some see the role of the state as purely regulative and enforcing, involving setting rules, legislation, monitoring, inspecting and compliance through the policy of carrots and sticks (North 1990).

One reason for adopting regulative instruments in state institutions is that states prefer to pass laws, not necessarily to properly address an issue, but to gain force (see Dornbusch and Scott 1975). Humanitarian and development organisations also represent formal institutions in which decisions on policy and practice are made. Much of the behaviour of actors, however, is only apparent in informal practices outside of or embedded in more formal institutions. This study uses an actor-oriented approach to try to understand more informal institutional behaviour, in order to better understand power relations as they are practised.

In terms of climate change, this article makes an important distinction between hazards and disasters. A hazard is a situation which poses a level of threat to life, health, property or environment. A disaster, on the other hand, is a hazard combined with vulnerability ( $\text{Hazards} + \text{Vulnerability} = \text{Disaster}$ ) (Alexander 1997). Vulnerability is about reducing exposure and risk and improving resilience within the existing socio-political context (O’Brien *et al.* 2015).

It is also important to distinguish between DRM and DRR, two of the most used terms in climate change discourse in Pakistan. DRM is mainly concerned with improving coping capacities in order to lessen the adverse impacts of hazards and the possibility of disaster. This is often the main focus of humanitarian organisations that are concerned with preparedness. DRR is the concept and practice of reducing disaster risks through systematic efforts to analyse and manage the causal factors of disasters, including through reduced exposure to hazards, lessened vulnerability of people and property, wise management of land and the environment, and improved preparedness for adverse events (UNISDR 2017). Both mitigation and adaptation is included in DRR, where mitigation refers to the prevention of hazards reaching populations, and might involve, for example, hazard-resistant construction to reduce vulnerability.<sup>5</sup> Adaptation, on the other hand, involves reducing vulnerability through adjustment in natural or human systems in response to actual or expected climatic stimuli or their effects (IPCC 2014).

Vulnerability is a key concept connected to risk reduction. Here we make a distinction between outcome vulnerability and social/contextual vulnerability, in order to understand the rationale behind the choice of different interventions by different actors. According to O’Brien *et al.* (2015), *outcome vulnerability* involves reducing exposure to a hazard, while

*contextual vulnerability* refers to the social, economic and political context which hinders or enables individuals and groups to respond to changing conditions in the longer term. She argues that while addressing both of these types of vulnerability are necessary, most efforts are focused on outcome vulnerability.<sup>6</sup>

#### **4 Institutional complexities and choices in interventions**

Following the 2005 earthquake, and in light of consecutive floods, droughts and other crises, the government established several disaster management bodies and institutions, of which ERRA and NDMA (at national, provincial and district levels) are the most central. It also re-organised and re-named existing government ministries (i.e. changed the Ministry of Environment to the Ministry of Climate Change) to show that DRR and CCA are high on their agenda. The main policies and strategies developed by federal institutions are the:

- Environment Protection Act 1997 (MoCC (previously Ministry of Environment))
- National Environment Policy 2003 (MoCC/Minister's Office)
- National Disaster Risk Management Framework 2007 (NDMA)
- National Disaster Management Plan 2010 (NDMA)
- National Rangeland Policy 2010a (MoCC)
- National Climate Change Policy 2012 (MoCC/Minister's Office)
- National Climate Change Strategy and Action Plan 2013 (MoCC/Minister's Office)
- National Disaster Risk Reduction Policy 2013a (NDMA)
- National Agriculture and Food Security Policy 2013b (Ministry of Agriculture and Food Security)
- National Forest Policy 2014 (MoCC)
- Pakistan Climate Change Authority Mandate 2016 (inter-ministry).

However, despite some progress, these institutions are still not able to implement any concrete mitigation and adaptation measures. There are several reasons for this. Firstly, with hazards occurring more frequently and intensely, these institutions are too young to develop the skilled human capital, knowledge and experience necessary to address such complex issues. Secondly, politics and power relations among and between government bodies and humanitarian and development organisations hamper their effectiveness. Who is responsible for what, and who is accountable to whom is often unclear, and becomes even more complicated in areas where security issues persist (as in FATA and Swat). Funding has also influenced the ways in which institutions

function, collaborate or compete. For example, the MoCC and NDMA which initiated climate and disaster policies, are dependent on line departments which under the recent eighteenth constitutional amendment were decentralised to the provinces, and are thus no longer reporting and accountable to the federal ministries. Thirdly, there exists a diversity of understandings of vulnerability, which in turn leads to very different types of interventions, many of which are neither sustainable nor transformational. For example, if one views vulnerability as being at risk of exposure to a hazard, avoidance or structural protection might be the chosen measure. On the other hand, an understanding of vulnerability as being at risk in terms of one's weak position in society and inability to adapt, would instead address the root causes of vulnerability such as poverty, lack of political voice, or gender inequality. An important aspect of this is whether the government and humanitarian organisations have the knowledge to understand the complexities of how and why different people experience hazards differently, and adapt or fail to adapt to the challenges of climate change.

The broader institutional landscape in Pakistan in the field of CCA and DRM and reduction is complex, with government, humanitarian and development organisations often competing for space and power. Policies are as well spread across several government bodies and represent different perspectives on how to address climate change challenges. This makes it difficult for implementers to make concerted efforts, and rather leads to disconnected and competing initiatives. What is clear, however, is that these institutions do not operate in a vacuum, and are subject to the broader political, economic, social and international context in which they work. While the international community has been involved in development work in Pakistan for decades, there has been a marked increase in the involvement of humanitarian organisations as disasters have become more frequent. Both the 2005 earthquake and the 2010 flood saw a huge influx of international humanitarian organisations intent on providing relief. Particularly since the 2010 flood, humanitarian organisations have become more interested in how they, too, might play a role not only in preparedness, but in DRR and prevention.

The government authorities mentioned frame their policies and strategies according to their own interests and priorities – they are not necessarily in coordination with other relevant provincial ministries and departments. Also, most of these policies are designed by high-level officials in consultation with donors, and not necessarily through participatory processes which might have aligned them with ground realities. Government officials explained, for example, that most policy strategies and action plans are framed mainly by consultants which are funded by donor organisations who rarely consult district-level line departments or local communities who have lived with climate change for decades. Therefore, most of these policies are donor-driven and only in response to climate change, disasters, the Millennium Development Goals (MGDs) and the Sustainable Development Goals (SDGs).

**Table 1 Focus of government and NGO policies on climate-induced disasters**

Policies/strategies	Disaster mitigation	Emergency response	Adaptation	Social vulnerability
<b>Ministry of Climate Change:</b>				
Climate change policy	Strong	Strong	Strong	Strong
Climate change policy implementation action	Strong	Weak	Strong	Weak
Climate change authority mandate	Strong	Weak	Strong	Weak
Environmental policy	Fair	Weak	Neglected	Neglected
Rangeland policy	Weak	Strong	Weak	Neglected
Food security and agriculture policy	Neglected	Strong	Fair	Neglected
Forest policy	Strong	Weak	Neglected	Neglected
<b>NDMA:</b>				
Disaster risk reduction policy	Strong	Fair	Neglected	Strong
Disaster management plan	Neglected	Strong	Neglected	Weak
Disaster risk management framework	Neglected	Strong	Neglected	Neglected
Earthquake rehabilitation and reconstruction policy	Weak	Strong	Weak	Neglected
Pakistan Red Crescent principles	Neglected	Strong	Neglected	Weak
<b>NGOs:</b>				
Humanitarian organisations	Weak	Strong	Weak	Weak
Development organisations	Strong	Weak	Depends on NGO	Weak

Source Authors' own.

These policy documents are well written, covering internationally debated aspects (mitigation, adaptation, emergency response and social vulnerability), but they lack action plans with time frames and resources for implementation. There is also little emphasis on social vulnerability. At the same time, due to devolution of power to provinces, the roles and responsibilities in implementing these policies are somewhat unclear and provinces lack financial and human resources to implement them.

The above-mentioned policies were analysed according to their emphasis on four key climate change aspects: disaster mitigation, emergency response, adaptation and social vulnerability (Table 1). The degree of emphasis given to each of these aspects in the documents was evaluated as strong, fair, weak or neglected, depending on how central the focus was (to what degree the policy owned the concept), how important it was as a part of the implementation strategy and action plan, time frames, and its reflection in budget allocations. This was also complemented by data from the field on implementation.



As shown in Table 1, there is variation in focus both within the government and between humanitarian and development non-governmental organisations (NGOs). Within the MoCC, the climate change policy, action plan and climate change authority strongly emphasised mitigation and adaptation, while these aspects are rarely incorporated in the environment and other sectoral development policies where real investment on the two should be made. The NDMA, on the other hand, continues to focus on response and has neither the mandate nor the resources and capacity for mitigation and adaptation. Due to frequent disasters in Pakistan, humanitarian organisations focus on response and have little time and resources to work in disaster mitigation, or adaptation. Development NGOs work mainly in disaster mitigation, with a select few (mostly in agriculture) involved in adaptation. Aside from the attention given in the climate change policy and disaster risk reduction policy, both the government and NGOs have neglected the issue of social vulnerability.

These different areas of interest, focus and understanding create tension between government, development and humanitarian organisations when it comes to real interventions. The MoCC aims for strong mitigation and adaptation but it would cost around US\$9.7 billion, which is almost equivalent to the cost of an average single flood event in Pakistan (Government of Pakistan and UNFCCC 2011). This shows that the planned global adaptation fund of around US\$100 billion is a gross estimation, leaving developing countries with limited possibilities to invest either in adaptation or mitigation.

The policy documents represent a wide-ranging effort on the part of the government in identifying hazards, risk, vulnerability, climate change and disaster-relevant mitigation, response and management efforts. However, the documents also confuse both central government and its line departments as well as NGOs, as they often talk about the same things with slightly different connotations. The policy documents overlap and are confusing in terms of institutional vulnerability, definitions, jurisdictional conflicts, policy disconnects and resource gaps. For example, the MoCC strongly emphasises mitigation and adaptation, but has no initiatives in the recent past in support of these policies. Likewise, NDMA policy strongly focuses on social vulnerability, but in practice implements mainly disaster mitigation and outcome vulnerability. These federal government institutions have big communication gaps among themselves and with the provincial line ministries and departments. This hampers effective disaster risk management and reduction in Pakistan. The policies fail to assign responsibilities for who will do what to achieve DRR in Pakistan. The DRR draft policy appears to be a supplement of the National Disaster Risk Management Framework (2007–12), but fails to integrate the changes due to devolution of power into provinces.

In addition to the disconnect between policy and implementation, these policies suffer from lack of political commitment, funding, skilled human resources, coordination, fragmentation, overlapping and unclear

agendas among government agencies horizontally and vertically. For example, there is no mechanism where the MoCC, NDMA or other federal ministries can force provincial governments to prioritise policies and relevant interventions and their implementations. Provinces are not bound to those policies and they often implement their own sector-specific development agendas which are not necessarily in line with the MoCC and/or any other federal government policies. As a result, institutions are especially weak at the district levels where real implementation should occur. Government programmes and policies often end up with vague interventions and support that do not help much in reducing people's exposure to physical hazards. In addition, local elites capture much of the resources intended for the most vulnerable, limiting even further the possibility of addressing the resource and information needs of the most vulnerable.

How the government will implement these ambitious policies is thus still a big question mark. The link between longer-term CCA and DRR remains unclear in most of the policies and in organisations dealing with disaster response, early recovery, rehabilitation and development. This includes a fundamental lack of understanding of the relationship between risk and vulnerability, and in particular social vulnerability to climate change (Nyborg and Nawab, this *IDS Bulletin*).

Humanitarian and development organisations must relate not only to Pakistan's policies, but to their own organisation's policies as well. Until recently, NGOs were undertaking mitigation and adaptation advocacy and networking in Pakistan either on their own, through general-purpose fora such as the Pakistan Humanitarian Forum (PHF),<sup>7</sup> the Disasters Emergency Committee (DEC),<sup>8</sup> and the UN/NDMA-led cluster and working groups. In late 2011, the ability of INGOs to undertake DRR activities more concertedly increased significantly with the establishment of the National DRR Forum, a network of more than 100 organisations including civil societies, NGOs, INGOs, donor agencies, government officials and academics. This is an informal group of civil society organisations voluntarily coming together on issues of common interest in the field of DRR/M and CCA, at the national level in Pakistan. The purpose of the DRR Forum is to enhance coordination, communication and information sharing on DRR/M and CCA among all relevant stakeholders in order to promote, improve and integrate DRR and CCA in emergency and development programmes in Pakistan (DEC 2012).

The biggest challenge for humanitarian organisations and government institutions alike lies in the area of more 'preventive' activities which touches on the realm of DRR. While many development organisations and ministries, and particularly those working on agriculture and livestock systems, have been dealing with the challenges of climate change in Pakistan for many years, the idea of prevention is a new area for those organisations and government bodies used to responding to disaster. The concepts of risk and vulnerability in particular can take on

very different meanings depending on one's conceptual and practical universe of experience.

#### 4.1 Power and politics in choice of intervention

How government, humanitarian and development actors actually choose activities depends on a combination of factors. First is their underlying understanding of risk, vulnerability and adaptation, which varies greatly according to their particular knowledge base and donor interest. The national government has knowledge on policy and political processes at higher levels but they often have less experience in the field. This gap could easily be filled by the local departments at the district level but they are often not consulted during policy formulation and thus the policies are not evidence-based. Development organisations are good at participatory processes but they lack relief and rehabilitation experience which is a landmark of humanitarian organisations. Local communities have rich knowledge about the impacts of climate change and how they might adapt to it. But they alone cannot cope with such huge and sudden hazards. They clearly and cleverly observe slow climate change phenomena and adapt their livelihoods and infrastructure accordingly – something which needs to be understood and strengthened by government and humanitarian actors. Researchers are good in understanding and generating knowledge and technological innovation on CCA and DRR, but generally they cannot convince policymakers and practitioners in bringing real change. Action research would be an exception, but is not common in Pakistan.

Second is the politics around interventions, and the ways in which powerful interests influence the decisions of which approach to take in terms of response. One of the biggest barriers for humanitarian interventions in Pakistan to move into mitigation and adaptation mode is the political and institutional constraints. The national and provincial governments, for example, are often headed by different political parties who have different interests and agendas, and could be additionally contradictory to humanitarian and development organisations' mandates and interests. There are still barriers between humanitarian and development funding and institutions, which make it difficult to share knowledge and foster collaboration across government departments and between humanitarian and development actors, government and NGOs, and donors and organisations. There are a few recent initiatives, however, which try to address this. One is the creation of the Pakistan Climate Change Authority, a cross-ministerial council on climate change (see previous section). In terms of knowledge sharing, the DRR Forum, which includes members of the Pakistan Humanitarian Forum, is playing an important role at national level to share knowledge among organisations. The government, however, is unfortunately not active in these fora, particularly the NDMA and PDMA. Recent government restrictions on humanitarian and development organisations concerning their mandate, funding sources and versatility is also hampering their work and coordination. Even more important is whose knowledge is counted when decisions on

funding take place. Such decisions are often taken in UN systems and by donors – not necessarily considering national researchers and local knowledge.

What is more critical, however, is what happens at the district level, where the competence and capacity of government officials is extremely limited, and organisations seldom cooperate. There is little awareness at this level of the relationship between hazards and a broader understanding of how the political, social and economic context influences vulnerability. Here, the politics of knowledge are in play, where those with power in terms of funding and political clout decide how issues are defined and addressed (Tanner and Allouche 2011; Eriksen *et al.* 2015). In government, activities and approaches remain dictated by line departments, and brought together only in emergencies by the district administration. Strong donor steering of local organisations, often through a contracting system, discourages local competence-building and participation of communities in designing assessments and interventions. In this way, knowledge of vulnerabilities at the local level remains inaccessible, since all the decisions have already been made at higher levels.

The lack of voice and involvement of a broader set of community members will allow inequalities that determine vulnerability to persist. Understanding people's perceptions about climate change and disasters is becoming an increasingly important tool in fostering better adaptability and ultimately human transformation (Chaudhary 2011; Yi, Ismail and Zhaoli 2012). Local perceptions and knowledge of local risks on issues around climate change and disasters are important because it is the communities themselves that make decisions on how they best could adapt to changing scenarios (Kansiime 2012). For example, sensitivity of ecological regions, changes in temperature, rainfall pattern and floods and drought are more likely to be seen in studies of local dynamics and practices than by only examining regional or global trends. Understanding how local communities recognise climate change-induced crises and how they cope is quite crucial for designing better mitigation and adaptation measures (Thomas, Twyman and Oshbar 2007).

## 5 Conclusions

Pakistan has recently developed discrete institutions and policies for climate change and disasters. However, in spite of some progress, the government has to go a long way to materialise and implement the policies, and achieve the targets. Poor coordination on policy action plan between central government and the provinces, knowledge gaps and stakeholder coordination hamper efforts in addressing disaster mitigation, CCA and DRR.

The main actors, for example government, humanitarian and development organisations, researchers and the local community have different understandings, interests and approaches to climate-induced disasters and how to address them. Listening to and understanding each other is one issue, and agreeing on an action plan and prioritising

interventions is another. Those with power in the form of either political clout or funding have the authority to define which issues are important, without consulting critical knowledge from other actors, and particularly local people directly affected by hazards and disasters.

Based on these conclusions, we can identify three areas as important in ensuring that humanitarian policy and practice contributes to reducing the vulnerability of people to climate change and disasters in Pakistan. First, there is the need for significant capacity building at all levels of government and within NGOs as to how to identify not only the vulnerable, but the drivers of that vulnerability in that particular context. Second, there is a need to design processes where a broad range of community members are brought into the decision-making process at district level. This will involve capacity building of both community members and district government staff, with the facilitation by a body or actor trusted by government, NGOs and local community members. Finally, investments in mitigation and adaptation in developed countries will have the greatest effect in reducing climate change. In countries such as Pakistan which suffer from the consequences of poor climate policy in the global North, funding for reducing hazards alone will not prevent disasters – an investment in people’s capacity to adapt is key to preventing disasters.

### Notes

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- 3 The policies for humanitarian and development organisations represent a composite based on reviews of policy documents, as well as interviews with staff. The policies and interviews were chosen at random from the list of members of the Pakistan Humanitarian Forum (PHF) and the Disaster Risk Reduction Forum (DRR).
- 4 ‘How can Humanitarian Actors Contribute to Climate Change Adaptation? Exploring Innovative Approaches to Thinking Long-Term in the Short Term’ held on 21 November 2014, in Islamabad.
- 5 Or in global climate change circles, it refers to the reduction of greenhouse gasses (UNISDR 2013).
- 6 See Nyborg and Nawab, this *IDS Bulletin* for a more detailed discussion of this distinction.
- 7 A forum of 50 international non-governmental organisations (INGOs) working in Pakistan, established in 2002.
- 8 A network of 13 UK-based aid organisations responding to emergencies worldwide.

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# Social Vulnerability and Local Adaptation in Humanitarian Response: The Case of Pakistan

Ingrid Nyborg<sup>1</sup> and Bahadar Nawab<sup>2</sup>

**Abstract** This article looks at the experiences of two areas hit hard by the 2010 mega-floods in Pakistan, one in Khyber Pakhtunkhwa and one in Sindh. It examines how different humanitarian actors understand climatic changes, risk and vulnerability, how this influences their choices of disaster risk reduction activities, and whether these activities promote changes which are merely cosmetic, or transformational. The findings point to the need to expand institutional understandings of risk and vulnerability to include social vulnerability in disaster risk reduction measures, and the importance of knowledge sharing and collaboration between humanitarian and development organisations, government and local communities, particularly at the district levels, to be able to address long-term risk reduction and adaptation.

**Keywords:** vulnerability, climate change, humanitarian response, humanitarian policy, development, adaptation, risk assessment, Pakistan.

## 1 Introduction

Reducing vulnerability in the face of repeated disasters in Pakistan is a huge challenge for humanitarian and development actors alike. Both national and international humanitarian actors have over the last 12 years responded to a broad range and frequent occurrence of crises in Pakistan. These have included earthquakes, floods, drought and conflict, from the far north to the far south, which have adversely affected millions of people in terms of loss of life, livelihoods and assets (Swati 2015). In light of this, the Pakistani government has put disasters, and particularly climate change disasters, high on the political agenda (Nawab and Nyborg, this *IDS Bulletin*). Also, in addition to their main focus on relief, humanitarian actors show a growing interest in contributing to both hazard preparedness and the reduction of vulnerability of populations to climate change in the longer term.

A greater focus on disaster risk and vulnerability reduction, however, is challenging for the humanitarian community. The vast majority of

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funding of humanitarian operations continues to be based on appeals in the wake of emergencies, and is overwhelmingly used for relief (UNOCHA 2017; ADB and World Bank 2010). Funding for prevention is difficult for humanitarian actors to obtain, as it is considered the domain of development actors. This can create challenges even within an organisation practising both relief and development, where there can be restrictions on using funding for relief or preventative measures. Efforts to address longer-term vulnerability issues are also hampered by competing understandings among government, humanitarian and development actors of risk, vulnerability, and what might constitute transformational change. Knowledge remains segregated in different communities of practice, with little interaction and institutional overlap (Polastro *et al.* 2011; Schipper and Pelling 2006). In particular, local knowledge and experiences of climate change and how their underlying vulnerability influences their ability to adapt is seldom considered in planning and implementing interventions (Christoplos, Mitchell and Liljelund 2001). In this respect, the politics around humanitarian assistance play a clear role in determining which knowledge bases are given space in humanitarian discourse and practice, including which definitions of risk and vulnerability are given precedence (Eriksen, Nightingale and Eakin 2015). The fact that the vast majority of humanitarian assistance continues to focus exclusively on relief and short-term response is a political decision. This limits the space for those humanitarian actors moving into disaster risk reduction who are aiming to achieve transformational change to reduce people's vulnerability in both the short and the longer term (O'Brien *et al.* 2015).

This article explores the ways in which government, humanitarian and development actors understand risk and vulnerability, and how this affects their choice of approach to longer-term adaptation. Do humanitarian actors, including the government, adequately understand the complexities of the local contexts in which they work? Are they able to contribute to not only mitigation and adaptation *per se*, but to reducing the social vulnerability of those most at risk? How do power relations influence policy and practice? The article begins with a discussion of how disaster risk management and reduction, climate change adaptation and vulnerability are understood in the climate change literature. This is followed by illustrative examples of the responses to and impact of the mega-floods of 2010 in Swat, Khyber Pakhtunkhwa (KP) and Thatta, Sindh. In each of these cases we examine the complexity of these communities in order to understand how vulnerability is shaped by their particular social, cultural, political and economic context. We then examine how the government and the humanitarian community understand the concepts underlying climate change and its effects (e.g. risk, adaptation, mitigation, disaster risk management (DRM), disaster risk reduction (DRR) and vulnerability), and how this understanding, embedded in power relations, influences the way in which they approach their work with communities. We end with a discussion of how a better understanding of the social context, power and politics could lead to improvements in both humanitarian policy and practice in reducing the vulnerability of people to climate change.

## 2 Understanding risk and vulnerability

There is a key distinction in the climate change literature in the use of the term vulnerability, based on whether the focus is reducing exposure to hazards and saving lives in the short term, or addressing social conditions and the drivers of vulnerability. This plays out in the ways humanitarian organisations understand and engage in risk management and reduction activities. In this section, we consider how risk and vulnerability are defined, and then operationalised in concepts such as DRM and DRR, which are central to climate change discourse in Pakistan.

The United Nations International Strategy for Disaster Reduction (UNISDR) defines risk simply as the combination of the probability of an event and its negative consequences (UNISDR 2017). The United Nations Development Programme (UNDP) expands this by describing risk as ‘the probability of harmful consequences, casualties, damaged property, lost livelihoods, disrupted economic activity, and damage to the environment, resulting from interactions between natural or human-induced hazards and vulnerable conditions’ (2011: 11). Disaster risk, therefore, is understood as ‘the potential disaster losses, in lives, health status, livelihoods, assets and services, which could occur to a particular community or a society over some specified future time period’ (IRP 2017). Based on these definitions, DRM is defined as ‘the systematic process of using administrative directives, organisations, and operational skills and capacities to implement strategies, policies and improved coping capacities in order to *lessen the adverse impacts of hazards* and the possibility of disaster’ (UNISDR 2017). This is the main focus of humanitarian organisations which are concerned with preparedness (authors’ emphasis added).

DRR, on the other hand, is ‘the concept and practice of reducing disaster risks through systematic efforts to *analyze and manage the causal factors of disasters*, including through reduced exposure to hazards, *lessened vulnerability of people and property, wise management of land and the environment*, and improved preparedness for adverse events’ (*ibid.*, authors’ emphasis added). We emphasise here the additional aspects of managing causal factors and reducing vulnerability of people in DRR as key distinctions from DRM. According to this view, DRR is in fact an expansion of DRM, inclusive of its attributes.

According to the IPCC (2012), DRR denotes both a policy goal or objective, and the strategic and instrumental measures used for:

- anticipating future disaster risk (forecasting);
- reducing existing exposure, hazard, or *vulnerability*; and
- improving resilience.

This includes a clear focus on not only reducing risk, but ‘lessening the vulnerability of people, livelihoods, and assets and ensuring the appropriate sustainable management of land, water, and other components of the environment’ (IPCC 2012: 46).

Reducing risk in these terms involves two well-known – but not always well-understood – aspects: mitigation and adaptation. In short, mitigation refers here to the prevention of hazards reaching populations, and might involve, for example, hazard-resistant construction to reduce vulnerability (in global climate change vocabulary, however, it refers to the reduction of greenhouse gas emissions). Adaptation, on the other hand, involves reducing vulnerability through ‘adjustment in natural or human systems in response to actual or expected climatic stimuli or their effects’ (UNISDR 2017). What is often confusing is that while both mitigation and adaptation involve reducing vulnerability, they in fact conceptualise the term completely differently. O’Brien *et al.* (2007) make a very important distinction between reducing *outcome vulnerability*, and reducing *contextual vulnerability*. According to the authors, outcome vulnerability involves *reducing exposure* through climate change mitigation, or activities that limit negative outcomes, i.e. reducing risk, or improving resilience. Reducing *contextual vulnerability*, on the other hand, involves altering the context (socioeconomic-political) in which climate change occurs, so that individuals and groups can better respond to changing conditions in the longer term. They argue that while addressing both types of vulnerability are necessary, most efforts are focused on outcome vulnerability.

### 3 Methods

In order to understand how this plays out in practice, we examine both government and non-governmental organisation (NGO) responses to and impacts of the 2010 floods in Pakistan. Government staff at national level involved in climate change and disaster management, as well as various line departments, were interviewed (ten in total). Secondary data provided by the government and organisations on policies and activities in DRR and DRM were analysed. A workshop was conducted in Islamabad where almost 40 representatives of different humanitarian and development agencies shared and discussed their work in DRM and DRR (Noragric, CIIT and NORCROSS 2014). To study local perceptions of response and impact, we chose three villages in Swat, Khyber Pakhtunkhwa which had experienced flood and conflict, and two villages in Thatta, Sindh which had experienced repeated floods and drought. The criteria used to select the villages included topography and geography, the intensity of the flood and damages, and the extent and type of government and humanitarian interventions. District government, humanitarian and development staff were also interviewed. At the community level, individual interviews (eight in Swat, nine in Thatta) and focus group interviews (nine in Swat, six in Thatta) were conducted, based on differences in wealth, status, gender and livelihoods. The semi-structured question guides covered a broad range of issues including livelihoods, power relations, infrastructure and extent of government services, experiences of hazards and climate change, and interventions.

#### **4 Government and humanitarian responses – relief, reconstruction and preparedness**

The ways in which the floods impacted the two study areas were very different. In Swat, the waters came with little warning, at high velocity. The water quickly overflowed the river banks, receded after a few days, and left in its wake deposits of sediment and debris several metres high. People living on both sides of the River Swat experienced loss of life, livestock, houses, agricultural fields, hotels, roads and bridges. In two of the study villages, floods had almost completely washed away the irrigated land, whereas in the third village it affected the land only partially. In Thatta, a lowland area, the water breached the river and channels early on, and spread extensively, in south Punjab and upper Sindh, staying for up to six months before receding. Standing crops were destroyed, and villagers were completely dependent on food aid until they could return to their villages. As in Swat, the flood hit prior to harvest, such that crops were destroyed in the fields. As the water began to recede, some landowners were able to begin cultivating again, while others experienced such extensive damage to their soils that the fields were unusable.

The government and international non-governmental organisations (INGOs) gave assistance in both areas after the flood, either directly or through the UN cluster system. The response was implemented in phases defined by the Provincial Disaster Management Authority (PDMA) as relief, early recovery, reconstruction and development. The government had both a coordinating role through the PDMA, and provided direct assistance along with humanitarian organisations and the army, which assisted in providing relief to remote and isolated areas where roads had been destroyed. After the initial three-month rescue and relief operation, the government conducted a survey of the damage in the affected population and distributed Watan cards (cash grants for consumption and rehabilitation), a few recovery items, and coordinated rehabilitation efforts. As the flooding reached the plains, most humanitarian organisations moved south to continue their relief work (ADB and World Bank 2010).

In both Thatta and Swat, a few humanitarian organisations remained past the relief and rehabilitation phases to work on preparedness, training local women and men in DRM to respond quickly to save lives. Activities in DRM included the formation of village disaster management committees and emergency response teams trained in search and rescue, first aid, preparedness and evacuation plans, and equipped with DRM kits. Capacity building in DRM was also prioritised nationally by the National Disaster Risk Management Authority (NDMA), which established the National Institute of Disaster Management (NIDM) for district government capacity building. Even though humanitarian organisations, through their DRM activities, had a longer-term engagement in the affected areas, the focus remained on managing short-term response. The activities identified were based on assessments of the physical effects of earlier hazards.

### 5 Disaster risk reduction – a shift from preparedness to prevention

The government's National Disaster Risk Reduction Policy was developed in 2013 (Government of Pakistan 2013). The international community then established a national DRR Forum, where both development and humanitarian actors meet regularly to share ideas and discuss ways to reduce risk in practice. While most of the organisations dealing with DRR are development organisations, there are several humanitarian organisations that have moved beyond DRM and into DRR activities, in an attempt to contribute to not only preparedness but prevention.

As mentioned earlier, DRR includes aspects of both mitigation and adaptation, but we found that not all organisations dealt with both. Humanitarian organisations, when performing DRR activities, focus almost exclusively on mitigation activities. This includes the building of mitigation structures, such as checking dams to stop erosion and reduce water flow during flash floods, to reducing *exposure* to hazards. These are also common mitigation activities of development organisations. In addition, however, development organisations address adaptation, or the reduction of vulnerability through longer-term 'adjustment in natural or human systems in response to actual or expected climatic stimuli or their effects' (UNISDR 2017). This involves activities such as livelihood programmes, DRR committee formation, agricultural innovations, and resource management training, designed to help people adapt to a changing climate in the long term. When the staff of the humanitarian organisations were asked why they did not engage in these types of adaptation activities, they replied that these were 'development' activities, something that they simply did not, as humanitarian organisations, engage in. Likewise, only a few development organisations were engaged in DRM, as this was considered the domain of humanitarian organisations.

What is common for both humanitarian and development organisations dealing with DRR, whether in terms of mitigation and adaptation, is that all of them focus on reducing vulnerability to *exposure* of hazards and climate change, while none of them focus on *contextual* or *social vulnerability*. For example, organisations informed the research team that their assessments and activities do not include the mapping of vulnerability at an individual level, only at a community level. They also focus on supporting livelihoods, such as agriculture, without focusing on differences or power relations according to gender, wealth, class, land tenure and education which might affect people differently in their ability to adapt to climate change. Even though those working with DRR were quite aware of how a lack of attention to underlying differences in vulnerability allows elites to capture resources and benefits, they felt it was beyond their capacity to change an assessment system which was defined by donor and government understandings of local risk and vulnerability.

## 6 Understanding root causes of vulnerability

The floods in Pakistan were considered a natural disaster by the government and local communities. There are, however, several drivers of vulnerability that involve both people and politics. One is the utilisation of natural resources upstream. The degradation of the upper catchment areas in Swat, climate change and mismanagement of water all play a role in causing hazards and disasters. In the case of flooding, the extensive felling of forests in the highlands, poor catchment management, overgrazing in the sensitive mountains, high levels of firewood consumption, and uncontrolled cultivation, all reduce water-retention capacity and cause increased surface water runoff and soil erosion, increasing the quantity, velocity and sediment load of the headwaters entering the river system. Activities aimed at reducing the intensity of these processes in the highlands could play an important role in preventing or at least lessening the impact of the floods on people in the lowlands. In order to do this, one would need to understand the political and social vulnerability context of their use in the highlands.

Another driver of vulnerability in the study areas and throughout Pakistan, is inequitable social structures. Key resources such as land are controlled by local elites, landlords and tribal leaders. Poor households and communities are often pushed into cultivating marginal land, which is less productive and also located in areas more vulnerable to hazards. During the 2010 floods, for example, there were numerous complaints in the Charsadda area of KP against landlords and government officials conspiring to divert floods away from the lands of rural elites and towards poor people and their properties. Such underlying social and political inequities and the limitations they put on women and men's lives and livelihoods contributes to increasing their vulnerability to hazards, leading ultimately to disaster (Taylor 2013).

In order to discover these underlying drivers, a detailed understanding of both the differential impact and the barriers to adaptation of different women and men in the affected communities is necessary. In Swat, for example, the loss of fertile land on the riverside has had different implications for the livelihoods of landowners and tenants. Larger landowners lost their property, but most had other assets and livelihood options. Smaller landowners and tenants, however, lost their only source of income, and many had to move from the area to find work. Some development organisations assisted in rehabilitating agricultural lands, but in many cases the damage was so severe that land demarcation became an issue and their lands are still not restored. Also, conflict in Swat in 2009 contributed significantly to the vulnerability of households to the flood. When the floods hit in 2010, people had not yet recovered from the political conflict the year before, when orchards had been vandalised, harvests confiscated, and people lost their jobs and had to relocate (Nyborg *et al.* 2012). Many were still suffering from trauma from the fighting and their experiences of being internally displaced people (IDPs), and there was a general lack of trust between members of the communities. In addition, gender disparities

in terms of education, income-earning opportunities and mobility hinder many women's participation in activities which could reduce their vulnerability to both fast- and slow-onset hazards. In general, limited livelihood options, education opportunities, health facilities, functioning institutions, and security for large parts of the population in Swat have all increased people's vulnerability to floods (Khalid, Nyborg and Nawab 2015; Elahi, Nyborg and Nawab 2015; Khan, Shanmugaratnam and Nyborg 2015).

In Thatta, the 2010 floods were followed by heavy rains in 2011, resulting in high levels of salinity. Some fields experienced a 50 per cent decrease in yields, others lay completely barren. None of the villagers interviewed were able to reclaim their degraded land, as the drainage improvements necessary would require the use of heavy digging cranes that were beyond their means. The only significant investments in land by the international community and the government have been the construction of massive bunds and the raising of the roadways to provide safe transportation routes in the event of future flooding, and some construction of housing on higher ground. While these are important investments, their contribution to the recovery of livelihoods is limited. The effect of the floods on longer-term livelihoods has been extensive, and different for different villagers. In the two villages studied, most of the land is owned by two or three larger landowners, who had tenants (with long-term tenant relationships), sharecroppers (shorter-term relationships with larger landowners, but owned small plots of land as well) and labourers working their land. After the flood, when the damaged land was producing only half of the yields, there was not enough work for many of the labourers and sharecroppers, and only some of the tenants were able to continue to work in the fields. The large landowners started to do much of their own labour, and produce mainly for their own consumption. Due to higher levels of education of several of their family members, landowners were able to supplement their farm income with salaries from government jobs. Sharecroppers increasingly supplemented their income from other sources, and some stopped cultivation completely on their damaged land in order to work as labourers. Those labourers and sharecroppers who lost their local livelihoods have had to move to the city (Hyderabad) for several months of the year for casual labour. These unskilled labourers are considered the most vulnerable in terms of loss of livelihood, and include several women household heads who either are widows or who have a husband not able to work.

What we see in both areas is that the flood had both short-term and long-term effects, which were very different depending on one's starting point before the flood. Attempts to respond to the flood, however, focused exclusively on assessing losses and damage to assets from this particular hazard (in addition to emergency relief efforts). While this is important, it is not sufficient for understanding ongoing processes that make people vulnerable to hazards, nor does it account for the impact of the floods on those with few assets – to put it bluntly, those with



lots of assets will always show the greatest losses and damage, but not necessarily in terms of their livelihoods since they usually have other opportunities, social networks and assets to fall back on. A focus on losses alone will thus mask the tremendous effect of the flood in further weakening the possibility of adaptation by the poor who already have suffered from longer-term political and economic marginalisation and a weakening of coping strategies (Eriksen, Brown and Kelly 2005). It also masks the effects of less apparent changes in climate that fall outside of the concept of ‘hazard’, but that threaten longer-term sustainability, such as long-term changes in temperature, and slow-onset drought.

### **7 Barriers to addressing social vulnerability in DRR**

Our study finds that there are two areas which hinder actors in addressing social vulnerability in their DRR work. First is the choice of inadequate assessment tools for defining damages, losses and vulnerability to future disaster. The second is the politics around interventions, and the ways in which powerful interests and institutions influence whose knowledge counts in making decisions of which approach to take for DRR.

#### **7.1 Focus and choice of assessment tools**

Internationally, there is a multitude of hazard risk assessment tools and methodologies available to governments and organisations (Caribbean Development Bank and CARICOM 2009; UNICEF 2012; US Department of State 2012). The focus on asset losses, however, is by far the most common measure of vulnerability, with a clear focus on measuring the risk of exposure (Caribbean Development Bank and CARICOM 2009). Even when attention is given to population sensitivity and resilience in addition to exposure, and underlying factors that contribute to vulnerability (Turner *et al.* 2003; Thomalla *et al.* 2006), the focus remains on exposure, and the description of the human condition remains static and apolitical. While such tools are undoubtedly critical for a country like Pakistan where sound geo-metrological-demographic data are lacking, and no national standard methodology or institutionalised capacity to conduct multi-hazard risk assessments exists, they are not sufficient for understanding social vulnerability. Reed *et al.* (2013), for example, argue for using the sustainable livelihoods approach in climate change vulnerability analyses to capture some of the underlying causes of weak adaptive capacities. Reed also emphasises the importance of stakeholder participation in processes of adaptive management to ensure longer-term adaptability (Reed 2008).

In Pakistan, government, humanitarian and development risk assessments continue to focus exclusively on reducing the risk of hazards reaching populations – despite the attention to contextual vulnerability in national policy documents. At the national level, the NDMA is slowly building the capacity of government in disaster risk assessments through the training of line departments and their provincial- and district-level staff. In addition to focusing on exposure, risk assessments are mainly conducted by technical government or NGO staff lacking in local knowledge, with

little or no participation of local community members. It is clear from our study that villagers can easily describe shifting weather patterns, and what this has meant to their lives and livelihoods both in the short and long term. Their experience and understanding of the social, natural and political context in which they live is also best expressed by them. The intensity of their experience of conflict, and the intensity of heat in the summers that cause heatstroke and make it difficult to labour outdoors for more than a few hours a day, risks being lost in figures of temperature and precipitation. Local women and men can best explain how these events and conditions affect different villagers differently, depending on their resources and ability to switch to other income sources when agricultural land is destroyed or lost. This knowledge, however, remains unavailable to actors who consistently measure and plan interventions through top-down processes where local women and men are not included.

In order for risk assessments to capture relevant information on exposure and social vulnerability, they need to be both participatory and provide data on more than aggregated damage, losses and physical risks. While development organisations have a long history of focusing on participatory development, humanitarian organisations tend to use external experts for assessments rather than local sources in the belief that the information will be less biased. An exception to this is recent work by the Pakistan Red Crescent: it has developed an Integrated Vulnerability and Capability Assessment (IVCA) which is conducted together with communities to help understand how it might strengthen community resilience in the face of various disasters (IFRC n.d.). The assessments are conducted with the help of local volunteers, and the Red Crescent as a permanent fixture at the district level is able to follow up the findings with local government and development organisations. The IVCA, however, do not include an analysis of social differences within the village, which hampers the ways in which they can identify and cater to the needs of the most vulnerable. With adjustments to methodology which allow for intra-village and household disaggregation and deeper analysis of the drivers of vulnerability, IVCA can become powerful tools in engaging local people in decisions concerning longer-term adaptation for DRR. The DRR Forum is currently exploring the possibility of developing an improved IVCA which includes attention to social vulnerability. Linking IVCA with district government technical assessments and longer-term adaptation activities (i.e. agricultural research on heat and drought-tolerant varieties) could address both short- and long-term needs. In this way, humanitarian organisations can both contribute to and have access to critical information on the vulnerability of community members long before a hazard hits, such that their efforts following a disaster are both timely and reach those who are in need of assistance.

## **7.2 Politics, institutions and DRR interventions**

Another barrier for humanitarian interventions in Pakistan to move into DRR and contribute to adaptation and prevention is the sectoral nature of the political and institutional landscape. There are still barriers

between humanitarian and development funding and institutions which make it difficult to share knowledge and foster collaboration across government departments, and between humanitarian and development actors, between the government and NGOs, and between donors and organisations (Thomas 2014; Eakin, Lemos and Nelson 2014). There are a few recent initiatives which try to address this. One is the attempt at national-level government to create a cross-ministerial council on climate change (Nawab and Nyborg, this *IDS Bulletin*). Also at national level, the DRR Forum, which includes members of the Pakistan Humanitarian Forum, is playing an important knowledge-sharing role among organisations (the development of a common IVCA is only one example). The government, including the NDMA and PDMA, is invited to these fora, but unfortunately seldom attend.

More critically, however, is what happens at lower levels, and particularly the district level, where the competence and capacity of government officials is extremely limited, and organisations seldom cooperate, unless they have personal contacts. Here, the politics of knowledge are in play, where those with power in terms of funding and political clout decide how issues are defined and addressed (Eriksen and Lind 2009; Eriksen *et al.* 2015; Tanner and Allouche 2011). In government, activities and approaches remain dictated by line departments, and brought together only in emergencies by the District Commissioner. Strong donor steering of organisations, often through a contracting system, discourages local competence-building and participation of communities in designing assessments and interventions. In this way, knowledge of vulnerabilities at the local level remains inaccessible, since all the decisions are in reality already made at higher levels. The lack of voice and involvement of a broader set of community members allow inequalities that determine vulnerability to persist.

Again, there are exceptions. In one district in Sindh, the District Commissioner requested the local Pakistan Red Crescent office to act as permanent coordinator for the District Disaster Management Unit (DDMU). Its status as a humanitarian organisation under the auspices of government provided a functioning link between government and NGOs working in the area. If the IVCA's are adjusted to incorporate contextual vulnerability, this could link the knowledge at community level to both practitioners and government. Another example is the work by the national DRR Forum to create and activate the DRR fora at district level. A pilot project forms community committees in selected districts in KP and facilitates meetings with the district authorities to discuss priorities in development investments. This could be a strong tool to make local governments and organisations accountable to communities. If these measures are to be possible, however, donors and central offices of both organisations and government need to set aside political rivalries and open up processes that are more locally determined. Without such processes, it is difficult for governments to execute and implement effective longer-term DRR strategies, and difficult for communities to adapt to climate change.

## 8 Conclusions

Our findings show that most responses to disasters in the study areas focus on vulnerability to hazards, or outcome vulnerability. While these responses may be important contributions to protecting populations physically in the short term, they are neither sustainable nor transformational in terms of reducing the drivers of vulnerability in society. Contextual vulnerability, or attention to the drivers of vulnerability, are seldom considered by government, humanitarian or development actors. This was evident in both the choice of activities themselves, and the risk and needs assessments studied. Our findings also show that despite the rich knowledge of drivers of vulnerability at the local level, this is not systematically incorporated into the decision-making processes of the government, humanitarian and development organisations when designing mitigation and adaptation activities. Where participatory methods are used, they are not used to discover social difference and vulnerability between members of communities. We found that this was due to a lack of understanding of the significance of social vulnerability by most of the actors, a lack of knowledge sharing between actors, and political power relations in humanitarian and development assistance which privileges knowledge bases at the national and international levels. The consequences of not considering the different ways in which people are vulnerable is that activities will strengthen existing inequalities, and vulnerability will in fact increase precisely for those people who are the most disadvantaged.

In light of these findings, we recommend the inclusion of social vulnerability into risk and needs assessments at all levels, and that these assessments are truly participatory in the sense that a broad range of village women and men from different social, economic and ethnic backgrounds are able to share their knowledge effectively. We also recommend that fora where government, humanitarian, development and research actors can share knowledge take place not only at the national level, but at the district level, such that there is both better coordination and more participation by community members. Finally, we recommend that donors re-examine their top-down mechanisms of funding such that participatory processes of planning and implementation are indeed possible. This includes a shift in focus from contracting to competence-building of local government and communities in designing and implementing activities that directly affect their lives.

## Notes

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# The Power of ‘Know-Who’: Adaptation to Climate Change in a Changing Humanitarian Landscape in Isiolo, Kenya

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**Abstract** This article examines adaptation to climate change in view of changing humanitarian approaches in Isiolo County, Kenya. While humanitarian actors are increasingly integrating climate change in their international and national-level strategies, we know less about how this plays out at sub-national levels, which is key to tracking whether and how short-term assistance can support long-term adaptation. The article suggests that increasing attention to resilience and adaptation among humanitarian actors may not lead to reduced vulnerability because resources tend to be captured through existing power structures, directed by who you know and your place in the social hierarchy. In turn, this sustains rather than challenges the marginalisation processes that cause vulnerability to climate shocks and stressors. The article highlights the important role of power and politics both in channelling resources and determining outcomes.

**Keywords:** Kenya, drylands, climate change, climate change adaptation, power relations, humanitarian aid, contextual vulnerability, marginalisation, resilience, pastoralism.

## 1 Introduction

Concerns over human-induced climate change have led to a growing emphasis among humanitarian agencies on the need to adjust and change their approaches towards strengthening resilience and supporting adaptation. State and non-state actors at the international and national level increasingly demonstrate a focus on resilience and adaptation to climate change in their humanitarian policies and practices, in part reflecting broader changes within the humanitarian sector (Bennett and Pantuliano 2016; Eriksen *et al.*, this *IDS Bulletin*). However, little is known so far about the implications of these changes for vulnerability outcomes at sub-national and local levels.

To address this gap, this article documents changes in humanitarian actors' policies and practices in Isiolo County, Kenya, and discusses whether and how these changes affect patterns of vulnerability and potentials for transformational adaptation, with a specific emphasis on power relations and marginalisation processes. Isiolo County is an interesting case for several reasons. It is located in the Arid and Semi-Arid Lands (ASALs) of northern Kenya, and is one of the poorest and least developed parts of the country (Republic of Kenya 2012b). After decades of neglect, Isiolo has, however, in recent years received increasing attention and investment, as a site for a number of flagship projects<sup>4</sup> under the 'Vision 2030' development strategy of Kenya (Republic of Kenya 2013a). The new investments and flow of resources have led to significant optimism, as well as new avenues for power plays and political struggles.

Following recent studies (e.g. Denton *et al.* 2014; O'Brien *et al.* 2015), we consider that to adapt to climate change, transformative changes are needed alongside incremental improvements in livelihoods. This puts the focus on socio-political drivers of vulnerability to climate change and variability, including power relations and marginalisation processes (Eriksen, Nightingale and Eakin 2015; Tschakert *et al.* 2016).

Based on interviews and data collected in six sites in Isiolo County, this case study identifies significant emerging changes in the approaches of state and non-state humanitarian actors in Isiolo. There is a move away from sector- and project-based short-term interventions towards more holistic, integrated and longer-term approaches – at least on paper. Climate change concerns appear to be one of the drivers behind these changes, with concepts such as resilience, adaptation and disaster risk reduction increasingly gaining traction among humanitarian actors. The humanitarian–development divide seems to be eroding at the county level, and socio-political processes such as devolution, growing political attention and new funding opportunities are bringing about both opportunities and challenges for adaptation processes.

Although it is still too early to see how the emerging 'paradigm shift' in the humanitarian landscape in Isiolo will affect longer-term vulnerability to climate change, this study cautions that unless more emphasis is placed on addressing socio-political drivers of differential vulnerability in the 'new' humanitarian policies and practices, they run the risk of reinforcing processes that reduce the vulnerability of some at the expense of those who might need it the most. This is in large part because humanitarian assistance gets 'woven' into the sociocultural and political fabric of Isiolo. Rather than challenging existing asymmetric power relations and dynamics leading to differential vulnerability, they appear to, at best, sustain – or, at worst, exacerbate existing marginalisation processes. Access to resources to cope with and adapt to climate change are to a large extent dependent on your place in a social hierarchy, your authority to influence decision-making processes and your links to economically or politically powerful people

(your ‘know-who’), which in turn is shaped by your ethnicity, gender, age, livelihood and wealth. Thus, despite changes in humanitarian policies, this study saw few indications of changing practices or activities addressing root causes of differential vulnerability, nor promoting any systemic, transformative change.

The next section sets out the theory and methodology. This is followed by an assessment of vulnerability drivers in Isiolo and the role of power (Section 3), together with an account of changes in humanitarian approaches in Isiolo and the attention to climate change (Section 4). Section 5 reflects on the overlaps and tensions between humanitarian changes and vulnerability drivers. The article concludes (Section 6) by suggesting that support to adaptation among humanitarian actors will require more focus on the governance of resource access as root causes for vulnerability, and that this needs to be carried out alongside improved access to climate-related technology and resources.

## **2 Theory and methods**

To address the relationship between humanitarian approaches and vulnerability in Isiolo, we need to understand what factors shape vulnerability patterns. Vulnerability is here understood as a present inability to cope with and respond to climate variability and change, caused by multiple interacting contextual conditions and processes (O’Brien *et al.* 2007). This contextual understanding of vulnerability is a processual and multidimensional view of climate–society interactions whereby climate variability and change is seen to occur in the context of political, institutional, economic and social structures and changes (O’Brien *et al.* 2007). As demonstrated also by this case study, vulnerability is highly dynamic and uneven across and within groups, and may change if, for instance, power relations shift. Strategies people employ to respond to stressors and change processes (i.e. coping, adapting) are an inherent part of the vulnerability context, and reflect pre-existing structures of social vulnerability (Eriksen *et al.* 2014; Forsyth and Evans 2013). Such responses may entail negotiating with others to ensure access to and control over resources in the face of shocks and change. Adaptation to climate change is considered fundamentally a governance issue – a process through which individual or collective deliberate actions, or inactions, are negotiated and structured (Adger, Lorenzoni and O’Brien 2009). Power is an intrinsic aspect of such negotiations between individuals and groups with differing, and at times competing, interests and aspirations (Eriksen *et al.* 2015). Power not only determines the extent to which a person or group has access to resources and/or whose voices are heard in decision-making processes, it also delineates authority to decide which development pathways are deemed desirable (Ensor *et al.* 2014; Eriksen *et al.* 2014; Swyngedouw 1997). ‘Authority’ is here seen as the ability to exert one’s agendas over another’s within environmental governance and adaptation processes (Eriksen *et al.* 2015).

Recognising that climate change is fundamentally a development issue, any efforts aimed at adaptation should support a move towards

more climate-resilient development pathways – meaning development trajectories that combine mitigation of emissions, equitable development and reduced vulnerability (O'Brien *et al.* 2015; Pelling, O'Brien and Matyas 2015). 'Resilience' is here considered to be the ability of an individual, group or a system 'to resist, absorb, accommodate to and recover from the effects of a hazard in a timely and efficient manner, including through the preservation and restoration of its essential basic structures and functions' (UNISDR 2009: 24). Resilience is a broad concept that spans the disaster risk management continuum, from the pre- to the post-disaster phase, and moves beyond merely being the opposite of 'vulnerability' by also focusing on factors such as capacities, exposure and self-organisation. Reducing vulnerability may contribute to strengthening resilience to shocks and stressors – but greater transformations are often needed, such as empowering marginalised groups to influence decisions that concern their lives and livelihoods.

This study employed a qualitative research approach, and empirical data was collected in Isiolo town, Kinna, Garba Tula, Malkadaka, Gafarsa and Belgesh between February and March 2015. Additional key informant interviews were conducted in Nairobi. Data collection included open-ended and semi-structured qualitative interviews, participatory observation at meetings and humanitarian interventions, and a review of relevant documents and statistics from Isiolo and Nairobi. Eleven focus group discussions, 33 key informant interviews and 40 household interviews were conducted, totalling 84 interviews with more than 170 informants, of which 118 were women. The wealth, education level, social status, source of livelihood and ethnicity of informants varied widely.

### **3 Vulnerability in Isiolo: drivers and the role of power relations**

Isiolo County has a population of 143,234 (Republic of Kenya 2013a). Pastoralism is the principal livelihood activity, along with agro-pastoralism or farming, trade, casual labour, charcoal production and formal employment. The county suffers from recurring droughts, with recent ones in 2009, 2011, 2014 and 2017, and floods, notably in relation to strong El Niño episodes like the ones that took place in 1997/98 and 2015/16 (Jebet and Muchui 2015). Respondents across the sites perceive that temperatures are increasing while precipitation is decreasing; droughts are becoming more frequent, and the rainy seasons are increasingly unpredictable. Previously, droughts occurred after periods of 10–15 years, but now they occur every two to three years. These changing climatic conditions affect pastoralists and farmers in Isiolo in important ways. Respondents tell of pasture grounds drying up and some species of grass disappearing altogether. Reduced rainfall intensity has also led to drying up of springs, and reduced water availability due to a sinking water table and limited recharge.

These impacts are closely linked to a number of other factors that shape the vulnerability context, such as cultural and religious customs and norms, conflict and insecurity, power relations and marginalisation

processes. For instance, while female genital mutilation (FGM) and under-age marriages are prohibited in Kenya, these practices are still widespread in Isiolo and have a number of harmful implications for female health, such as causing complications during pregnancies and childbirth. Furthermore, due to religious beliefs, weather forecasts and the idea of preparing for climate change were resisted by many on the grounds that it is beyond human control, and commercial loans and insurance were, according to informants, considered *haram* – or illegal within Islam. This restricts investments in measures that may limit risks or diversify livelihoods.

Power and socio-political relations in Isiolo are closely linked to markers of social differentiation, including ethnic affiliation, gender, age, livelihood, education and wealth. As in other parts of Kenya, ethnicity is still among one of the most significant identity markers in Isiolo, and tribalism and clannism are a fundamental aspect of political processes and struggles over access to resources and decision-making power (Auma 2015; Sharamo 2014). Isiolo is home to a number of ethnic groups, including the Borana, Somali, Turkana, Samburu, Sakuye, Gabra, Rendille and Meru, and recurring inter-ethnic clashes and cattle-rustling sporadically lead to loss of lives and livestock, displacements and hampers mobility (Jebet 2016; Sharamo 2014).

Current patterns of power relations have deep historical roots. The Borana ethnic group, a branch of the Cushitic Oromo people originating from southern Ethiopia, is the most populous in Isiolo today, and is considered to be the most dominant in politics and decision-making processes. Traditionally a nomadic, pastoralist people, the Borana migrated to northern Kenya during the end of the 1900s in search of water and pasture. One group started to settle near water wells in Wajir, but after recurring conflict between the Borana and Somali over access to water and grazing rights, the British colonial government in 1932 decided to transfer the area of Wajir to the Somali in exchange for the Ewaso Nyiro area of Isiolo, which was given to the Borana people (Aguilar 1998; Arero 2007). This group of resettled Borana people was from then on referred to as the ‘Waso Borana’, and is still by many considered to be the rightful ‘owners’ of Isiolo. This notion of autochthony, meaning that a people is entitled to a certain piece of land due to their ancestral rights to it (Boås and Dunn 2013), can still be found resonated in the rhetoric of Borana politicians during election campaigns. According to informants in this study, election campaigns in Isiolo are characterised by ethnic cleavages, rather than opposing political ideologies, and loose alliances between representatives from different tribes/clans are commonly formed based on linguistic, cultural and religious traits.

Intra-ethnic clan structures are also of great importance to how authority and power is delineated. For instance, within the Borana ethnic group, there are ten clans of varying size. The clans Karayo and Warjida are commonly the greatest rivals in Isiolo politics. Karayo is the

most populous in Isiolo County, with about 50 per cent of all Borana people in Isiolo, while Warjida is the clan of the current governor, and is therefore according to informants considered to be the 'clan in power'. The clans considered to be the least powerful were according to informants the minority clans of Hawatu, Nunito and Digalu. These were explained to be low in both number and political influence.

Wealth is another key marker of societal differentiation in Isiolo. Major wealth indicators include having livestock, educated children and big houses. The poor were identified as those without livestock, without education, and those who relied on livelihoods such as casual labour, charcoal production or petty trade. Wealth is also closely associated with the impression of being 'successful' and having the ability to make good choices, thus shaping people's relative authority in decision-making processes.

Among the Borana, livestock is also a major determinant of power and authority. As explained by a key informant, 'those with less than 30 heads of livestock are considered to be poor; those with more than 30 are well off; while those with more than 50 are considered to be rich.' Camels are the most expensive.<sup>5</sup> Cattle are worth roughly a tenth of the value of a camel, while sheep and goats are worth a hundredth. Keeping livestock is, however, not only considered to be an investment and a source of food and income, but is closely related to identity and pride. The following quote typifies this: 'Recognition here is when you have herds. Nobody recognise you if you don't have herds. People don't even know you. You just remain and work in a world of oblivion.'<sup>6</sup>

Livestock ownership is increasingly being concentrated into fewer and fewer hands of wealthy pastoralists, and the gap between rich and poor is increasing as the rich are able to employ strategies that minimise their own and capitalise on other's losses during droughts (Tari and Pattison 2014). For example, wealthy pastoralists may send their livestock for grazing at ranches in other parts of Kenya during extended dry seasons or droughts, or bribe park rangers to send their livestock for grazing inside Meru National Park.

The importance of livestock for authority and social standing is well illustrated through the example of the marginalisation of the Watha group. The Watha is an endogamous<sup>7</sup> group of former Boran pastoralists who allegedly lost their livestock herds at some point in history and started hunting wild animals, such as giraffes, elephants or antelopes, and gathering honey, fruits, roots and berries for survival. These hunters and gatherers coexisted peacefully with the pastoralist Boran people for decades. A key informant described the relationship thus:

*In times of major drought, when all livestock of the Boran was dead, the Boran respected the Watha a lot, because the Boran didn't have skills to hunt. So the Watha gave them meat. The 'relief food' of that time was that of wild animals provided by Watha.<sup>8</sup>*

This changed when it became illegal to hunt wild game in Kenya in 1977 (Barnett 1998): as a result, the main livelihood of the Watha was effectively criminalised. The Watha then had to find alternative livelihoods, and started farming, doing casual labour or producing charcoal. ‘That was when they became totally poor and respect was lost. Their dignity lost. After the prohibition, there was no relief coming from Watha, so nobody cared about them any more’, our informant continued. ‘Although some of the hunters and gatherers even went back and started owning livestock, people don’t consider Watha as people with dignity.’ To this day, the Watha are stigmatised in the Borana community, and excluded from decision-making processes.

In addition to the Watha group, this study also revealed that women, people from minority ethnic groups, people with disabilities, orphans, people living with HIV/AIDS and widows felt discriminated against and excluded from accessing resources and decision-making processes. This also included a group of people that were displaced from their homes during the 2007–08 post-election violence in Kenya, locally referred to as the ‘Tenne’ people.

#### **4 The changing humanitarian policy landscape in Isiolo**

Humanitarian interventions in Isiolo date back to the period after the Shifta War of 1963–68, when the newly independent Kenyan government fought secessionists in the Northern Frontier District (NFD), who wanted NFD to become integrated into the ‘Greater Somalia’ (Arero 2007; Dahl 1979; Hogg 1983). The Shifta conflict was brutal and had detrimental effects on the livelihoods and economy of people in northeastern Kenya, and a severe drought in 1970–71 left the already destitute population in a severe condition. According to Hogg (1983), 95 per cent of the total camel population in Isiolo was lost between 1963 and 1970, from 200,000 heads to 6,000, while the small stock population declined by 90 per cent.

Massive relief operations were then initiated by the Kenyan government and various religious and international aid organisations, and at one point, as many as 140,000 people were living on famine relief in northern Kenya (nearly half of the total population of the NFD at that time) (Dahl 1979; Lewis 1963). Small-scale irrigation schemes were also established to provide pastoralists who had lost their livestock with alternative sources of food and income (Hogg 1983).

After the 1970s, the post-independence Kenyan government held back investments in infrastructure and service delivery in the former NFD region as they argued that public investments should go to areas with abundant natural resources where revenues would be higher (Elmi and Birch 2013). The collective punishments of the Cushitic-speaking pastoralists of northern Kenya by the Bantu-dominant government during and after the Shifta conflict led to mistrust of the government among the Borana (Hjort 1979). As explained by Arero (2007: 297), ‘The Borana felt they were being punished for a problem caused by the activities of the Somali, and as a result they began to lose faith in

the young Kenyan nation'. Governmental neglect of infrastructural development also led to a high reliance on humanitarian relief, provided primarily by non-state actors, during periods of stress such as drought or floods. However, as also pointed out by informants in this study, these short-term interventions did not address or change the root causes of vulnerability – they just treated the symptoms.

The last decade has, however, seen a significant transformation in the governmental approach to development in the ASAL regions of Kenya. In 2012, the Government of Kenya approved the *Sessional Paper No. 8 of 2012 on National Policy for the Sustainable Development of Northern Kenya and other Arid Lands*, also referred to as the ASAL policy (Republic of Kenya 2012a). Here the government acknowledges that impoverishment in ASAL regions is partly a result of conscious public policy choices taken in Kenya's past, and declares a commitment to facilitate sustainable development, strengthen climate resilience and ensure sustainable livelihoods in the ASALs (Republic of Kenya 2012a). The Kenyan 'Vision 2030' development blueprint launched in 2007 also declared Isiolo County as a site for the establishment of a flagship project, while the subsequent 'Vision 2030 Development Strategy for Northern Kenya and other Arid Lands' aimed to achieve: 'A secure, just and prosperous Northern Kenya and other arid lands, where people achieve their full potential and enjoy a high quality of life' (Republic of Kenya 2007, 2012b). Furthermore, the Ending Drought Emergencies (EDE) Strategy launched in 2014 places particular emphasis on strengthening climate resilience in the ASAL regions (Republic of Kenya 2013b, 2014). According to informants in this study, the renewed focus on development of the ASAL regions is not only attracting private investments, but also leading to greater availability of donor funding and an influx of both humanitarian and developmental (or mixed mandate) non-governmental organisations (NGOs) and United Nations agencies.

Echoing a paradigm shift in the humanitarian sector internationally, state and non-state actors interviewed in this study were also emphasising sustainability, community participation and capacity building as increasingly important. Furthermore, as a result of the growing emphasis among donor agencies on partnerships and holistic and cross-sectorial approaches in the humanitarian and development sector, both humanitarian and development NGOs in Isiolo are increasingly coming together and forming consortiums to access funds. This is, according to informants, changing the humanitarian landscape in the area, and contributing to eroding the humanitarian/development divide. Even humanitarian NGOs in Isiolo are increasingly embracing 'resilience' thinking in their policies and strategies and moving towards longer-term integrated programmes.

### **5 Humanitarian assistance and vulnerability to climate change in Isiolo**

In spite of a growing emphasis on climate change and resilience in humanitarian *policies* in Isiolo County, humanitarian *practices* seemed in this study to remain more or less the same, and little seems to be done in



practice to address unequal power relations and marginalisation processes that lead to differential vulnerability. Humanitarian efforts implemented in response to drought during the time of this study were still focusing on addressing basic needs (e.g. relief food, water trucking) and providing some livelihood support, primarily to pastoralists (including livestock off-take and re-stocking, distribution of hay, vaccinations, medicines and concentrates such as saltlicks, molasses and minerals), but also some to farmers (provision of hand pumps for irrigation). Those relying on other sources of income were not given any livelihood support and, as identified earlier, these were commonly understood to be among the most vulnerable. Rather than support transformational adaptation processes, the humanitarian efforts thus served to keep the status quo and consolidate existing vulnerability patterns.

The phenomenon of ‘elite capture’ has been well documented in development research previously (e.g. Dasgupta and Beard 2007; Platteau 2004) and was, perhaps not surprisingly, also to some extent observed in this case study. Respondents argued that wealthy, well-educated people with a large social network were able to capitalise on their ties with people in power to channel humanitarian resources to their own families and ethnic kin. Many local informants argued that they felt bypassed and neglected by both development projects and humanitarian assistance from government or non-state actors, and argued that these interventions were influenced by existing power structures such that those who were marginalised in the community were effectively restricted from accessing humanitarian assistance (and development aid more broadly). As a female, elderly farmer said:

*That assistance depends on your ‘know-who’. That help always goes to the rich, and the poor remain without help. Those who are in charge of giving out the assistance are only concerned with helping their friends or building their own wealth.<sup>9</sup>*

An elderly male agro-pastoralist<sup>10</sup> also said: ‘The assistance that comes to this area goes to those people in charge and they only give to their relatives. So those who need it never benefit.’ In Kinna, among those who complained the most about being neglected included the marginalised groups of Watha, Meru, Kikuyu and Tenne; and minority clans such as Digalu and Nunito, women, and non-pastoralists relying on charcoal production, petty trade or casual labour.

State and non-state humanitarian actors operating in Isiolo emphasised that their activities were needs-driven and based on comprehensive vulnerability assessments and community consultations, and an increased focus on ‘bottom-up’ approaches and ‘participation’ in both project design and implementation was found to be evident in this study. This was primarily done through engaging with local formal and informal institutions, such as the chiefs, village elders, community committees or community-based organisations. These institutions do not, however, necessarily represent the views and interests of everyone in the community equally. Many respondents in this study argued that the

people who were selected to represent the community in local institutions such as the village elders were typically those with economic, social and political power and authority, and informants complained that these 'representatives' channel benefits and resources through personal and family relations and along clan lines. A male informant provided an example of this; some poor, vulnerable women were supposed to be given goats by a humanitarian NGO, and in order to find out whom the most vulnerable women in that community were, a local committee was consulted and given the task of submitting a list of names of the most needy. However, the list included almost exclusively women from one particular clan, and was neither representative nor needs-based. This, and other examples, seem to indicate that local power relations and patterns of authority thus influence the 'participatory' process of targeting and lead to some being favoured over others.

Furthermore, some informants argued that they were not reached by humanitarian (or development) aid because they were not considered to be part of the *community*, and therefore were not able to sit on committees or even be invited to community meetings (*barazas*). For instance, an informant said:<sup>11</sup>

*Watha people end up being disadvantaged because we are within the community, but nobody asks for us. NGOs tell the community to select their own committees which they think are appropriate, and unfortunately, we are not part of the people who will be selected.*

This exemplifies some of the challenges with using the notion of 'community participation' uncritically, as widely discussed by Cannon and Schipper in the *World Disasters Report 2014* (IFRC 2014).

When those who are invited to represent the community are already the most wealthy and powerful, the question is to what extent the priorities and interests put forth by those who are invited to participate in the 'participatory', 'bottom-up' process actually reflect the needs of those who are the most vulnerable? Are their views representative of a heterogeneous population? Findings in this study suggest that they do not. Interventions seem to do little to reduce the underlying causes of differential vulnerability, also bringing into question the extent to which findings from 'participatory' vulnerability assessments and consultations are acted upon in practice. It might be argued that these are often conducted primarily for the sake of 'ticking a box' in donor proposals and reports, and do not necessarily guide interventions in practice.

This case study accentuates the difficulties of adopting a technical approach to adaptation. Interventions become part and parcel of socio-political structures. By operating within existing socio-political structures, and not challenging these, asymmetric power relations, marginalisation processes and associated vulnerability patterns may be reproduced. For instance, humanitarian assistance that supports only certain livelihoods or coping strategies in emergency situations, or that

is being channelled through existing local institutions, may inadvertently strengthen the relative power of some over others in a social hierarchy, and thereby indirectly contribute to consolidating vulnerability patterns. People who already have authority to influence decision-making processes, based on their subjectivity and status in the ‘community’, are often also those who end up controlling access to resources. Humanitarian interventions may serve to either entrench or challenge such inequities, and need to take into proper consideration how to address power relations and marginalisation processes that contribute to differential vulnerability, in order to reach the most disadvantaged and support a move towards climate-resilient development pathways.

## 6 Conclusions

This article has discussed to what extent changes in humanitarian approaches in Isiolo County, Kenya, may help reduce vulnerability and support transformational adaptation to climate change. Our findings suggest that while the landscape of humanitarian efforts are changing, with part of the motivation being climate change, there are key challenges remaining in tackling power asymmetries and marginalisation processes.

In particular, we show the importance of understanding how historical trajectories and relationships shape decision-making in contexts with weak formal institutions. This study highlights the importance of paying particular attention to the role of power and politics in the design and implementation of humanitarian interventions, and ensuring that ‘community’ participation does not exacerbate existing vulnerability dynamics but rather gives a voice to the marginalised.

The findings add to the growing number of studies that question assumptions about linear causal relationships between, on the one hand, increased focus, funding and knowledge about climate change among humanitarian actors, and on the other, outcomes for those who have the least capacity to cope with and adapt to climate change. Findings suggest in turn that increased resources and funding could feed into, and entrench, existing power relations, supporting the very processes that create vulnerability in the first place (Lockwood 2013). To avoid this, the findings suggest, in line with a growing number of studies (Adger *et al.* 2009; Brown 2015; Taylor 2015; Eriksen *et al.* 2015; Tschakert *et al.* 2016), that adaptation is fundamentally a governance issue and more attention is needed to the socio-political factors and processes that drive adaptation decisions and outcomes at sub-national and local levels.

### Notes

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- 4 Please note that at the time of finalising this article in May 2017, the future of the proposed Resort City, mega-dam and the LAPSSET corridor, which were expected to lead to massive infrastructural developments in Isiolo, is uncertain, due to ongoing debates regarding the potential environmental implications of the projects.
- 5 One camel may be worth nearly KSh600,000 (£4,618.48).
- 6 Interview, February 2015.
- 7 'Endogamy' is the practice of marrying solely within a specific ethnic group.
- 8 Interview, March 2015.
- 9 Interview, February 2015.
- 10 Interview, February 2015.
- 11 Interview, March 2015.

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# Social Protection or Humanitarian Assistance: Contested Input Subsidies and Climate Adaptation in Malawi

Ruth Haug<sup>1</sup> and Bjørn K.G. Wold<sup>2</sup>

**Abstract** The purpose of this article is to assess factors that contributed to the apparent success of the Farm Input Support Programme (FISP) in the period 2005–15, and discuss the lessons that can be learned from this experience in relation to climate change adaptation. Important factors were the ability to balance external and internal drivers that affected policy formulation, national ownership and prestige that influenced and motivated implementation capability, creation of conducive conditions for agricultural development and the demand-driven nature of the programme. However, the flooding in 2015 and the drought in 2016 revealed that Malawi is in dire need of more effective measures that can reduce long-term vulnerability and build resilience to future adverse impacts of climate change. Still, lessons learned from the social protection programme can prove useful in relation to multiple efforts towards achieving sustainable climate change adaptation that could reduce the need for future humanitarian assistance.

**Keywords:** social protection, humanitarian assistance, input subsidies, climate adaptation, Malawi.

## 1 Introduction

Climate change contributes towards increased uncertainties around future risks for national food scarcity and a possible worsening of food insecurity and hunger in many countries in Africa (IPCC 2014; Hallegatte *et al.* 2016). Risks of drought and flooding call for an increased focus on climate adaptation and effective emergency responses that consider longer-term resilience (Thurlow *et al.* 2014; Challinor *et al.* 2016). Vulnerability to disasters such as drought and flooding is closely related to poverty (Hallegatte *et al.* 2016). Malawi is a country with extensive experience of drought and flooding. Serious hunger triggered by drought brought Malawi into the international crisis headlines in the 1990s and the first half of the 2000s. From 2005 to 2015, however, Malawi was able to go from being at the receiving end of extensive

humanitarian assistance to becoming self-sufficient in staple foods, even exporting maize to Zimbabwe and Kenya (NSO 2005–2015; Government of Malawi 2016), as well as the country's traditional agricultural export commodity, tobacco. But after a decade of keeping serious hunger at bay, flooding in 2015 followed by El Niño and severe drought in 2016 brought Malawi back into the disaster headlines with almost half of the population being in need of food relief in 2016 (WFP 2016). From the mid-1990s, the Malawian government adjusted its agricultural policy to fight food insecurity and hunger, and invested in social protection through different input subsidy programmes such as the Farm Input Support Programme (FISP), which started in 2005 (HLPE 2012; Government of Malawi 2016). The main goal of social protection in the form of farm input subsidies has been to produce enough food in the country to avoid hunger. The political changes and the subsidised inputs have, according to several sources (Carr 2014; Arndt, Pauw and Thurlow 2014; Pauw, Beck and Mussa 2014; Government of Malawi 2016), contributed towards preventing hunger and the need for humanitarian assistance in the decade 2005–15. According to the Government of Malawi (2016), the FISP was able to advance food security by improving agricultural productivity, but failed to develop the necessary resilience in relation to the 2015 flooding and the 2016 El Niño and drought. The purpose of this article is to assess factors that contributed to the apparent success of the social protection programme FISP, and to discuss the lessons that can be learned from this experience in relation to climate change adaptation.

## **2 Approach and analytic framework**

This article is based on analysis of data collected by the National Statistical Office of Malawi (NSO) and the Ministry of Agriculture, Irrigation and Water Development (MOAIWD) in the period 1997–2014, and a review of the literature including policy documents and newspaper articles, as well as a limited number of key informant interviews with university and ministry employees. Each year, the statistical unit in the MOAIWD produces and distributes detailed crop estimates to stakeholders in the country, based on data collected by the extension officers. The figures on area cultivated and total production at national, district and local levels by crop are available on demand. Most of the graphs presented in this article are based on these figures. Unfortunately, the MOAIWD and NSO apply slightly different survey approaches resulting in different estimates. The NSO is dependent on donor funds for many of the national surveys. For donors operating in many countries, the main interest may often be consistency across countries rather than over time within Malawi. As described in detail by Beck, Pauw and Mussa (2015), this may give inconsistent time series, especially for data constructs such as poverty estimates, when based on various survey types. It is therefore essential to follow trend estimates within each of the two major survey approaches rather than combining them. In cases where statistical data that has not been published are used, reference is given to the main publication from the survey that included these data.



To analyse factors that contributed to the apparent success of the social protection programme FISP in improving food security in the period 2005–15, we assess the political landscape that shaped the formulation of the FISP policy including national and international drivers. Secondly, we look at implementation capability in accordance with Booth *et al.* (2006) who underline that the degree to which policies are implemented depends on governance, power relations, institutional capability, voters' support, monetary resources and priorities. Thirdly, we analyse the appropriateness of the technology in relation to political frame conditions and impact. Regarding impact, we lean on Birner *et al.* (2006) who imply that social and technological innovations should result in impacts such as productivity increase, improved food and nutrition security, reduced poverty, better gender and social equity, more employment opportunities and increased resilience at all levels. To analyse trends in the food and nutrition security situation, we rely on the Global Hunger Index (IFPRI-GHI 2015). Lastly, to analyse what lessons could be learned from the social protection (FISP) experience in relation to climate change adaptation, we apply Eriksen and Marin's (2015) key principles for sustainable climate change adaptation:

- Describe vulnerability contextually, including multiple stressors;
- Acknowledge differing values and interests that affect adaptation outcomes;
- Suggest how local knowledge can be incorporated into adaptation responses;
- Consider potential feedback between local and global processes;
- Empower vulnerable groups in influencing development pathways and their climate change outcomes.

### **3 Social protection the 'Malawian way'**

Around 85 per cent of the Malawian population (approximately 17 million people) live in rural areas (WB 2016). Agriculture accounts for 30–40 per cent of gross domestic product (GDP) and 80 per cent of foreign export earnings (EAD/UNDP 2016). Malawi is a country that is used to experiencing recurrent disastrous famines triggered by drought and flooding. Between 1967 and 2014, Malawi suffered seven serious droughts and 19 floods that adversely affected smallholders' production and food security (Government of Malawi 2015). In 2015, Malawi received the highest rainfall on record for the country, causing severe flooding, particularly in the Southern Region (*ibid.*). In 2016, El Niño-induced drought contributed towards another state of disaster (WFP 2016). Over the last decades, different Malawian governments have put in place various policies and strategies to secure food in the country. In the Malawi Growth and Development Strategy 2012–2016 (MGDS II), the government emphasised the strengthening of disaster risk management coordination, development of an integrated national early warning system and implementation of mitigation measures in

disaster-prone areas (EAD/UNDP 2016). Several other national policies and strategies such as the Disaster Preparedness and Relief Act 1991 (DPR), the National Disaster Risk Management Policy (NDRM), and the National Climate Change Policy have shaped policies and actions in preparation for the possible disasters that climate change may bring. In 2015, Malawi was granted support from the Green Climate Fund for the project 'Scaling up the Use of Modernized Climate Information and Early Warning Systems in Malawi' (Green Climate Fund 2015). In 2016, the Government of Malawi presented a new National Resilience Plan aimed at addressing the causes of climate change and minimising the negative effects on food security (Government of Malawi 2016).

Social protection in the form of input subsidies has been used by different Malawian governments both in relation to recovery schemes such as starter packages after drought, as well as in relation to long-term development efforts to increase productivity and improve food security (Sjaastad *et al.* 2007). Regarding the serious droughts in 1991/92 and 1994/95, humanitarian interventions by donors included food relief, but did not originally allow input subsidies. However, due to the low production of maize, the World Bank accepted that a free input programme should be established in 1995, and production increased as a subsequence (*ibid.*). After a year, the government abandoned the input subsidies under pressure from donors (Harrigan 2003). In the following years, fertiliser use dropped drastically and so did production, resulting in increased food insecurity and hunger. This situation led the Malawian government to establish its own subsidy programme in 1998, the Starter Pack Programme that lasted until 2000 (Harrigan 2003).

Then another devastating famine took place in the 2001/02 season, and donors were again willing to support input subsidy programmes (Sjaastad *et al.* 2007). Donors agreed to fund a larger fertiliser scheme, the Extended Targeted Input Programme for a limited period. In 2004, Dr Bingu wa Mutharika was elected as president, and with him came new policy reforms reversing the privatisation that had taken place during the structural adjustment period (*ibid.*). The Agricultural Development and Marketing Cooperation (ADMARC) was re-nationalised (but still allowing competition from private traders) and a new input subsidy programme, the FISP, was introduced. In his election campaign, presidential candidate Bingu wa Mutharika promised to extend the input subsidy programme if elected, and he kept his promise when he came into office.

Although donors have played an important role in discussions around input subsidies in Malawi, the FISP has, to a large degree, been funded by the Malawian government and not by direct donor support; for example, in 2005/06 no direct donor support to the programme was reported (Dorward and Chirwa 2014). In the following years, direct donor support varied from 5 per cent of total costs at the lowest level in 2013/14, to 32 per cent at the highest level in 2011/12 (Dorward and Chirwa 2014). The FISP has been a costly programme for the Malawian government and the lion's share of public spending on

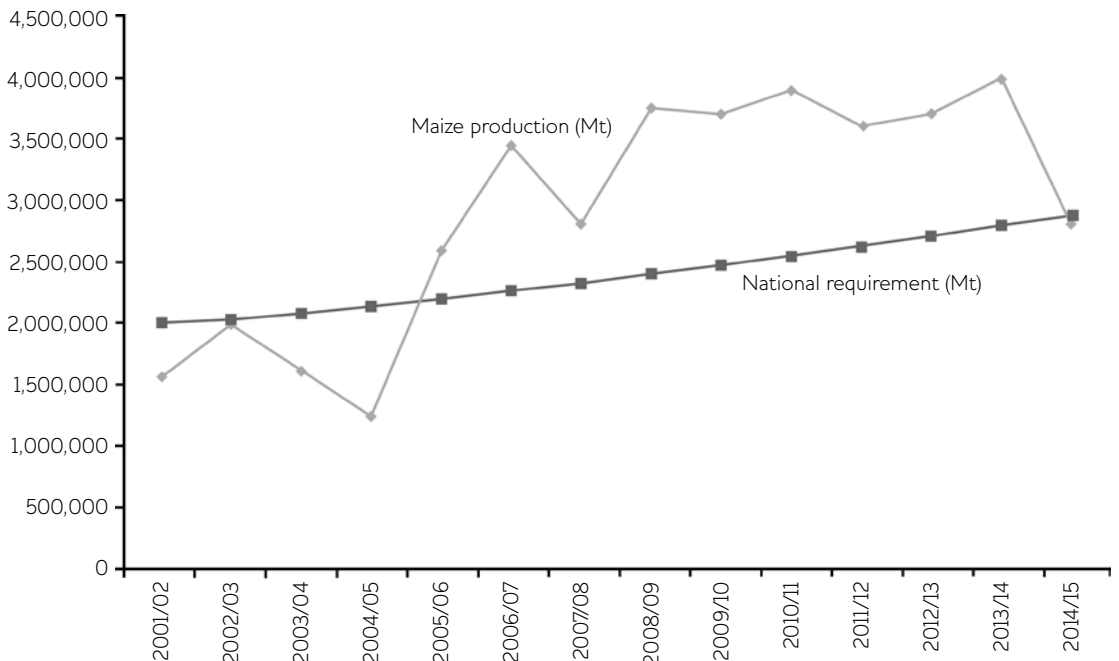
agriculture has gone into funding it. In 2014, agriculture accounted for around 20 per cent of government spending and the FISP received around 70 per cent of this amount (Government of Malawi 2016).

The design of the FISP has varied over the last ten years, but three important features have remained more or less static. Firstly, the programme involves both private and public input distributors, which means that the ADMARC operates in low-profit remote areas. Secondly, there is a targeting element, as the subsidised input should preferably reach the poorest half of the farming population, ensuring distribution to about half of the farmer households in the country. Thirdly, the subsidies cover a large share of the input costs, around 90 per cent of the price. A crucial element was to make the subsidy programme 90–100 per cent free to allow even risk-averse and cash-constrained farmers to use the coupons themselves rather than selling them cheaply to better-off farmers, district officers or traders.

**4 Contested subsidies**

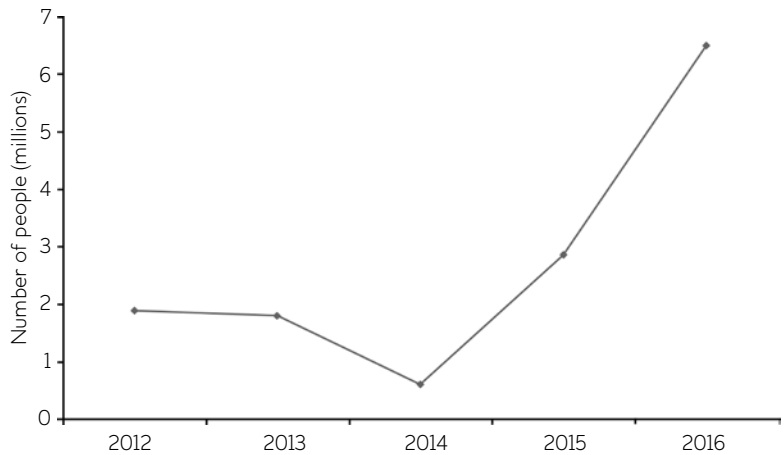
As described previously, social protection the ‘Malawian way’ involves targeted subsidisation of chemical fertiliser and improved seed. This policy has been heavily contested for various reasons. Donors and experts have challenged the input subsidies from a market liberalist point of view, claiming that input subsidies are not economically viable and that they distort the market (Minot and Benson 2009; Jayne and Rashid 2013; WB 2015). Similarly, reversing the structural adjustment’s privatisation of the ADMARC has been contested. The

**Figure 1 Total maize production against national requirement**



Source Government of Malawi (2016).

Figure 2 Trends in people in need of food assistance

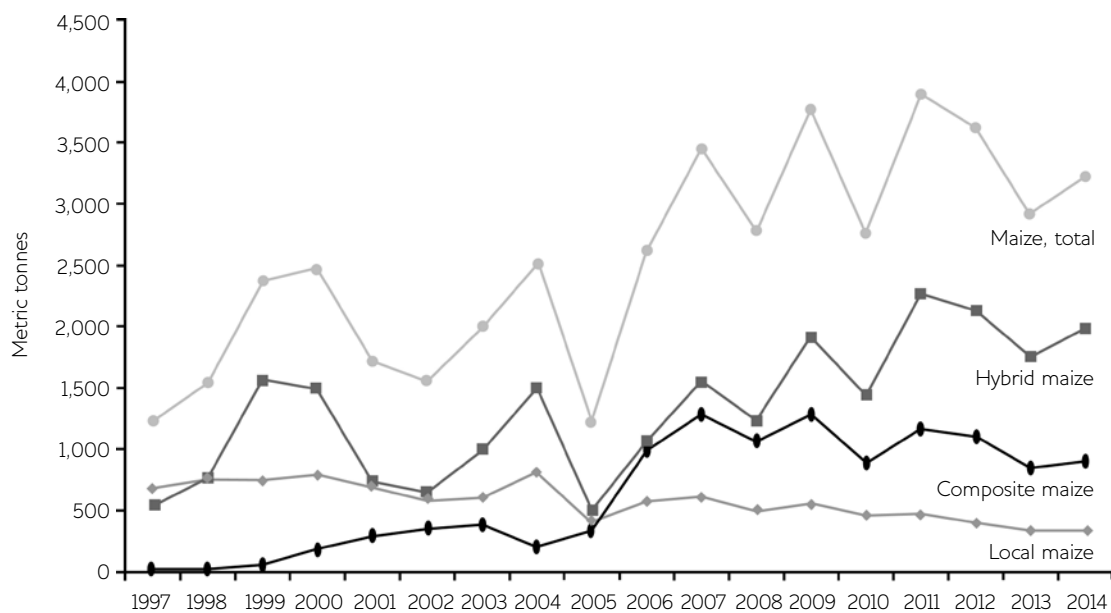


Source Government of Malawi (2016).

input subsidy programme is further contested from an environmental sustainability point of view in relation to possible soil degradation and loss of long-term soil productivity (De Schutter 2014; Grist 2015). The programme is also contested when it comes to crowding out necessary measures in relation to longer-term sustainable development, resilience-building and adaptation to climate change (Dorward and Chirwa 2014; Chinsinga and Chasukwa 2016; Government of Malawi 2016).

On the other hand, subsidising farm inputs has been successful in increasing agricultural productivity and improving household food security in the country, and thereby reducing the need for humanitarian assistance (Sjaastad *et al.* 2007; Carr 2014; Arndt *et al.* 2014; Pauw *et al.* 2014; Government of Malawi 2016). Figure 1 shows surplus maize production in relation to national requirement after the FISP was introduced in the period 2005–15. Figure 2 illustrates a decline in the number of people in need of food relief followed by a sharp increase after the 2015 flooding and the 2016 drought.

Whilst the Government of Malawi (2016) portrays the FISP as a success, in the sense that it broke the cycle of food insecurity, the programme failed to build the necessary resilience to withstand serious flooding and drought. The causal relationship between the FISP, productivity increase and improved food security could be questioned as other factors could have played a role, such as favourable rainfall. However, several studies of the FISP provide convincing evidence of a positive impact on improved food security (Carr 2014). Pauw and Thurlow (2014) go as far as stating that there has been a *dramatic decline in food insecurity* in Malawi due to the FISP. Arndt *et al.* (2014) estimate that each dollar spent on the FISP generates \$1.62 in national welfare improvements. Arndt *et al.* (2014) argue that in order to understand the impact of the FISP, indirect benefits should also be included; otherwise, two fifths of the FISP benefits are not captured.

**Figure 3 Total maize production of smallholders and estates**

Source MOAIWD (1997–2015).

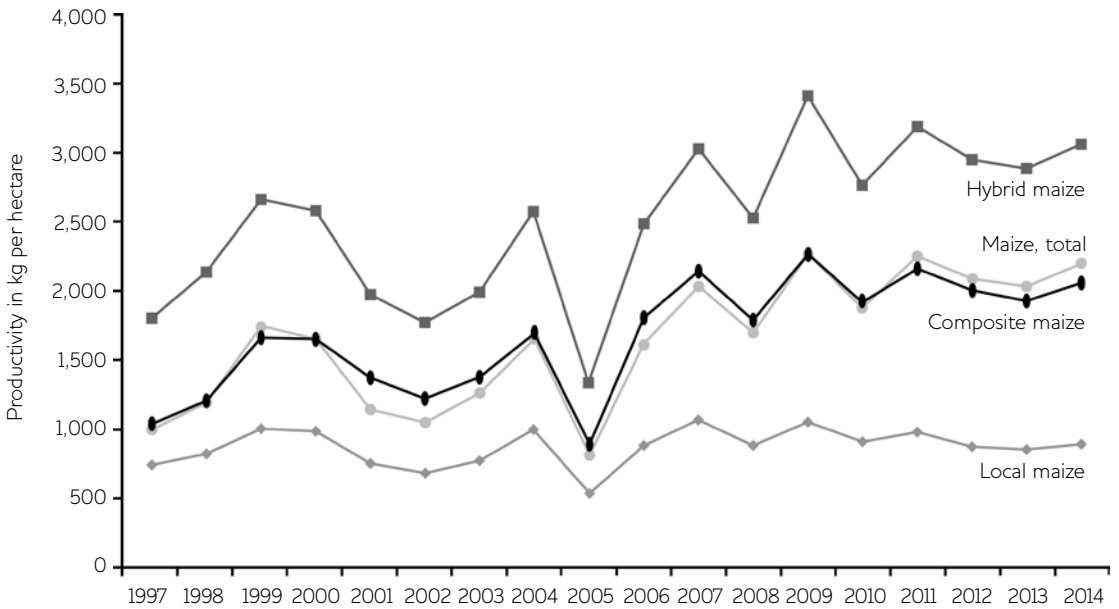
### 5 Factors that made the FISP work

When it comes to addressing the multiple stressors faced by Malawi, opinion differs as to what degree the reform of the ADMARC and subsidised inputs are the way forward. Statistical data show considerable production and productivity increase in the FISP period 2005–15. Compared with maize yield levels in neighbouring countries under similar production conditions, Malawi is doing better (WB 2016). Without the input subsidy, improved seed and fertiliser would have been out of reach for most Malawian smallholders (Carr 2014). The increase in maize production has more or less happened without an increase in the area under maize cultivation (MOAIWD 1997–2015).

Figure 3 shows that total maize production almost trebled in the period 1997–2014. Figure 4 illustrates how maize yields per hectare (ha) have more than doubled in the same period. The yield level for local maize averaged less than one Mt per ha while the yield level for hybrid maize reached around three Mt per ha over the last five years. Hybrid maize is rarely cultivated without fertiliser application, whilst local maize is grown both with and without fertiliser. Hence, the production curve for hybrid maize also indicates results for fertiliser use.

Increased production has definitely improved the food availability situation in Malawi, as shown in Figure 1. However, food security entails access to food and not only availability. In order to assess changes in the food security situation, we have looked at how Malawi has scored on the Global Hunger Index (GHI). GHI scores combine multiple indicators such as

Figure 4 Maize productivity of smallholder and estates



Source MOAIWD (1997–2015).

child nutrition and child mortality into one index number, which falls within the range 0–100, where a high score indicates severe food insecurity (IFPRI-GHI 2015). Malawi’s score has improved considerably from 58.9 in 1990 to 27.3 in 2015, which is slightly better than Tanzania and much better than Zambia (*ibid.*). Malawi has been able to reduce child mortality from 1 in 4 in 1990 to 1 in 13 in 2013, and has improved in all of the child nutrition indicators monitored through the Millennium Development Goal (MDG) process (WHO 2015). In Malawi, food security is about who produces the food, as improved food availability at national level will not be sufficient to secure poor smallholders’ access to the available food.

### 5.1 Balancing different interests and drivers

Formulating a policy that both reversed privatisation decisions made during structural adjustment, and establishing a substantial social protection programme in the form of input subsidy, was a balancing act juggling different national and international interests. Bingu wa Mutharika, Malawian president from 2004 to his death in 2012, regarded input subsidies as an effective alternative to food relief. He was able to manoeuvre in a political landscape influenced by external factors such as donors’ unwillingness to support his policy, scepticism towards state-controlled institutions and subsidies, scepticism towards chemical fertiliser and hybrid seed, demanding public–private partnerships and uncertain international market conditions, such as food and fertiliser prices.

On the other hand, President Bingu wa Mutharika faced internal drivers such as a strong demand from the voters (predominantly smallholder

farmers) for free or heavily subsidised improved seed and fertiliser. In this sense, input subsidies are heavily politicised; on the other hand, it could be argued that this is how democracy works: voters use the power of their vote to make demands on the government. In this way, farmers could be said to empower the government to go against the advice of experts and the views of many donors to go ahead and/or continue with input subsidy programmes. Bingu wa Mutharika seemed to realise that going against subsidies would mean losing the election, but at the same time, his state budget depended heavily on funding support from donors.

The two presidents succeeding Bingu wa Mutharika, his vice-president Joyce Banda and his brother Peter Mutharika, continued with the FISP. However, different governments have been open about the need to improve the FISP. At a FISP symposium in July 2014, Malawi's Minister of Agriculture, Irrigation and Water Development, Allan Chiyembekeza, called for a discussion on how the programme could work better, whilst maintaining that:

Official government estimates show that average maize yields have more than doubled since the introduction of FISP contributing to rapid agricultural Gross Domestic Product (GDP) growth of around 10 per cent per annum between 2005 to 2011 (StarAfrica 2014).

## 5.2 National ownership and prestige

The input subsidies and re-nationalisation of the ADMARC have been strongly owned by the Malawian presidents. President Bingu wa Mutharika defended the input subsidy programme in many fora, such as during a speech at Boston University in which he pointed out that 'although Western countries say African governments should not subsidise agriculture, Western governments subsidize their own farmers' (BU Today 2010). President Mutharika's brother and current president Peter Mutharika has continued Bingu wa Mutharika's position regarding Malawi's right to decide its own policy, including input subsidies. At the Forum for China–Africa Cooperation (FOCAC) in December 2015, Peter Mutharika stressed that:

[The] China Africa partnership needs to walk the path of localization of international goals and indigenization of policies. One of the saddest tragedies in most Africans is that we lost faith in ourselves, and stopped believing in ourselves, that we own the capacity to change our situation – Africa needs partnership that inspire[s] this inner capacity and dignify [*sic.*] our longing for self-dependence (*Nyasa Times* 2015).

Since 2007, China has played an important role in Malawi, providing both grants and loans to projects in areas such as education, energy, agriculture, water supply, tourism, trade and infrastructure (Banik and Chasukwa 2016). The collaboration with China has opened an alternative funding opportunity that has made Malawi somewhat less dependent upon its traditional donors. President Bingu wa Mutharika came into serious dispute with donors that led to the British High

Commissioner being expelled from Malawi in 2011 because he supposedly accused Mutharika of being 'increasingly arrogant and autocratic', which contributed towards freezing and cuts in aid from the UK and USA (Somerville 2012). Reduction in support from traditional donors hit Malawi hard as foreign assistance accounts for approximately 40 per cent of its development budget (Somerville 2012).

### 5.3 Implementation capability

What is particularly interesting with the FISP is the capability not only to formulate a policy, but also to be able to implement it in spite of significant institutional, logistical and funding challenges. President Bingu wa Mutharika was well aware that in order to ensure support for himself and his party, it was not enough to present a policy for improved food security; he had to demonstrate that he was also able to deliver on affordable fertiliser and improved seed to be re-elected. What we have seen in Malawi is not only that the government has gone against the advice of many experts and donors when changing the policy and establishing the input subsidy programme, but also that the government had the capability to implement and follow through with the programme.

As described previously, the contestation around whether or not to have an input subsidy programme as well as how to design it, might have given the government additional motivation to ensure that implementation took place. Problems such as timely delivery, distribution throughout the country, uncertainties as to how the programme would work each year (for example, in relation to the number of targeted farmers and the level of subsidy) were more or less dealt with. The tight budget situation in Malawi and the willingness (or lack of willingness) among donors to co-finance, influences each year's design of the programme. From the central level, coupons are passed down to the districts and then to local chiefs who distribute coupons according to poverty criteria. Farmers who were not happy with how local chiefs distributed the coupons took action and established new villages in the same area. Their 'own' chief could then garner the responsibility for the distribution of coupons. However, the government closed this practice in 2008.

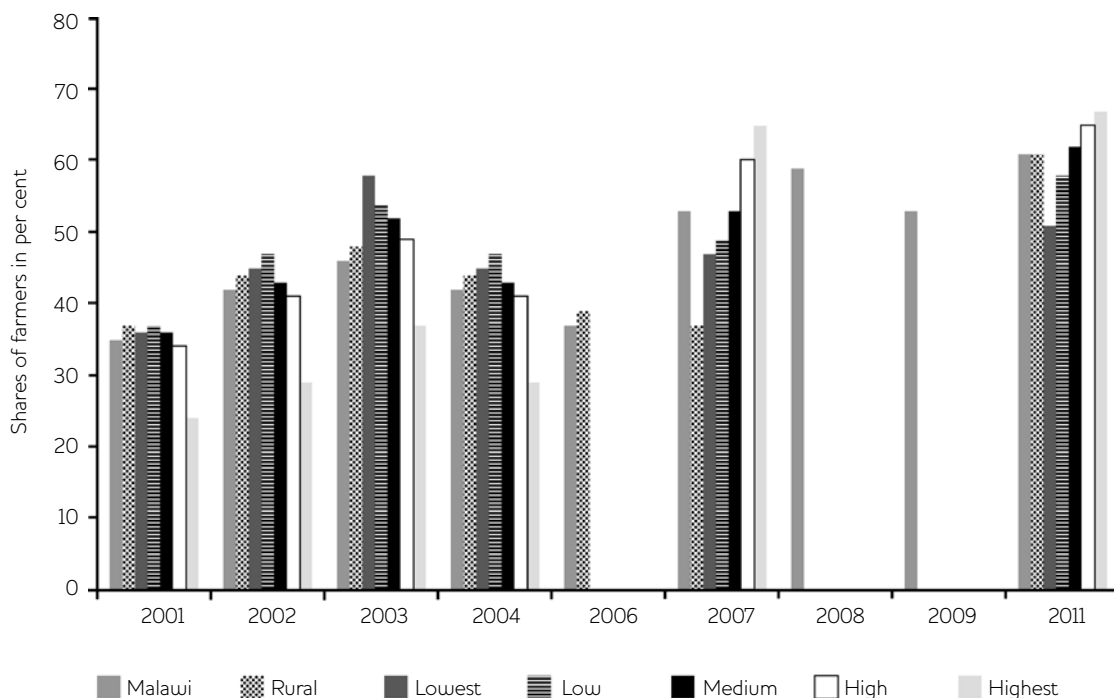
When the government cuts back on input coupons, chiefs are often blamed for the reduction. Such reductions make it difficult for the chiefs to distribute the coupons in a fair and predictable way. The extension system plays an important role in relation to advising on fertiliser use and what kind of seed to use (open-pollinated or hybrid). The media's focus on the performance of the subsidy programme has probably also revealed shortcomings, and contributed to the implementation. In addition, Malawi has a relatively strong farmers' union in the NASFAM, which voices farmers' views.

### 5.4 Political frame conditions and impact

In relation to the implementation of the FISP, the frame conditions were conducive to making it worthwhile for both smallholders and estates to invest capital and labour in efforts towards increasing their



Figure 5 Share of farmers receiving fertiliser coupons by poverty quintile

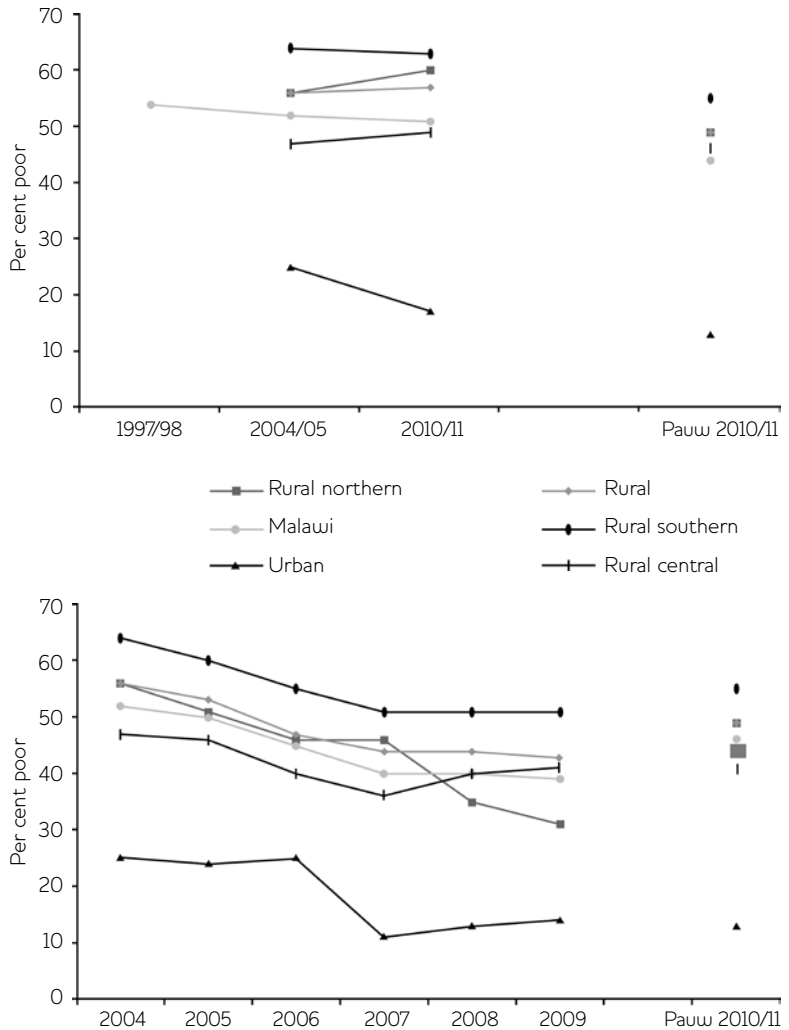


Source WMS 2001–2004 (NSO 2002–05); IHS2 (NSO 2005); WMS 2006–2009 (NSO 2007–10); WMS 2011 (NSO 2012b).

production. Smallholders are usually short on both capital and labour, a factor that should be recognised in efforts to make changes in farming practices and technology (Kirrane, Sharkey and Naess 2012). The input and output market worked well in most parts of the country. Where private traders were not willing to go because of low profits, the ADMARC stepped in. Farmers experienced that maize cultivation was profitable and a good way of earning some cash in addition to securing food for the household. Regarding impact, according to Birner *et al.* (2006) social and technological innovations should result in impacts beyond production and food security, including reduced poverty, better gender and social equality, more employment opportunities and increased resilience at all levels.

Since poverty reduction and gender equality are used as arguments for supporting the FISP, to what degree subsidies have reached these groups is an important factor in assessing the programme as a social protection measure. Figure 5 shows that between 35 and 60 per cent of the population have benefited from receiving subsidised fertiliser in the period 2001–11, and coupons have been distributed to all poverty groups. Whilst it may be assumed that the poor and less vocal groups lost out in the local distribution of vouchers, it appears that even the two lowest quintiles are well represented among the receivers throughout this period. Figure 5 illustrates that in 2004, around 45 per cent of the

Figures 6a and 6b Poverty head count by IHS1, IHS2 and IHS3 and WJMS 2004–2009 both compared with Pauw *et al.* (2014)



Source Estimates for 1997/98, 2004/05 and 2010/11 from IHS1, IHS2 and IHS3 (NSO 2000, 2005, 2012b); for 2004–09 from WJMS (NSO 2005–10) and for Pauw 2010/11 from Pauw *et al.* (2014).

two poorest poverty quintiles received fertiliser coupons, while less than 30 per cent of the highest quintile did.

In 2011, the situation had improved for all groups; the two poorest quintiles received 50 and 58 per cent each. Data from 2013/14 show that 47 per cent of farmers in the poorest quintile and 52 per cent in the second poorest quintile received coupons, while 30 per cent of the wealthiest group received coupons (WMS 2014 (NSO 2015)). With regard to gender equality, around the same proportion of male and female recipients are reported for 2013/14 (*ibid.*). To what degree this distribution of coupons is satisfactory from a poverty point of view is

arguable, as a larger proportion of poor smallholders could have been reached.

To what degree the FISP has contributed to poverty reduction in Malawi is also arguable. Different poverty analyses in Malawi apply different approaches and do not necessarily provide the same results. In order to assess the poverty trends under the FISP, we have looked at available data and results from the Integrated Household Surveys (IHS) (NSO 2005, 2012a) and the Welfare Monitoring Survey (WMS) 2001–2004 (NSO 2002–05), WMS 2006–2009 (NSO 2007–10), WMS 2011 (NSO 2012b). The IHSs show hardly any change in the average poverty level from 1997–98 to 2004–05 and 2010–11. However, these data have been re-analysed by Pauw *et al.* (2014), who found a larger decrease in poverty, as illustrated in Figure 6a. Their analysis is more consistent with the WMS model based on WMS estimates as illustrated in Figure 6b. The poverty headcount data in Figures 6a and 6b indicates that poverty levels are highest in the rural southern part of the country and lowest in urban areas. Although the data show a downward trend in poverty, a poverty level of on average 40–50 per cent is still very high. What we do not know is the contra-factual situation; what would the poverty situation be without the FISP? According to Chinsinga and O’Brien (2008), the FISP is as important to Malawians as the National Health Service is to Britain.

## 6 Sustainable climate change adaptation

In the previous section, we have assessed the factors that have contributed to the apparent success of the social protection programme FISP in improving food security and reducing the need for shorter-term humanitarian assistance in the period 2005–15. However, as the flooding in 2015 and the El Niño/drought in 2016 showed, Malawi is in dire need of additional measures that can reduce long-term vulnerability and build resilience towards climate change. What lessons, if any, can be learned from the FISP experience in relation to climate change adaptation? Eriksen and Marin’s (2015) key principles for assessing sustainable climate change adaptation provide a frame for addressing this question.

The first principle is to *describe vulnerability contextually, including multiple stressors*. The predicted negative impact of future climate change on economic growth and social development in Malawi is *like a black cloud hanging over the country* (Thurlow *et al.* 2014; Challinor *et al.* 2016). Already, Malawi is unable to cope with the serious droughts and flooding that are affecting it. According to the IPCC (2014), maize-based food systems such as in Malawi might experience yield losses from 18–22 per cent by 2050. In addition, poverty, corruption, donor dependency, small landholdings, and reliance on agriculture, particularly maize for food, and tobacco for export, contribute towards a situation of serious vulnerability.

The second principle is to *acknowledge differing values and interests that affect adaptation outcomes*. The FISP provides a valuable lesson regarding how to balance different interests and drivers when formulating a policy

contested by diverse actors for various reasons. Trusting one's own judgement rather than listening to external experts and donor advice, as well as listening to the demands of the people appear to be lessons for future Malawian governments.

The third principle is to *suggest how local knowledge can be incorporated into adaptation responses*. The lesson here is that since the FISP was only successful with regard to production and food security, and apparently unable to reduce longer-term vulnerability and build resilience, the inclusion of local knowledge might have helped in this situation. However, it is questionable as to what degree local knowledge could be the solution to the huge challenge of climate change adaptation. Perhaps local knowledge could be interpreted as recognition that some form of social protection is needed in Malawi.

The fourth principle is to *consider potential feedback between local and global processes*. A lesson from the FISP experience in this regard is that the national ownership and prestige that went into making the FISP a success contributed towards its implementation capability.

The fifth principle is to *empower vulnerable groups in influencing development pathways and their climate change outcomes*. A lesson here is that the Malawian government appeared somewhat vulnerable in its negotiations with donors regarding the FISP as a development strategy. To a certain extent, voters empowered the government by voicing a strong demand for subsidised inputs. Overall, when assessing what lessons could be learned from the FISP experience in relation to sustainable climate change adaptation, it is important to recognise situation specificity. We should thus be cautious when trying to draw general conclusions as regards applicability for future situations.

## **7 Conclusion**

The policy reforms and the input subsidy programme FISP are heavily contested and far from perfect, but still, have been able to contribute towards positive results as regards agricultural productivity, food security and possibly poverty reduction. It is difficult to envisage how Malawi would cope without a social protection programme of some sort. Without social protection and considering the effect of future climate change, there would probably be substantial increases in human suffering and the need for demanding international humanitarian interventions.

There are many lessons to be learned from the FISP, not least related to the government's ability to implement the programme and the role that national ownership and the demand from voters played in this regard. However, the flooding in 2015 and the drought in 2016 revealed that Malawi is in dire need of more effective measures than the FISP that can reduce long-term vulnerability and build resilience to the future adverse impacts of climate change.

## Notes

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# Rethinking Food Aid in a Chronically Food-Insecure Region: Effects of Food Aid on Local Power Relations and Vulnerability Patterns in Northwestern Nepal

Sigrid Nagoda<sup>1</sup>

**Abstract** The impacts of repeated food aid programmes on households' livelihood strategies and capacity to adapt to stressors such as climate change were investigated in the chronically food-insecure district of Humla in Nepal, using food security as an entry point for analysing vulnerability. The study questions food aid as a tool to reduce vulnerability, and argues that it may indirectly impede the enhancement of food security by reinforcing inequalities and local power structures that drive household vulnerability. The article concludes that a refocus addressing the social dynamics that shape local vulnerability patterns is needed before food aid can contribute to enhancing households' long-term adaptive capacity.

**Keywords:** vulnerability, climate change, humanitarian aid, food security, power relations, Nepal.

## 1 Introduction

In many areas, climate variability and change are increasing the stress on already pressed farming systems (CCAFS 2012; IPCC 2014), leading to an increased focus on food security programmes and disaster risk reduction measures as ways of reducing vulnerability (IPCC 2014; IFRC 2014). Food aid is one of the main tools used by the humanitarian community to address food insecurity and to alleviate acute food shortages. In 2011, the United Nations World Food Programme (WFP) delivered 3.6 million metric tonnes (Mt) of food to 99.1 million people in 75 countries (WFP 2012a). However, food aid is not without controversy. While some consider it a key tool for saving people from hunger (WFP 2012b), others have raised concerns that food aid may undermine livelihood strategies of already marginalised households and cause aid dependency among recipients when provided repeatedly over a long period of time (Barrett and Maxwell 2005;

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Lentz, Barrett and Hoddinott 2005). Such criticisms of food aid have contributed to increased attention on the need for humanitarian assistance to be redesigned to address vulnerability to multiple stressors, including climate change, more effectively (IPCC 2014; Eriksen *et al.* 2015b).

The climate change literature increasingly describes vulnerability as being driven by multiple social and environmental processes including economic and political change, marginalisation, and inequality, rather than by climate change alone (Adger 2006; IPCC 2014). In particular, power through social relations has been identified as a key factor affecting and creating vulnerability, since it influences people's entitlement to resources, access to formal and informal networks of support, as well as their extent of decision-making (McLaughlin and Dietz 2008; Ribot 2010). An important dynamic identified by Nagoda and Eriksen (2015) is that in times of food crisis, local vulnerability patterns may be reinforced through a deepening of the inequality and dependency between those with access to resources and decision-making opportunities, and those who are excluded from these.

It is within such a complex vulnerability context that governments and humanitarian organisations face the difficult task of responding quickly to people suffering from acute food shortage, while at the same time reducing their longer-term vulnerability. Addressing this challenge requires an enhanced understanding of how aid may affect the different drivers of vulnerability (Eriksen, Nightingale and Eakin 2015a; Tschakert *et al.* 2016). Building on the recognition that power relations and marginalisation processes are key factors that shape differential vulnerability patterns (Ribot 2010; Pelling 2011; Taylor 2014), this article offers an empirical contribution to the nascent field of politics of adaptation by investigating social vulnerability patterns and food aid interventions in two villages in the district of Humla in northwestern Nepal.

Food aid interventions in Nepal provide a particularly interesting case for studying how aid interventions affect differential vulnerability patterns at the local level. Nepal is among the poorest countries in the world (WFP 2012b) and social exclusion based on caste, gender and ethnicity is considered a key factor affecting people's vulnerability and the poverty situation (Bista [1991] 1994; Cameron 2007). Several regions of the country are chronically food-insecure (Adhikari 2008) and highly vulnerable to climate change (Xu *et al.* 2007), leading humanitarian agencies to scale up their interventions in an effort to enhance food security and people's adaptive capacity (WFP 2009).

The study undertakes a twofold analysis. First, it investigates the impacts of repeated food relief distribution in enhancing or substituting local livelihood strategies, including the extent to which it creates food aid dependency at the household level. Second, it considers how food aid influences power and interdependency relations within villages, and the impacts of such interactions on household vulnerability. With growing attention and resources directed to promoting climate change

adaptation worldwide (Agrawal and Perrin 2009; IPCC 2014), this study contributes to the debate about how humanitarian interventions can better address the related problems of chronic food insecurity and vulnerability to climate change in poor rural households.

## **2 Theoretical framework: humanitarian interventions and social vulnerability**

The danger of creating aid dependency is frequently raised as a criticism of humanitarian aid (Lentz *et al.* 2005; Barrett and Maxwell 2005; Little 2008). Most definitions of food aid dependency converge with Little's claim that it is 'a condition where farmers modify their social and economic behaviour in anticipation of food aid' (2008: 861). The assumption is that by abandoning their livelihood activities in expectation of food aid, households may become more vulnerable to climate variability and change.

However, a definition of dependency that focuses only on the direct consequences of the anticipation of aid may be too narrow to explain how aid interventions affect vulnerability. The indirect influence of aid on pre-existing sociocultural and power relations among households may be at least as important in determining long-term household vulnerability (Mosse 2005; Barnett 2008). For example, Duffield *et al.* (2000), and Harvey and Lind (2005) found that food aid may impact on local social relations and pre-existing *interdependencies* between individuals and households, as well as between populations, groups and communities. On the one hand, such interdependencies may have a positive impact on people's vulnerability in terms of generating social capital when households have a mutual interest in helping each other through a crisis. On the other hand, the impact may be negative if the intervention leads to increased inequality and a risk of becoming trapped in an exploitative relationship (Harvey and Lind 2005). In Humla, interdependencies are formed by formal and informal sociopolitical structures and networks along the lines of caste, class, gender, ethnicity, kinship and other social groups that are important in shaping local vulnerability patterns (Nagoda and Eriksen 2015).

The main question this study addresses is: 'How does food aid impact on people's vulnerability in the context of climate stressors and socioeconomic changes?' First, to analyse the effect of food aid on livelihood strategies, we examine the importance placed by the interviewees of this study on food aid as a coping strategy in times of crisis and how it influences various livelihood options such as agriculture, trade, and daily labour. This analysis builds on the assumption that if food aid leads to more robust livelihood strategies, for example by contributing to more diversified livelihood options, it may have a positive and lasting influence on households' vulnerability to stress. Second, the analysis examines how local power relations are affected by food aid and how changes in local interdependencies affect differential vulnerability patterns at the household level.

The article builds on the Food and Agriculture Organization of the United Nations (FAO) definition of food security as 'a situation that exists when all people, at all times, have physical, social, and economic access to sufficient, safe, and nutritious food that meets their dietary needs and food preferences for an active and healthy life' (FAO 2002: Glossary). Since people's perception of their food security situation is subjective, the information collected in the interviews is not interpreted as an absolute measure of food security, but rather as an entry point for analysing causes and processes driving vulnerability. Several researchers such as Eakin, Lemos and Nelson (2014) and Lemos *et al.* (2016) show that reducing vulnerability 'requires a combination of interventions that address not only climate-related risks (*specific capacity*) but also the structural deficits (e.g. lack of income, education, health, political power) (*generic capacity*) that shape vulnerability' (Lemos *et al.* 2016: 170). Hence, and in line with a contextual interpretation of vulnerability (O'Brien *et al.* 2007; IPCC 2014), the study analyses not only the challenges and possibilities that people experience in securing food, but also other factors they consider important for their wellbeing and adaptive capacity, such as health, education, dignity, and freedom from oppression.

Since vulnerability is dynamic and ever-changing (Eriksen, Brown and Kelly 2005; Twyman *et al.* 2011), this article analyses the effects of food aid as part of a contextual vulnerability dynamic where environmental, sociocultural, economic and political factors interact, and where food aid is one of various factors leading to changes. In the investigation, a failure to provide nutritious food of sufficient quality is thus seen as an outcome of the processes and structures driving the inherent state of vulnerability. Hence, the study does not attempt to isolate the impacts of food aid on vulnerability, nor does it pursue a quantitative line of argument based on the volumes of food aid that have been provided. Rather, it seeks to understand how, by being part of the social dynamic of a village, food aid interventions may strengthen, or weaken, the social power relations that shape differential vulnerability patterns.

### **3 Methods and case study**

#### **3.1 The study sites**

The district of Humla in far northwestern Nepal is particularly appropriate for studying the impacts of repeated food aid on local vulnerability to stressors, including climate change. The district is one of the poorest in Nepal (UNFCO 2013), with around 80 per cent of the 50,000 inhabitants being classified as food-insecure (DFSN 2010). Humla is also vulnerable to climate change, including changes in precipitation patterns (NPC 2010; Ministry of Environment 2010), which contributes to further deterioration of the region's food security situation (WFP 2012b). In response to the chronic food insecurity situation, the district has received food aid for more than three decades, leading some authors to question the impact of food aid on people's longer-term adaptive capacities and coping strategies (Bauck *et al.* 2007; Adhikari 2008).

Humla is a mountainous district with altitudes varying from 1,524 to 7,337 metres above sea level (masl) (Roy 2010) and is characterised by its remoteness, limited infrastructure, and weak and sporadic presence of government institutions, in particular beyond the district headquarters at Simkot (Roy 2010; Nagoda and Eriksen 2015).

The main livelihood strategies in the district are subsistence agriculture and trade in non-timber forest products (NTFPs), *Furu*,<sup>2</sup> and rice and salt exchanged with Tibet, in addition to daily labour and temporal migration (Roy 2010). Ownership of livestock is an important part of these strategies. Out of Humla's 5,655sq km (DDCO 2006), only around 98sq km are cultivated and less than 11sq km are irrigated (UNFCO 2013). Land endowments are small, with an average of about 0.5 hectares per household, but with important differences between households, especially in the southern part of Humla where better-off households may have up to two hectares while destitute households have as little as 0.1 hectares of land (Nagoda and Eriksen 2015).

People in Humla can be roughly divided into two groups based on religion and mother tongue: the communities of Buddhist Tibetan-speaking Lamas who live in northern parts of Humla, and the Hindu Nepali-speaking communities that live in southern parts of Humla. The Hindu Nepali-speaking people are further divided according to the caste system of the Hindu religion. The most important castes in Humla are Brahmin, *chhetri* and *thakuri* who are considered high castes, and *dalits* who are considered low castes (untouchables).

Local social, political and economic networks and relations are essential parts of people's survival strategies (Bishop 1990; Cameron 2007). Such relations are also shaped by social inequalities and marginalisation processes based on caste, class, ethnic group and gender, and form part of a broader system that enhances or inhibits people's access to various assets (Bista 1994; Cameron 2007). A previous study has revealed a strong correlation between people's food security situation and their caste, gender and ethnic belonging (Nagoda and Eriksen 2015). While all of the *dalits* interviewed for this study were considered food-insecure, this was the case for about 60 per cent of the high-caste households and none of the Lama households. Women often face greater economic marginalisation since their access to land and means of production are in the hands of their male family members. Buddhist Tibetan Lamas have better access to economic networks, in part due to their geographic and cultural proximity to Tibet, making them less vulnerable to variations in agricultural output than most Hindu-speaking households.

### 3.2 Food aid in Humla

According to interviews with government officials, food distribution in Humla began in the 1950s through the Nepal Food Corporation (NFC), an agency under the Ministry of Industry, Commerce and Supplies that is still selling rice at subsidised prices in food-insecure regions today. Although sporadic during the early decades, food distribution in the

Table 1 Characteristics of the villages studied, Humla district, Nepal

Village	Syaandaa	Khankhe
Region	Northern part of Humla	Southern part of Humla
Altitude (masl)	2,745*	1,700
Religion	Hindu	Hindu
Caste	<i>chhetri</i>	<i>thakuri and dalits</i>
Number of households	152*	90
Persons per household	6.3*	7.2
Child mortality per household	1.4	0.9
Main livelihood strategies	Agriculture, trade, and wage labour	Agriculture, trade, wage labour, migration, and food aid
Main crops cultivated	Buckwheat, millet, barley, wheat, potatoes, and seasonal vegetables	Rice, millet, barley, wheat, corn, and seasonal vegetables
Main livestock	Yaks, yak/cow hybrids, horses, sheep, and goats	Cows, buffaloes, sheep, and goats

Note Data based on fieldwork 2010–11, except those denoted with an asterisk, which are \*based on Roy (2010).

Source Based on data from Table 1 in Nagoda and Eriksen (2015).

region increased steadily during the 1990s due to the support of the WFP (Adhikari 2008).

No data have been made available for this study regarding total volumes of food aid to the district, but conservative estimates based on interviews with WFP staff indicate that approximately 7,980 Mt of food were distributed in Humla between 2004 and 2011. This equates to around 20kg per capita per year for the district as a whole, but with large annual variations as well as large variations between villages.

At the time of the study, the WFP was implementing Food for Work and Food for Assets programmes (FFW/FFA) in Humla, as part of the organisation's Protracted Relief and Recovery Operation (PRRO) in Nepal. Each of these programmes lasted for a period of 40–60 days, with participants undertaking labour activities in exchange for food that was supposed to cover three to four months of the households' food consumption (WFP 2012a). In the villages visited, most households were expecting to receive 120–160kg of rice by participating in the programmes. The objective of the PRRO is to 'strengthen the resilience of the most vulnerable households and communities by building long-term human capital and productive assets' (WFP 2012c: 9). The focus is on creating new income-generating activities by building irrigation systems, roads, paths, fences, community buildings, and cultivating new crops for commercialisation (e.g. *attis*<sup>3</sup> and apples). All households may participate in the projects.

### 3.3 Data collection

Field studies were carried out over a five-year period from 2009 to 2014 with two long-term stays in the field in 2010 and several shorter visits between 2011 and 2014, in order to take the temporal dynamics in the villages into account. Using qualitative methods, data were collected through 48 semi-structured and informal household interviews in the village of Syaandaa and 49 in the village of Khankhe. To follow up on particular issues raised in household interviews, a total of seven focus group interactions were undertaken in the villages, with participants from different castes and wealth categories including women, traders and elders. An additional 74 interviews were conducted with policymakers, donors and representatives of aid agencies in Kathmandu (46 interviews) and Simkot (28 interviews). Hence, all the data presented in this article have been triangulated by a high number of interviews at local, district and national levels, through observations of everyday life in the villages, and by participating in informal and formal meetings and gatherings.

The villages of Khankhe and Syaandaa were considered highly food-insecure in 2010 (DFSN 2010) and received approximately 624 Mt and 144 Mt of rice respectively between 2008 and 2013.<sup>4</sup> Both villages are situated on the eastern part of a mountain range with access to forests and rivers, but with different environmental and sociocultural characteristics (see Table 1).

## 4 The effect of food aid on vulnerability in Humla

### 4.1 Food aid and the dependency syndrome

Government officials and development workers frequently express concerns that repeated food aid may create aid dependency in the region of Humla. However, although data from the study highlight that (i) more land is left fallow today than ten years ago; (ii) villagers consume more rice and eat less of the traditional crops; and (iii) food trading patterns have changed over recent years, these changes in livelihoods cannot be attributed to food aid alone. Rather, they are the result of the interaction of complex social and environmental changes.

The observed increase in fallow lands was primarily explained in household interviews as the result of changes in climatic conditions, and by a shortage of manpower and manure. For example, finger millet (*L.n. kodo*) – a crop that needs abundant rain and manpower – has become difficult to cultivate because of changes in rainfall patterns. Informants attributed the lack of manpower to more children going to school, and the shortage of manure to the fact that many poor households sold their animals as they could not afford the increased fees claimed by the Forest User Groups<sup>5</sup> in the south for grazing during winter. Hence, the study does not support the argument that food aid has created disincentives for agricultural production. In fact, only 5 per cent of the informants in Syaandaa and 7 per cent in Khankhe considered that they had a surplus of food annually, and none of the households would work less on their fields because of food aid. As one informant said: ‘We are too poor to take the chance of not working on our fields.’

During interviews, some policymakers recounted how food aid creates disincentives for local trade, referring specifically to the reduction in the traditional salt–rice trade between Tibet and neighbouring districts. For centuries, the salt trade was a major livelihood strategy in the region, where traders would buy salt in Tibet and exchange it for grains in southern Nepal (Von Fürer-Haimendorf 1988; Bishop 1990). However, reasons for the decline in the trade are complex. Older informants, who had been involved in the salt trade, said that the decline started in the late 1960s with the closing of the Tibetan borders by China and the distribution of subsidised salt by the Government of Nepal (Salt Trading Corporation of Nepal 2013). The salt trade is known to be a tough and time-consuming activity that requires animals, and was conducted mostly by the better-off Lama people in the North. Nowadays, Lama households prefer the more lucrative trade in NTFPs, and to buy rice from the NFC office in Simkot.

In addition, food aid is considered too unreliable to replace other coping strategies. All of the food-insecure households stated that the food received is insufficient and its supply too unpredictable to meet their needs in times of stress. Indeed, borrowing food and money from fellow villagers is a much more important coping strategy than receiving food aid. Eighty-three per cent of the food-insecure households interviewed in Syaandaa and 81 per cent in Khankhe said they would borrow food and money within the village in order to survive a food shortage, thus highlighting the importance of local social networks and relations in times of crisis. Other coping strategies include daily labour (12 per cent of interviewees in Khankhe; 48 per cent in Syaandaa), trade (23 per cent in Khankhe; 9 per cent in Syaandaa), selling assets (12 per cent in Khankhe; 5 per cent in Syaandaa), and seasonal migration (12 per cent in Khankhe; none in Syaandaa). In times of crisis, food aid is appreciated as a short-term opportunity to access food. For example, one informant explained how, for a few weeks, quick access to rice through food aid programmes enabled him to engage in daily wage labour and repay his debts. However, apart from some temporary changes in coping strategy for a few households, no informants claimed that food aid had replaced more erosive coping strategies, such as eating seed, selling land, or taking their children out of school.

Hence, food aid is found to be only one among several factors influencing the production systems, economy and trading patterns in the study area. Other factors such as changes in climatic conditions and diversification of trading opportunities with NTFPs are more important in altering livelihood activities. Using Little's (2008) definition of food aid dependency, it may therefore be argued that food aid has not created a situation of 'aid dependency' in the study area, as households have not 'modified their social and economic behaviour in anticipation of food aid' (Little 2008: 861). On the other hand, food aid is not found to have any long term positive effects in terms of reduced vulnerability of the poorest households. Section 4.2 presents a discussion on how food aid interventions influence the power relations that shape local-level vulnerability patterns.



#### 4.2 The effect of food aid on interdependencies, power, and inequity

External interventions such as food aid occur in a context of pre-existing structural and cultural intra-village dependency relations (Duffield *et al.* 2000; Harvey and Lind 2005). This investigation suggests that food aid interventions affect households' vulnerability patterns over time by consolidating interdependency relations in two main ways that are closely interlinked: first, by reinforcing the gap between the better-off and the poor; and second, by reinforcing existing power dynamics and unequal power relations in decision-making processes at the village level. These two aspects are discussed below.

First, interviews and observations show that livelihood opportunities created by food aid and the accompanying programmes (FFW/FFA) remain confined mostly in the hands of the better-off members of the community. The analysis demonstrates, for example, that in Khankhe, irrigation systems supported by FFW/FFA programmes were built to bring water to the rice fields of the *thakuris* and not to the *dalits*, since the fields of the *dalits* are of poor quality, in areas too steep for cultivating rice or too far from the village. The cultivation of *attis* and apples, which was supposed to facilitate trading opportunities, is another illustration of how the poorest tend to be excluded from the benefits of food aid interventions. Out of 97 respondents, only two stated that their food security had improved as a result of opportunities to engage in trade and none of the most food-insecure households interviewed had the time, financial resources or manpower required to take advantage of new trade opportunities. As summarised by one informant: 'Nothing has changed with food aid. The rich stay rich and the poor stay poor.'

The differential impact of food aid interventions means that not only do poorer households benefit relatively less than wealthier households, but participating in the projects may also have other unintended effects that can undermine their future adaptive capacity. For example, families with little manpower are usually among the most food-insecure, and whilst most of them praised the food received from WFP, they also explained that the work associated with the WFP activities has to be undertaken in addition to all their daily tasks. In a focus group discussion several women from poor households admitted to taking their children out of school in order to participate in the FFW/FFA projects, and said that they had even less time to breastfeed their babies and cook for the household. One woman said: 'Because of all the work, women have more health problems, and with the WFP projects the workload is even bigger. People don't count our work as productive unless we are working in the field.' During the fieldwork, many women and children were seen carrying stones for WFP projects.

The second way that food aid interventions affect households' vulnerability patterns is that they tend to strengthen the decision-making authority of the most influential over the most vulnerable. This could be observed in the user committees (UCs) that were formed to ensure that the FFW/FFA projects are well planned and implemented according

to local needs. The UCs are organised in each village and are supposed to be representative of the different groups within the community. However, although women and *dalits* appear on the lists of UC members, these groups complain that they are not heard during meetings. Many *dalits* and poor families are of the opinion that the UCs do not represent their interests, and some choose not to attend the meetings feeling that it is a waste of time since they cannot influence any decisions. A woman belonging to a UC expressed that she felt excluded from decision-making, since 'the men do not want to listen to the women'. Many development workers were aware of these challenges, but felt they did not have the mandate to challenge social structures at village level. As one development worker put it: '*Dalits* and women only participate on paper, but are not part of the decision-making process. Unfortunately, we [development organisations] can do little to change this, since the UC is formed by the community itself.'

Importantly, in interviews and focus group discussions the most food-insecure households identified exclusion from decision-making processes as a main reason for their vulnerability. Because the policy spaces at the local level are dominated by male members of better-off high-caste families, the most food-insecure households felt they had no real opportunity to influence the design of food aid programmes in the villages. This leads to types of interventions that, as described above, do not address the longer-term needs of the most food-insecure, but rather consolidate the pre-existing intra-village power structures where the food-insecure households have to borrow food or money from the better-off in order to survive a crisis. This creates a precarious situation for the most vulnerable as the need to repay their debt, for example by working on other people's land, limits their capacity to manage and improve their own livelihoods. At the same time, the better-off households see their status and position in the village being reinforced.

The above shows that power relations are important in defining who benefits from food aid projects and illustrates how a technocratic approach (such as food distribution, construction of irrigation systems or paths) to food insecurity fails to challenge pre-existing, structural, intra-village relations. It also suggests that food aid, through using and thus legitimising existing power structures and relations (exemplified here by the UCs), risks consolidating the very inequalities and power relations that cause household vulnerability in the first place. This challenge is, of course, not unique to food aid but a dilemma all external interventions may face when the most vulnerable are excluded from decision-making processes.

### **5 Conclusion: questioning food aid's capacity to reduce vulnerability**

The study finds that while food aid may alleviate short-term food shortages, it does not effectively reduce vulnerability or enhance long-term livelihood strategies. Food aid and the accompanying development programmes (FFW/FFA) in Humla are found to reinforce power relations and inequalities that drive vulnerability by

legitimising existing power structures at the village level and where the food-insecure, in times of crisis, have no choice other than to rely on the better-off households for survival. As such, food aid itself forms part of the complex dynamic that shapes the local vulnerability context and may indirectly impede the enhancement of food security because it contributes to consolidating unequal power relations rather than challenging the local power structures that drive household vulnerability in the long term.

Humanitarian aid is regarded by some as a mechanism that could potentially boost adaptation efforts when activities are appropriately planned (WFP 2012c; IPCC 2014). However, adding to the results of recent studies that have uncovered social, institutional and political barriers to improving the link between development and climate change adaptation efforts (Nagoda 2015; Lemos *et al.* 2016; Tschakert *et al.* 2016), the findings of this study underscore the risk that humanitarian responses that do not take unequal power relations into account may increase the vulnerability of the poorest when faced with future crises. A profound refocus that addresses the power imbalances and social dynamics that drive local vulnerability is needed before food aid can be expected to contribute to enhancing households' long-term adaptive capacity.

### Notes

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- 2 *Furu* is a cup made of wood that is collected by the Lama people of Upper Humla in forests in the southern parts of Nepal.
- 3 *Atis* is a herb with an economic value in Humla of about 500 Nepalese rupees per kg (see Roy 2010).
- 4 Data obtained through interviews with WFP staff.
- 5 Forest User Groups in Nepal can be defined as 'village-based organisations established to protect, develop, and use a particular area of national forest as a community forest' (Khadka 2009: 56).

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# What Does Climate Change Adaptation Mean for Humanitarian Assistance? Guiding Principles for Policymakers and Practitioners

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**Abstract** Vulnerability to climate change is the result of complex interactions of various social, political, economic and environmental conditions. Humanitarian actions, while often having short-term and ‘neutral’ intentions, necessarily influence the development pathways that define people’s vulnerability to climate change. On the one hand, humanitarian interventions risk reinforcing existing vulnerability patterns by increasing the gap between those who benefit from different programmes and those that remain marginalised. On the other, addressing climate change may provide new opportunities for transforming the development pathways that create vulnerability in the first place. However, while there are shifts at the policy level towards integrating humanitarian assistance with longer-term development, considerations about how humanitarian action may support transformational adaptation are often missing. This article describes a framework for integrating climate change adaptation concerns into humanitarian policies and actions, which has been developed in collaboration with several humanitarian organisations to support efforts to reduce longer-term vulnerability and the recurrence of humanitarian crises.

**Keywords:** humanitarian assistance, climate change adaptation, vulnerability, transformational change, guidelines, policy processes.

## 1 Introduction

Humanitarian assistance and climate change adaptation are often regarded as two separate disciplines in practice as well as in academia. They are often carried out by different actors, governed through different policies, funded through different mechanisms, and have different goals. However, while the main objective of humanitarian assistance is – and must be – to save lives and alleviate immediate suffering, it makes a lot of sense to do so in a way that reduces longer-term vulnerability and the recurrence of humanitarian crises. Indeed, the humanitarian sector is already moving to integrate longer-term approaches such as

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social protection (Haug and Wold; Costello *et al.* and Marin and Naess, this *IDS Bulletin*), disaster risk reduction and disaster preparedness as well as through the resilience agenda (see, for example, IFRC 2016a; Jeans, Thomas and Castillo 2016). However, while there are shifts at the policy level towards integrating humanitarian assistance with longer-term development, considerations about how humanitarian action may support transformational climate change adaptation are often missing.

As outlined by Eriksen *et al.* (this *IDS Bulletin*), climate change intersects with humanitarian crises and how they are handled in four main ways: first, many disasters are climate-related; second, climate change may contribute to social changes that influence the nature of humanitarian crises (also non-climatic crises); third, how a non-climatic disaster is handled is critical for how vulnerable a community may be to future climate events; and fourth, humanitarian aid can either support or undermine transformations towards climate-resilient development pathways (development trajectories that combine mitigation of emissions, equitable development and reduced vulnerability; see also Eriksen *et al.*, introduction to this *IDS Bulletin*). Hence, how we design and implement humanitarian interventions have an impact – sometimes a substantial impact – on future vulnerability to climate change. This calls for approaches to reduce climate vulnerability as part of the humanitarian response in order to prevent and address the growing number of protracted crises and ultimately address the underlying causes for vulnerability.

However, the challenge is not merely to make shorter-term measures long term, it is also about transforming the nature of the measures and the way that they are carried out so that they open up space for multiple vulnerability knowledges and alternative development pathways (Eriksen *et al.*, this *IDS Bulletin*). What constitutes opportunities to support potential transformational adaptation (adaptation that changes the fundamental attributes of a system in response to climate and its effects as opposed to incremental adjustments – IPCC 2014) is context specific: First, vulnerability is dependent on social, political, economic and environmental changes as well as inequitable social and power relations generating vulnerability for a group or individual at a particular point in time and space. Second, the way that a humanitarian organisation interacts with donors and other development actors frames what actions are possible within a particular vulnerability context. Third, what might constitute more climate-resilient development pathways – as well as the political spaces for challenging current pathways – varies between contexts. Hence there is no 'blueprint' for 'good adaptation' in humanitarian actions. What may make sense in one context may not be practically possible or may even exacerbate vulnerability in another (Eriksen *et al.* 2011). Instead, humanitarian organisations require a framework for analysing the vulnerability and institutional contexts in which they work in order to reflect on what 'good adaptation' may be for whom and in which contexts, and identify the practical spaces for altering practices within current planning and



implementation. Such a framework should also assist organisations to interrogate the assumptions regarding vulnerability and development that underlie their work, as well as to help them reflect upon whether or not there is a need to rethink the way that they operate.

In this article, we describe the development of key principles aimed at providing such a framework for analysis and reflection that are further described in Eriksen *et al.* (forthcoming). Importantly, these principles do not provide a ‘blueprint’ nor aim to replace the great number of *guidelines* in support of climate change adaptation currently used by humanitarian and development organisations. Rather, they aim to help organisations understand how their existing approaches and guidelines link to climate change adaptation, recognise where gaps or contradictions exist, and identify opportunities (and limitations) for humanitarian interventions to help drive transformative types of adaptation.

The development of these guiding principles formed an important part of the project ‘Courting Catastrophe? Humanitarian Policy and Practice in a Changing Climate’ (2012–16). The project involved seven case studies of different humanitarian approaches in various geographic and institutional contexts, including in Nepal, Pakistan, Bangladesh, Ethiopia, Kenya, Malawi and Zambia. In particular, the guiding principles are a result of discussions with practitioners and policymakers, feedback on presentations of research findings at conferences and seminars, as well as interviews with the representatives of various humanitarian organisations.

In the following section, we describe the conceptual underpinnings of transformational adaptation, and what it means for humanitarian approaches and their role in development in a broader sense. In Section 3 we describe how key findings from across the Courting Catastrophe case studies form a starting point for developing guiding principles within this conceptual framework. In Section 4, we use the normative principles of sustainable adaptation to frame the guiding principles for how humanitarian interventions can support transformational adaptation. Drawing on findings from the case studies, we highlight key questions and practical entry points relevant to each principle.

## **2 Humanitarian aid in the context of transformational adaptation**

Disaster and crisis of current systems can represent an opportunity for dramatic changes and transformation. However, they can also represent an opportunity for vested interests and entrenched power structures to yield their agency and get their interests/actions implemented without critical resistance because of the urgency and institutional crisis due to disaster. Humanitarian lifesaving actions, while they often have short-term objectives, necessarily form part of the actions that comprise development pathways, as they risk reinforcing or altering practices, social structures and norms. A critical question to ask in this regard is under what conditions or through which modalities/approaches do humanitarian actions contribute to either transformation or entrenchment?

Transformative change can be generally represented through three interacting spheres of transformation, referred to as the practical, political, and personal spheres (O'Brien and Sygna 2013). These spheres capture the ways that beliefs, values and worldviews interact with political decision-making and governance, as well as with on-the-ground practices that contribute to sustainable systems. According to O'Brien *et al.* (2015), transformation in practice is contingent on a political sphere, which includes the systems and structures that create the rules, norms and incentives for different types of behaviours and practices. These in turn are influenced by subjective views of systems and relationships that are represented in a personal sphere. Indeed, individual and shared beliefs, values and worldviews often drive political priorities and goals and influence framings of problems and solutions, which can lead to conflicts and tensions in decision-making processes that often impede transformative change.

While there are shifts at the international policy level towards integrating humanitarian assistance with longer-term development and to integrate longer-term perspectives into humanitarian assistance, this shift seldom explicitly considers the transformational potential of humanitarian aid in a climate change context. Humanitarian assistance is generally accepted to mean the aid and action designed to save lives, alleviate suffering, and maintain and protect human dignity during and in the aftermath of man-made crises and natural disasters, as well as to strengthen preparedness for and prevent the occurrence of such situations (Good Humanitarian Donorship 2017). What marks it out from other forms of aid and foreign assistance is that it should be guided by the principles of:

- Humanity: saving human lives and alleviating suffering wherever it is found;
- Impartiality: acting solely on the basis of need, without discrimination between or within affected populations;
- Neutrality: acting without favouring any side in an armed conflict or other dispute where such action is carried out; and
- Independence: the autonomy of humanitarian objectives from the political, economic, military or other objectives that any actor may hold with regard to areas where humanitarian action is being implemented.  
(Global Humanitarian Assistance 2017)

The broad endorsement of the humanitarian principles by most humanitarian actors has led to the term 'humanitarian exceptionalism' as a means to distinguish humanitarian actions from interventions that may have political and security objectives (Bennett, Foley and Pantuliano 2016). This distinction is particularly important for humanitarian actors that engage in conflict zones and in order to reach victims from different sides of a conflict.

However, a strict interpretation of the humanitarian principles has also been criticised for contributing to an artificial division between humanitarian assistance and development efforts (Bennett *et al.* 2016). In real-life operations, it is argued, there is no linear transition or ‘handover’ between ‘development’ and ‘humanitarian’ interventions. Still, a range of different structures, institutions and modes of operation uphold this division, sometimes at the cost of ensuring the necessary coordination between what is regarded to be humanitarian activities on the one side and development on the other.

The need for better coordination among the wide range of humanitarian and development actors engaged in emergency situations is widely recognised. Over the last few decades, various initiatives and processes have been undertaken to improve the efficiency of the humanitarian system, including the United Nations General Assembly Resolution 46/182 in 1991,<sup>4</sup> the establishment of the Inter-Agency Standing Committee (IASC) in 1992, the Humanitarian Reform Agenda with the Cluster Approach in 2005,<sup>5</sup> and the IASC Transformative Agenda in 2011.

Most recently, several international events, such as the Sendai Framework for Disaster Risk Reduction, the Paris Agreement on Climate Change, and the Sustainable Development Goals agenda in 2015, and the World Humanitarian Summit (WHS) in 2016 have stressed the need for the removal of artificial barriers between short-term and longer-term interventions. An important outcome of the WHS, for example, was the Grand Bargain that aims to reform the system for humanitarian funding, simplify reporting requirements, increase support to local partners, and bridge the gap between humanitarian and development interventions.

Integrating adaptation in the humanitarian response challenges the division between development and humanitarian assistance. It obliges humanitarian actors to include the capacity, understanding and expertise from other sectors, and to plan and to implement humanitarian interventions within a longer-term horizon. Below, we outline five key ways in which humanitarian aid is directly relevant for transformation.

### **3 Research approach and five key recognitions**

An examination of the seven case studies (many of which are described in separate articles in this *IDS Bulletin*) gleaned five common themes that are key to identifying entry points for transformative adaptation in humanitarian actions. These are:

- Vulnerability is complex and its root causes are often multidimensional.
- Lasting solutions to humanitarian crises require that root causes for vulnerability are identified and addressed.

- Power relations are important drivers of differential vulnerability patterns at the local level and shape policy processes and their outcomes.
- Poorly designed humanitarian interventions risk enhancing local vulnerability patterns.
- Preparedness and planning are key for avoiding protracted crises and ensuring early response.

**Vulnerability is complex and its root causes are often multidimensional**

This recognition highlights the importance of understanding vulnerability as shaped through the interactions of multiple socio-environmental processes including economic and political changes, marginalisation and inequity. Indeed, disasters and the human suffering involved are seldom caused by a climate extreme or shift in climate extreme on its own – they are the result of a combination of social and environmental factors, including for example conflict and political instability, settlement patterns, socioeconomic marginalisation, fragile institutions, and poor infrastructure and social welfare provision (O'Brien *et al.* 2007; Reid and Vogel 2006; Eakin and Lemos 2006; Twigg 2015). Vulnerability is dynamic, specific to each situation, and may vary greatly between individuals and groups within the same villages. The case study from Nepal, for example, shows that the most vulnerable, often women and people from low castes, would highlight oppression and social inequality as causes of their entrenched vulnerability. High caste people from the same villages, on the other hand, would point to a lack of physical infrastructure such as the absence of irrigation channels as the main reason for their climate change vulnerability (Nagoda, this *IDS Bulletin*). Thus, our approaches need to start with a sound understanding of the environmental, social and political factors shaping vulnerability in the particular context that we are addressing.

**Lasting solutions to humanitarian crises require that the root causes for vulnerability are identified and addressed**

Vulnerability to climate events manifests itself in its most extreme form in humanitarian disasters, and such disasters are often a starting point for understanding which groups are most vulnerable, and what social and environmental processes lead to their vulnerability. In many cases, humanitarian staff have a sound understanding of the local complexities creating vulnerability. Nevertheless, too often, humanitarian interventions address only the symptoms and not the root causes of a crisis, while we need to be doing both. For example, the Nepal case study demonstrates how better-off households with high-quality land close to the river may benefit much more from the construction of irrigation channels during Food for Work interventions than poor households with land in poor conditions, far from the village and too steep for irrigation (see Nagoda, this *IDS Bulletin*). This recognition implies that humanitarian interventions must be conceived as a part of, and contributing to, ongoing development processes and that this must be reflected in the planning

and design of humanitarian programmes and interventions. This is a strong argument for a holistic and coordinated approach between development and humanitarian actors and programmes.

**Power relations are important drivers of differential vulnerability patterns at the local level and shape policy processes and their outcomes**

The third recognition underscores the importance of socio-political factors in determining local vulnerability and how these shape humanitarian interventions. In reality, most communities are heterogeneous, constituted by people and groups of people with conflicting interests, needs and ideas. Our study from Kenya, for example, shows that better-off men have more opportunities to influence local-level decision-making processes through social and political networks with local leaders and governmental representatives. The most vulnerable, on the other hand, were often marginalised in local policy spaces and did not believe in their own deliberative strategy (Mosberg *et al.*, this *IDS Bulletin*). In the short term, understanding how socio-political dynamics shape local vulnerability patterns is essential for humanitarian actors to ensure that the aid benefits the most vulnerable households and individuals. In the longer term, it is necessary for designing programmes so that they can address the dynamics that determine vulnerability. Critically, humanitarian organisations and their staff form part of the power dynamics – and the production of particular vulnerability understandings and ideas of ‘good development’ – themselves.

**Poorly designed humanitarian interventions risk enhancing local vulnerability patterns**

Importantly, humanitarian interventions are never neutral as they are implemented within the frame of existing social and political structures where some people may benefit more than others. Even if do-no-harm approaches may be high on the agenda among humanitarian organisations, this recognition highlights that poorly designed interventions may nevertheless do harm by enhancing the vulnerability of already marginalised groups and individuals, and may even contribute to prolonging a humanitarian crisis. In consequence, programmes that are primarily designed to respond to acute humanitarian needs also need to take into consideration possible implications on how humanitarian interventions may influence longer-term vulnerability patterns.

**Preparedness and planning are key for avoiding protracted crises and ensuring early response**

With some exceptions, a crisis does not occur ‘out of the blue’. Experience tells us that investing in crisis prevention and preparedness pays off, and knowledge about the local vulnerability context before the crisis hits buys time and is invaluable information when planning and designing a humanitarian response (see, for example, Haug and Wold, this *IDS Bulletin*). A well-designed humanitarian response that has already taken the above recognitions into account in the planning phase is more likely to address the root causes of climate vulnerability and reduce the long-term impact of the crisis.

These five key findings have implications for what is required for humanitarian aid to be more transformative, that is, to contribute not only to longer-term measures but also to transformative adaptation. The findings underwrite the work of other studies (see, for example, IASC 2009; IFRC 2014a; Bennett *et al.* 2016; Jeans *et al.* 2016) that highlight the need for more cross-disciplinary approaches to vulnerability that allow for coordination within and between organisations rather than competition for resources. The findings also suggest the need for more financial and administrative flexibility that allow for more focus on risk reduction and preparedness as well as allocations to long-term development in the aftermath of a disaster. Crucially, they demand a better comprehension of the political economy of the country and how it influences differential vulnerability patterns at local level. Specifically, there must be a fundamental understanding that no intervention is ever neutral, in that it contributes to the political economy of development. Communities cannot be seen as homogenous – interests are diverse, there are both positive and negative effects of an intervention on different people, and people will seek to negotiate access and influence humanitarian aid to their advantage. The power to do so is greatly differentiated within a society.

#### **4 Guiding principles outlined**

Knowing that humanitarian operations may increase the vulnerability of some while alleviating the suffering of others suggests the need for organisations to reflect on the role that different actors have in the shaping of the vulnerability context at local, national and international level. Such reflection may be difficult when there is a need to react quickly to crises, and in the face of emergencies that are complicated, with different actors having different interests and expert skills. How can one make sense of this complexity and act to reduce rather than increase vulnerability for certain groups? Who represents the 'local' and can one link the different 'local' knowledge with expert knowledge, policy development and decision-making processes?

Several organisations have already developed guidelines that go beyond a mere hazard-based understanding of vulnerability by also taking social vulnerability into account (for example, the International Federation of Red Cross and Red Crescent Societies (IFRC 2013, 2014a, 2014b, 2016b, 2016c, 2017) and Jeans *et al.* (2016)). In order to take such efforts further, a framework that guides reflection on the significance of transformational adaptation in local work is required, posing new questions that help organisations interrogate the way that current practice may support or undermine climate-resilient development pathways. In this section, we use the normative principles of sustainable adaptation in order to outline guiding principles for the humanitarian sector, using the key findings described in the section above to identify entry points within planning, implementation, and evaluation of actions.

The guiding principles further described in Eriksen *et al.* (forthcoming) outline questions to be posed at various stages of planning,

implementing and evaluating humanitarian interventions, using the five principles of sustainable adaptation described in Eriksen *et al.* (2011) and Eriksen and Marin (2011). Sustainable adaptation was selected as an approach because these are explicit normative principles developed to help adaptation efforts address poverty, inequality and environmental integrity. The terms ‘adaptation’ and ‘sustainable’, when used uncritically, can be used to conceal vested interests and avoid resistance and critical examination (Brown 2011). At the same time, the very term adaptation is problematic in terms of the tendency to depoliticise interventions and delink them from development processes (Taylor 2015). The normative principles are intended to provide very explicit criteria for identifying the positive and negative impacts of adaptation processes, helping actors within the humanitarian sector to critically examine their own measures and processes. Below, we propose some questions that can help identify opportunities for humanitarian actions to support transformational adaptation.

**Principle 1. Recognise the context for vulnerability, including multiple stressors (stressors other than and including climate change)**

Given that responses should be sensitive to the wider vulnerability context, including multiple stressors that contribute to vulnerability, the analysis should attempt to answer the following key questions:

- What are the main reasons for being vulnerable (caste, ethnicity, gender, poverty, disability...)?
- What factors other than climate change (political, social, economic and environmental) contribute to these people’s vulnerability? How do these processes interact and influence people differently?
- What are the historical, cultural and political processes that have shaped the vulnerability of individuals or groups?
- Which interventions have been carried out before? Which projects/programmes have been considered successful? Why and for whom?

**Principle 2. Acknowledge that differing values and interests affect adaptation outcomes**

Given that responses should take into account that different actors have different values and interests which may affect adaptation outcomes, the mapping should attempt to answer the following key questions:

- Which are the main groups/actors with an interest in adaptation programmes and their outcomes in the region, and why?
- What are the main differences in needs/interests between different groups?
- How/to what extent are the views/interests of the most vulnerable groups taken into account in national/international climate change adaptation policies and approaches?

**Principle 3. Integrate local knowledge into adaptation responses**

Given that successful responses need to have a conscious approach towards which knowledge is recognised and how it is used in project design and decision-making, the strategy should attempt to give answers to the following key questions:

- What are the different interests and needs at local level and what are the reasons for this diversity of 'local' knowledge (also note the different conflicts and how these are negotiated at local, regional level)?
- How can programmes ensure that the different types of local knowledge are integrated with other sources of knowledge when planning projects and formulating policies?
- In particular, what can be done to ensure that the voices of the most vulnerable are taken into account within the formulation and the implementation of policies and programmes at both local and national levels?

**Principle 4. Consider potential feedback between local and global processes**

Given that responses to reduce vulnerability do not happen in isolation but may directly or indirectly influence and be influenced by larger-scale processes, the strategy should attempt to give answers to the following key questions:

- What are the potential effects of national and international programmes at the local level?
- How do organisations work across scale? What are the other ongoing processes addressing development and adaptation in the region and how do these processes coordinate at national, regional and local level?
- How can the coordination between different sectors and organisations, including between civil societies and governments at local, national and international level be strengthened?

**Principle 5. Empower vulnerable groups to influence development pathways and their climate change outcomes**

Given that marginalisation and social exclusion are important factors shaping vulnerability processes, the strategy should attempt to give answers to the following key questions:

- Who are the most vulnerable and what are their contexts (situations) that make them vulnerable?
- What are the political, economic, cultural and social processes that hinder the most vulnerable from influencing decision-making processes at local, regional and national level?
- What are the opportunities that exist within the humanitarian action in question to support their active participation in influencing development pathways?



## **5 Concluding reflections: barriers and opportunities for humanitarian aid to contribute to adaptation**

Integrating adaptation concerns into humanitarian responses represents an opportunity to address humanitarian needs and at the same time reduce the risk of recurring crises. The growing recognition of the need to integrate humanitarian assistance with longer-term development has generated a number of policy recommendations for humanitarian actors, including better coordination between organisations, more focus on preparedness, better inclusion of local actors in decision-making, better understanding of the local context, and enhanced financial flexibility and transparency (see outcome of the 2016 World Humanitarian Summit).<sup>6</sup> However, the scale and intensity of current and recurring humanitarian crises in different parts of the world suggest that much more must be done to address entrenched vulnerability patterns. Our findings show that climate change adaptation can contribute with additional insights as we take on the challenge of responding to acute humanitarian needs while simultaneously addressing longer-term vulnerability concerns and supporting more climate-resilient development pathways.

Importantly, any ‘longer-term humanitarian measure’ does not in itself constitute climate change adaptation. Transforming the conditions, relations and processes that cause vulnerability will often require changes in the way humanitarian interventions are planned and designed. It is how a measure is implemented in terms of reinforcing or challenging inequities and environmental change, and the extent to which it opens up space for the voices of the vulnerable – such as their vulnerability understandings and alternative conceptions of ‘good development’ – that determines whether outcomes are transformative or not. This implies a need for better understanding of the processes that shape local-level vulnerability patterns and a more holistic financial and administrative approach for humanitarian aid that allows organisations to address the conditions that entrench vulnerability.

This article describes the development of a framework to facilitate the application of our accumulated knowledge and best practices within climate change adaptation in humanitarian interventions. Every crisis is unique and the framework does not pretend to be a blueprint that can be applied to every situation. Rather, it proposes a set of questions, or meta guidelines, that have been formulated with the joint purpose of: (1) avoiding the risk that humanitarian actions reinforce entrenched vulnerability patterns, and (2) identifying opportunities for humanitarian actions to contribute to transformative adaptation. Importantly, the framework is not a static document, but a contribution to the continuing process of enhancing the ability of humanitarian action to alleviate human suffering in the short as well as in the long term.

### Notes

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# Glossary

- ACCC** Adaptation to Climate Change in the Caribbean
- ADB** Asian Development Bank
- ADMARC** Agricultural Development and Marketing Cooperation [Malawi]
- ASAL** Arid and Semi-Arid Land
- BMZ** German Federal Ministry for Economic Cooperation and Development
- BRACED** Building Resilience and Adaptation to Climate Extremes and Disasters
- CAP** Consolidated Appeals Process
- CARICOM** Caribbean Community
- CASELAP** Centre for Advanced Studies in Environmental Law and Policy [Kenya]
- CCA** climate change adaptation
- CCAFS** Climate Change, Agriculture and Food Security
- CFS** Committee on World Food Security [Italy]
- CICERO** Center for International Climate and Environmental Research – Oslo [Norway]
- CIIT COMSATS** Institute of Information Technology [Pakistan]
- CIRCLE** Climate Impacts Research Capacity and Leadership Enhancement
- CVA** Capacities and Vulnerabilities Assessment
- DARA** Development Assistance Research Associates [Spain]
- DDCO** District Development Committee Office
- DDMU** District Disaster Management Unit
- DEC** Disasters Emergency Committee [UK]
- DFID** Department for International Development [UK]
- DFSN** District Food Security Network
- DPR** Disaster Preparedness and Relief
- DRM** disaster risk management
- DRR** disaster risk reduction
- EAD** Environmental Affairs Department
- EC** European Commission
- EDE** Ending Drought Emergencies
- ERRA** Earthquake Rehabilitation and Reconstruction Authority [Pakistan]
- FAO** Food and Agriculture Organization of the United Nations [Italy]
- FATA** Federally Administered Tribal Areas
- FbF** Forecast-based Financing
- FEWER** Forum on Early Warning and Early Response
- FEWS** Famine Early Warning System
- FFA** Food for Assets programme
- FFW** Food for Work programme
- FGM** female genital mutilation
- FISP** Farm Input Support Programme
- FOCAC** Forum for China–Africa Cooperation

- GDP** gross domestic product  
**GHAR** Global Humanitarian Assistance Report  
**GHD** Good Humanitarian Donorship  
**GHI** Global Hunger Index  
**GIEWS** Global Information and Early Warning System  
**GLOF** glacier lake outburst flood  
**GRC** German Red Cross  
**ha** hectare  
**HERR** Humanitarian Emergency Response Review [UK]  
**HEWS** Humanitarian Early Warning Service  
**HLPE** High Level Panel of Experts on Food Security and Nutrition  
**HPC** Humanitarian Programme Cycle  
**HPG** Humanitarian Policy Group [UK]  
**HUMPOL** Research on Humanitarian Policy, activity under the NORGLOBAL programme of the Research Council of Norway  
**IASC** Inter-Agency Standing Committee [Switzerland]  
**IDS** Institute of Development Studies  
**IFPRI** International Food Policy Research Institute  
**IFRC** International Federation of Red Cross and Red Crescent Societies [Switzerland]  
**IHS** Integrated Household Survey  
**IIED** International Institute for Environment and Development [UK]  
**INGO** international non-governmental organisation  
**IPCC** Intergovernmental Panel on Climate Change [Switzerland]  
**IRI** International Research Institute for Climate and Society [USA]  
**IVCA** Integrated Vulnerability and Capability Assessment  
**IVM** Institute for Environmental Studies [Amsterdam]  
**JICA** Japan International Cooperation Agency  
**KFSSG** Kenya Food Security Steering Group  
**KP** Khyber Pakhtunkhwa [Pakistan]  
**LAPSSET** Lamu Port Southern Sudan–Ethiopia Transport Corridor  
**LSE** London School of Economics and Politics  
**masl** metres above sea level  
**MDG** Millennium Development Goal  
**MGDS** Malawi Growth and Development Strategy  
**MoAFS** Ministry of Agriculture and Food Security  
**MOAIWD** Ministry of Agriculture, Irrigation and Water Development  
**MoCC** Ministry of Climate Change [Pakistan]  
**MDG** Millennium Development Goal  
**Mt** metric tonne  
**NAFM** Needs Assessment Framework and Matrix  
**NAP** National Adaptation Plan  
**NASFAM** National Smallholder Farmers' Association of Malawi  
**NDMA** National Disaster Risk Management Authority [Pakistan]  
**NDRM** National Disaster Risk Management  
**NEEDS** National Economic and Environmental Development Study [Pakistan]  
**NFC** Nepal Food Corporation  
**NFD** Northern Frontier District [Kenya]

**NIDM** National Institute of Disaster Management [Pakistan]  
**NMBU** Norwegian University of Life Sciences  
**Noragric** Department of International Environment and Development Studies, Faculty of Landscape and Society, at the Norwegian University of Life Sciences (NMBU)  
**NORGLOBAL** Norway–Global Partner programme of the Research Council of Norway  
**NPC** National Planning Commission [Nepal]  
**NSO** National Statistical Office  
**NTFP** non-timber forest product  
**ODI** Overseas Development Institute [UK]  
**OPM** Oxford Policy Management  
**PDMA** Provincial Disaster Management Authority [Pakistan]  
**PHF** Pakistan Humanitarian Forum  
**PRCS** Pakistan Red Crescent Society  
**PRRO** Protracted Relief and Recovery Operation  
**PSNP** Productive Safety Net Programme  
**RCCC** Red Cross Red Crescent Climate Centre [Netherlands]  
**SADC** Southern African Development Community  
**SDG** Sustainable Development Goal  
**SDPI** Sustainable Development Policy Institute [Pakistan]  
**SHARE** Supporting the Horn of Africa’s Resilience  
**SIDA** Swedish International Development Cooperation Agency  
**SP** social protection  
**SREX** Special Report on Managing the Risks of Extreme Events and Disasters to Advance Climate Change Adaptation  
**TA** Transformative Agenda  
**UC** user committee  
**UNDP** United Nations Development Programme [USA]  
**UNFCCC** United Nations Framework Convention on Climate Change [Germany]  
**UNFCO** United Nations Field Coordination Office  
**UNICEF** United Nations Children’s Fund [USA]  
**UNISDR** United Nations International Strategy for Disaster Reduction  
**UNOCHA** United Nations Office for the Coordination of Humanitarian Affairs [USA]  
**UNRISD** United Nations Research Institute for Social Development [Switzerland]  
**UNU-WIDER** World Institute for Development Economics Research of the United Nations University [Finland]  
**USAID** United States Agency for International Development  
**WB** World Bank [USA]  
**WFP** World Food Programme [Italy]  
**WHS** World Humanitarian Summit  
**WMS** Welfare Monitoring Survey  
**WRI** World Resources Institute [USA]

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*'This IDS Bulletin calls for deliberate transformation as an approach to making humanitarian action and adaptation more closely aligned in tackling short- and long-term challenges brought about by a changing climate.'*