

REACHING RESILIENCE



Handbook resilience 2.0
for aid practitioners and policymakers

Reaching Resilience

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for aid practitioners and policymakers

in Disaster Risk Reduction, Climate Change Adaptation
and Poverty Reduction

www.reachingresilience.org



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Introduction

Issues at stake

Over the last few decades, the alarming increase in both the frequency and impact of disasters has drastically affected the livelihoods of people living in both developing and developed countries. A growing number of weather-related hazards can be observed such as floods, droughts and forest fires. Climate change most likely contributes to this rise, as well as people's mounting vulnerability due to, for instance, population growth, insecure land rights, rising food prices and unemployment. Over the last few years a sense of urgency has emerged among platforms and networks related to Disaster Risk Reduction (DRR), Climate Change Adaptation (CCA) and Poverty Reduction (PR) to integrate the three domains in order to cope with future risks more effectively.¹

International Non-Governmental Organizations (INGOs), government departments and local actors are now increasingly convinced that integrating DRR, CCA and PR is important, but find it difficult to apply this in practice. There is compelling evidence that integration works. Examples are addressing forest fires in Indonesia by better governance of peat areas and at the same time organizing disaster preparedness while enhancing people's socio-economic space, or integrating emergency and structural interventions throughout climate change-intensified drought cycles in the Horn of Africa. In many areas, however, successful integration has not been started or runs into problems. Various attempts have been made to share integration experiences and to document and publish 'best practices'. However, these are hard to apply in different settings and do not sufficiently help address the barriers that exist between the three realms.

¹ Much of what is said in this handbook also pertains to integrating the domains of Conflict Management and Sustainable Development.

‘Resilience’ is a concept that can bring various actors involved in DRR, CCA and PR together, and offers opportunities to ‘work across silos’ by sharing different analytical approaches. The prevailing definition of ‘resilience’ is: *‘The capacity of a system, community or society potentially exposed to hazards to adapt, by resisting or changing in order to reach or maintain an acceptable level of functioning and structure. This is determined by the degree to which the social system is capable of organizing itself to increase its capacity for learning from past disasters for better future protection and to improve risk reduction measures’* (UNISDR, 2004: 6 volume II).

This definition focuses on ‘social systems’ and appears to be value-free because the ‘system’ is valued, not the wellbeing of a particular social group. The notion of ‘resilience’ further encourages a value-free analysis by focusing on outcomes and characteristics of resilience, rather than recognizing power differentials that are at the root of much vulnerability (Levine *et al*, 2012).

Although the concept of ‘resilience’ makes sense to most stakeholders facing disasters, three main challenges remain in integrating DRR, CCA and PR:

- The distinct conceptual frameworks used by DRR, CCA and PR, and the assumptions, values, and worldviews behind them, cause confusion and ineffective interaction or cooperation
- The lack of scaled integration of the diverse actors and the different institutional policy frameworks pose a ‘governance’ challenge: how to proceed in this political arena?
- The dire need for guidelines and training materials to enable local actors to analyze the risks to be addressed, define appropriate action and decide on courses to take.

Integrating DRR, CCA and PR cannot be done according to a standard recipe. Each context differs, and actors operating in the field of DRR, CCA and PR require new sets of lenses to see the opportunities and constraints for collaboration in their own situation and respond to them to maximize the opportunities for integrated planning and action. Enhancing their capacity to do so can be realised through networking and dialogue, and by encouraging the various actors to reflect on and improve their response capacity by learning from real-life processes and programming in other areas. Fostering resilience implies changing *how* we programme, rather than *what* we programme.

The RESILIENCE project

The RESILIENCE project was born from the conviction that linking Disaster Risk Reduction (DRR), Climate Change Adaptation (CCA) and Poverty Reduction (PR) in humanitarian and development programmes would greatly improve the livelihoods of local communities facing recurrent disasters. CARE Nederland, Wageningen University and Groupe URD, each of which have gained substantial experience through years of efforts and research in the three fields, came together and decided to further explore and arrive at an approach to address the three challenges mentioned above. This resulted in a three-year study and interaction from 2009 to 2012 financially supported by the European Union.

In order to reflect on the diversity of contexts and actors that work on resilience, the RESILIENCE project partners implemented desk studies and extensive field research in three contrasted areas faced with different types of hazards and having various ways of dealing with them: a semi-arid area affected by drought in Southern Ethiopia, tropical lowland prone to floods in Bolivia, and peat lands prone to peat fires in Kalimantan, Indonesia. In each of these areas, we organized multi-stakeholder workshops to understand the role played by different stakeholders – from communities to governmental authorities and the private sector – in fostering resilience. We relied on the extensive experience of local CARE field officers and on the narratives and perspectives of community leaders, civil society organizations, government officials and the private sector acting in the fields of DRR, CCA and PR. Further an EU stakeholder workshop was held in Brussels where 34 different stakeholders gathered consisting of practitioners, researchers, policymakers and donors. Together they identified gaps, constraints, opportunities and course of actions towards fostering resilience of local communities.

The experiences, views and course of proposed actions from the local to the (inter) national level have been documented and processed into three different products: a set of film documentaries which show the various risk perspectives of different actors and their proposed actions in Bolivia, Ethiopia, and Indonesia; a serious game that challenges aid practitioners to shape a winning funding proposal aimed to foster resilience by answering a series of questions related to the eight key elements of our Resilience approach; and this Resilience 2.0 Handbook which seeks to provide aid practitioners, policy makers and DRR/CCA students with an understanding of the issues, key points, assessment and planning tools, and proposed action

to engage with multiple stakeholders, integrate different processes and to deal with constraints and power differentials when translating ‘resilience’ into practice.

How to use this handbook?

This handbook is designed to encourage thinking and provide insights and ideas about how to design well-integrated, step-by-step actions and strategies to foster resilience at the local level. The handbook aims to support students and young professionals in their DRR, CCA and PR related work and secondly to acquaint policy-makers involved in these three domains with the integration issue and help them to take a resilience 2.0 approach into their (present or future) daily work.

The handbook provides action points and messages that are widely applicable but their conditions for success contextualized – it does not offer a ‘one-size-fits-all’ approach. Readers are encouraged to approach the key points with an open mind and be willing to experiment, to reflect and be creative in their thinking to apply the action points in their specific context. They are further encouraged to actively look for opportunities to engage with stakeholders with whom they usually do not engage. The key points further enable practitioners, managers and policy-makers to reflect on the interactions and processes occurring during multi-stakeholder processes when identifying, shaping, and implementing interventions that intend to integrate the three realms.

We shall first unravel how we see resilience and its connection to the domains of DRR, CCA and PA. This leads to an eight-step approach. Each subsequent step has been allocated a chapter.

The key points are further detailed into action points or steps that can be taken to design interventions or to engage with other stakeholders from different disciplines, sector or who adhere to different values and interests. The action points are illustrated with examples and experiences from different contexts and critically reflect on current policy and practice and suggest alternatives more in tune with the experience of local stakeholders. The key points also discuss and critically reflect on the role and merits of multi-stakeholder engagement and processes in achieving said integration and how to deal with obstacles.

It merits re-emphasising that the key points do not represent a step-by-step model or road map indicating where to start and where to go following a particular trajectory. In reality the key points do not follow a linear process but occur simultaneously. For example, key point 1 and 6 are closely connected and overlap. The key points rather present a series of issues to consider, observe, discuss and reflect on during the process of engaging with different actors, and shaping and implementing interventions aimed to foster resilient communities.

Unraveling ‘resilience’

Current thinking, operational challenges and lessons learned

The RESILIENCE project was initiated to explore the idea of the potential for synergies between the concepts of DRR, CCA and PR, to analyze the institutional disconnects that hinder these synergies, and finally to identify possible areas for policy development. Based on our experiences, synergy is far from obvious: opportunities and risks are multiple and if the very concept of ‘integrating’ CCA, DRR and PR seems attractive, there are also drawbacks. When the RESILIENCE project started in 2009, the idea of integrating the three fields was novel, and even today it is not yet part of the mainstream. The concept of ‘resilience’ increasingly gained policy recognition and a general consensus exists on the need to make sense of its meaning and how the three fields of DRR, CCA and PR interrelate to foster resilience. The three field studies in Bolivia, Ethiopia and Indonesia, the series of workshops that took place in these three countries and in Brussels bring about lessons in what worked and what did not work in integrating the three domains. This section builds on several workshop reports, interviews and studies done that were part of the project².

2 Warner, J. and F. Grünewald, 2012. Resilience: buzz word or critical strategic concept? Online: www.urd.org/IMG/pdf/ArticleResilience_EN.pdf
Bilo, N. 2011, Integration DRR, CCA and PR – interviews with researchers, practitioners and policy makers from the three realms about resilience, Internal report
Groupe URD, CARE, Netherlands and WUR, 2011, The Road to Resilience: Converging Actors, Integrating Approaches, Workshop Report, Brussels, November 24, 2011.

Is integration needed?

While local communities often take a holistic perspective, on a policy level, the three fields of DRR, CCA and PR developed as three realms of action. They are often compartmentalized and segregated within or between institutions and professional disciplines. Organizations are explicitly structured according to these categories in order to access funds and to organize their accountability systems.

Not only European and national agencies but also NGOs and large enterprises work this way. As a result, compartmentalization in funding, training and research can easily incite project workers to look 'upwards' to please funders, rather than looking 'downwards' to optimize links with the realities on the ground. Of course people working in said 'bureaucracies' are not ignorant of the problems of segregation. They themselves need to be increasingly resilient: donors and NGOs will need to adapt to a changing political climate: they themselves are faced with budget cuts and a declining popular as well as financial support base for aid.

Yet, a conceptual change seems vital, as in practice, reality on the ground is more integrated and holistic. Local people are exposed to a wide range of risks like disaster risks but also to risks resulting from diseases, unemployment, insecure land rights or violence. At the operational level, adhering to separate domains can lead to counterproductive interventions and duplication of efforts. It is confusing for local communities living in multi-risk environments to engage with different organizations each working separately either on DRR, on CCA or on PR, without proper coordination. Additionally a segregation of the issues masks the interrelated nature of the realms: While climate change is more and more an uncontested fact, the level of causality between the rise in disaster events, the growing vulnerability of many agroecosystems, the degraded resilience of many urban contexts and poverty is seen by many as a credible hypothesis while others still lack evidence to support this idea. Moreover, the division can seem artificial when it comes to responses. A project, say: building a water tank or basin, may be funded under each of the three headings – as Climate Change Adaptation (storage for future scarcity), as Disaster Risk Reduction (to counter effects of drought) and as Poverty Reduction (for tank-irrigated agricultural production). This example illustrates the discursive flexibility of the three categories. There is no neat distinction between risk, shock, vulnerability and response, because in the real world they can be one and the same (Levine *et al*, 2012).

A growing literature (e.g. Van Aalst 2006, O'Brien *et al*, 2004, Gero *et al*, 2011) is starting to address the integration between climate change and disaster risk reduction, at policy and/or operational levels: community-based CCA and DRR, or climate-smart DRR. Another trend in the literature is to link disaster relief and rehabilitation to development (LRRD) and climate change to development. As practitioners from the fields of DRR, CCA and PR (interviewed between November 2011 and February 2012) told us: *'It is not enough to provide weather forecasts and to build cyclone shelters. We need to take livelihoods into account'*. Based on our experiences in the field in our RESILIENCE project we argue for a more radical desegregation of these domains. The aforementioned literature implicitly tends to assume that local people (have to) recognize and experience climate change and disasters the way aid workers do, or would like them to do. We encountered 'climate awareness' in Ethiopia but not in Indonesia, whereas in Bolivia people did not always experience floods as 'disasters', but as part of normal life, especially where they are frequent.

Planned interventions may therefore not necessarily resonate with the risk perspectives of the intended beneficiaries. A local focus, talking to various local stakeholders, putting local people centre stage, also compels us to question taken-for-granted categories. While aid practitioners and donors routinely assign labels such as 'vulnerability', 'disaster', 'climate change', 'resilience', the notions may have little meaning locally. Based on the field studies we observed that 'risk' could be a central concept that links the three realms as we tried to understand local people's broader 'risk landscape'. Understanding 'risk' means understanding the connections between the occurrence of disasters, changing weather patterns due to climate change and failed development efforts that increase people's vulnerability to disasters (see figure 1).

Challenges to integrating DRR, CCA and PR

Integration makes intuitive sense, because a sectoral approach creates inefficiencies and conflicts. While disaster experts focus on present events and ask why disasters happen, referring to social processes preceding the disaster, climate specialists zoom out on the long term and the wider (systemic) scale, while poverty alleviation also has a long term objective but focuses on community level. Differences in time frames and scales hamper integration. At the village level, people have to contend with many more risks than just weather-related disasters and climate variability – unemployment, poor governance, diseases, conflict and crime, leaving aside everyday hazards like traffic.

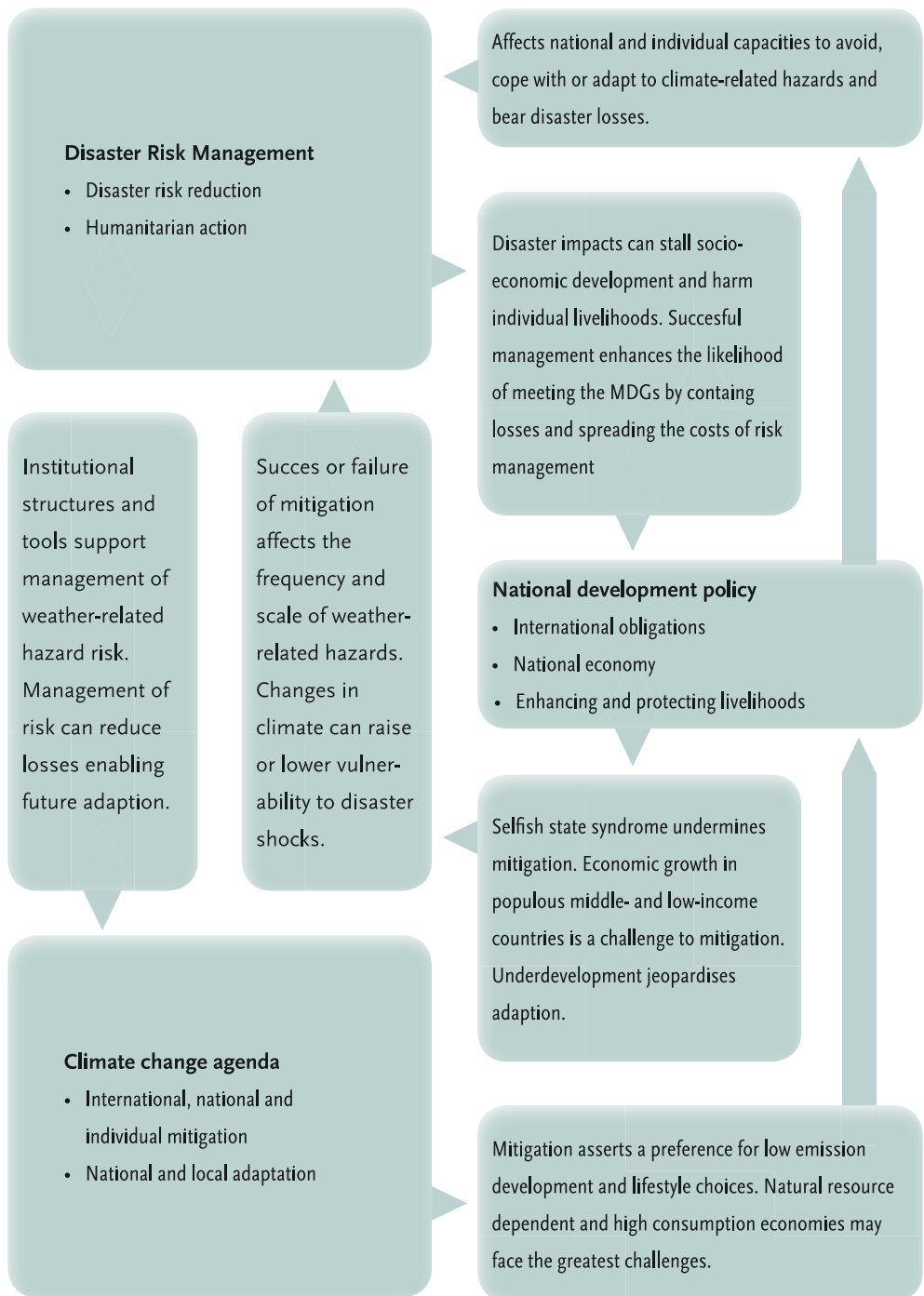
The interviews held by Nienke Bilo in 2012 with international practitioners from various aid agencies, humanitarian and climate-change organizations showed two key concerns related to integration:

1. A risk of losing focus, thus creating indistinctiveness, blurriness, a mash.
2. Integrating domains may risk overlooking the distinctive nature of each domain. Foregrounding certain relations means backgrounding other, potentially crucial concerns, such as environmental sustainability, focusing exclusively on the commonalities and leaving out what is exclusive to each domain. An ecosystems approach may even be a basis for climate-change adaptation, disaster risk reduction and poverty reduction. It was pointed out that the domains identified for integration are themselves partial: adaptation backgrounds mitigation; integrating climate and hazards exclude non-weather events such as earthquakes and volcanoes while poverty alleviation remains essential in areas experiencing non-disastrous climate change.

The interviewees further highlighted the problematic operationalisation of integration. Donor procedures and systems, sector specialists' preoccupations, NGO routines and even scientific paradigms more often hinder rather than support crossing boundaries. 'Integration' assumes that all the different objectives can be subsumed under the label of 'resilience' which can be maximized simultaneously, when in reality there will always be trade-offs and, at best, only a pragmatic balance can be achieved.

We therefore propose a resilience-'lite' (or '2.0') approach with more achievable goals, meaning a 'light' approach to integration (Butterworth *et al*, 2010). It does not try to achieve the unachievable, that is: full integration, but accepts partial modalities where synergies are obvious. This includes breaking through departmental walls of aid agencies and NGOs, without necessarily forcing everyone to work in the same holistic way. Put differently, translators between different dialects of project language, between time and space scales are required, without the need for all to speak the same language all the time. Partial integration and interaction may be the best achievable result. In this context, so-called 'boundary spanners' are needed, people with innovative mindsets and positioned at inter-mediate levels at the outskirts of their division, and who may have regular interaction with counterparts in other divisions and in society. They develop sensitive 'feelers' for what is going on outside, sensing joint opportunities and anticipating obstacles in co-operation. They are however at risk of stretching their mandates too much and losing their internal constituency if they venture too far outside the comfort zone.

Figure 1 | Climate change, disaster risk reduction and development linkages (Schipper and Pelling, 2006).



Thai or Chinese cuisine?

Accepting differences in time-frames, scales and language is not a bad thing. Although it may sound contradictory, integration can work exactly through compartmentalization (Warner, 2011). That is to emphasize rather than dilute the constitutive elements of the ensemble. It may be preferable to view integration like a Thai dish, in which the key component tastes – sweet, sour, bitter and salty – are not thrown together in a hotpot to produce a generic taste, but remain distinguishable: they do not lose their identity and strengths in the mix and can create very tasty, synergetic results. This as opposed to a process that would resemble, let's say, (poor) Chinese takeaway cuisine, in which the original separate flavors all blend into one, without the consumer being able to discern one ingredient from the other afterwards.

If we choose to go with 'Thai cuisine' which resonates with the previously mentioned idea of resilience-lite, integrating the three realms does not mean merging them into one common concept and forget about DRR, CCA and PR, but the concepts will still make sense by themselves and each has its own specificities. We therefore rather talk about *de-compartmentalization* of the three realms: projects, programs and policies should not be only about one issue or the other, but each issue should feature clearly and be articulated with the others. 'Climate-Smart DRR'³, for instance, is based on de-compartmentalization: it means that people's risks landscape – comprising of both present and future risks, considers environmental, socio-economic, and health risks, and that based on such risk assessment, measures are taken to prepare for, live through, recover from and adapt to new situations after the occurrence of hazards. This implies that *DRR and CCA become true components of livelihoods strategies, and that they are integrated into development schemes and projects*. De-compartmentalization means articulating the three realms better, speaking a common language, sharing experiences and knowledge in order to learn from each other and cooperate and negotiate to foster resilient communities.

Moreover, de-compartmentalizing allows for more flexibility in the use of concepts. As a matter of fact, *for communication purposes we have to adapt our vocabulary to the different levels of operation*. Talking about CCA strategies at the household level does not always make sense, whereas livelihoods and risk do resonate with local realities. On the contrary, it is difficult to talk about livelihoods at national levels because they depend a lot on the context, while global CCA strategies can be adopted at national

3 See the Climate-Smart Disaster Risk Management (CSDRM) Approach, developed by Strengthening Climate Resilience (SCR), at <http://www.csdrm.org>

and even international levels. Disaggregating concepts sometimes helps being understood at different levels: even though in the action, realms have to be better integrated, using each concept separately for communication and clarification matters.

Our proposed approach to foster resilience

Participants in a Brussels workshop (November 2011) and interviewees expressed their worries that resilience has become a convenient buzzword behind which blurry policies and programs could be implemented. While omnipresent in policy speak, we found the concept surprisingly hard to translate into other languages at our regional workshops. ‘Resilience’ gets defined ever more broadly to incorporate more disciplines and sectors, such that ‘resilience’ is in danger of being a catch-all concept. We need to prevent it from becoming vague and immeasurable.

There was further consensus that ‘resilience’ *can and should be operationalized differently depending on the context* to which it applies: a resilient community is a community that is able to prepare for, adapt to and live through shocks while not undermining its basic assets, but what makes communities resilient differs from place to place, *‘from Eskimos to Amazonians’*⁴. Resilience in Indonesia is different from resilience in Ethiopia; a resilient pastoralist household is different from a resilient fishermen community. Based on a common understanding of the concept of resilience, its meaning has to be redefined for each community at local levels and translated into concrete, specific strategies and actions and indicators for each community.

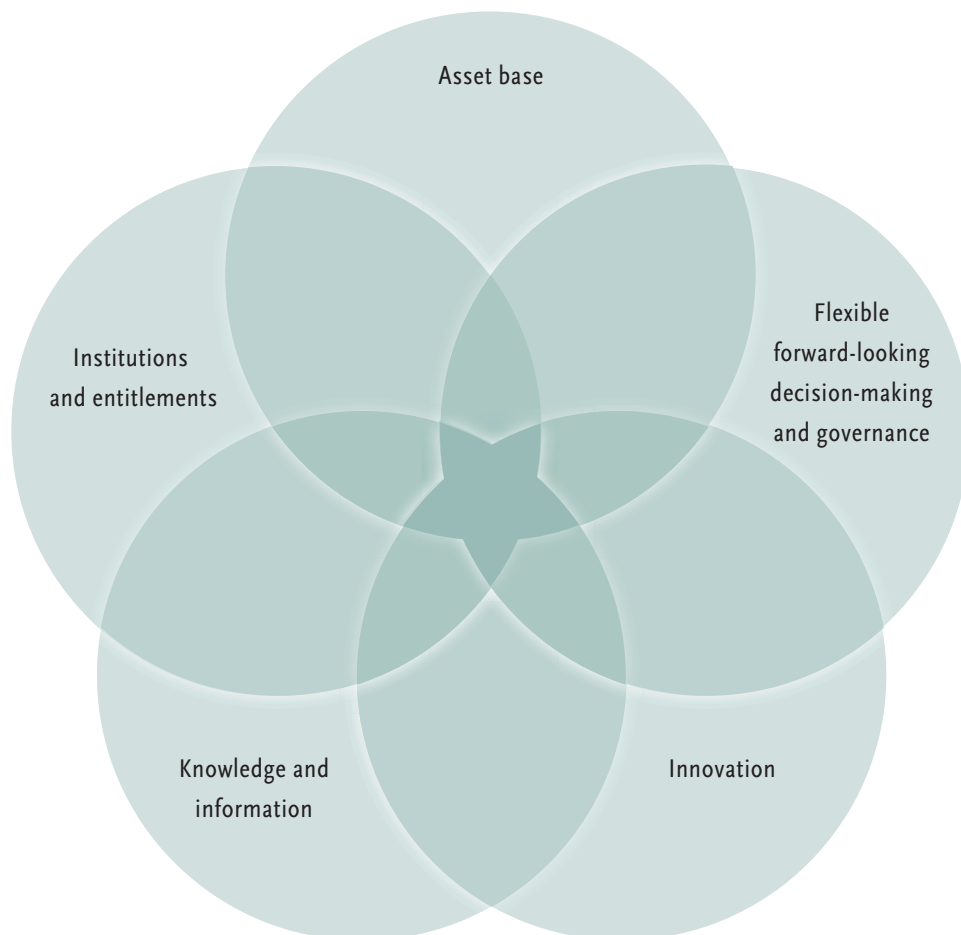
Based on the three country analyses, the feedback and experiences collected through the various case studies and literature reviews⁵ we arrived at eight key elements that together make up an approach to foster resilience. These eight key elements do not just describe *what* to do, but rather *how* to do things differently. It adds on existing ‘resilience frameworks’ in that it focuses on the process of fostering resilience, on dealing with power relations among the various DRR, CCA and PR actors that are at the root of many vulnerabilities, and takes the real-life of people as focus instead of a system-focus.

Twigg’s ‘resilience framework’ (2009) breaks the concept up into many characteristics and indicators to describe an ideal situation of resilient communities on one

4 Metaphor from the working groups, reported by Brian Ingle (Plan UK) in the plenary discussion

5 We like to mention here three specific works: John Twigg’s Characteristics of a Disaster-resilient Community, 2009; SCR’s Discussion Paper No.1, The Resilience Renaissance? Unpacking of resilience for tackling climate change and disasters, 2010; ACCRA’s Local Adaptive Capacity Framework, 2012.

Figure 2 | The ACCRA Framework for thinking about local adaptive capacity.



hand and the enabling environment on the other. It is based on the five priority actions formulated in the Hyogo Framework for Action (2005) and has an outcome-orientation. The question remains how to reach such an ideal situation in a particular context. A second resilience framework was developed by the Africa Climate Change Resilience Alliance (ACCRA) called Adaptive Capacity Framework. This framework focuses on five dimensions that it considered to contribute to the adaptive capacity (resilience) of a system in a particular context: people’s assets, institutions and entitlements, innovation, knowledge flows and flexible forward-looking decision-making and governance (figure 1). This framework approaches to look at adaptive capacity and resilience of people through a diversity of lenses or angles. A focus on ‘dimen-

sions' or 'building blocks' of resilience, hides the interconnectedness between these dimensions that need to be analyzed in order to understand how to foster resilience and reduce vulnerability. For instance, access to asset base is regulated through institutions which determine who benefits from rules, regulations, norms and decision making and who does not.

Our experiences with multiple stakeholders in Indonesia, Bolivia, Ethiopia and in Brussels particularly focused on the interactions, cooperation and disconnects among agencies and sectors, between aid NGOs, between neighboring communities and between top and bottom layers of government. The functioning of institutions, linking different knowledge and information systems, and cooperation and coordination between different stakeholders turned out to be very poor, and a desire for improved interactions clearly emerged. Yet cooperation and coordination cannot be planned in advance, but is the emergent outcome of multiple interactions, of struggles, debates and negotiations between the different actors at multiple levels. Hence our specific key point on flexibility and iterative scenario planning. Yet, the key points in this handbook deal with the *how* to achieve the characteristics of a resilient community (Twigg, 2009), *how* to analyze and engage with the five dimensions identified by ACCRA that contribute to adaptive capacities, and *how* to facilitate interaction and engagement that can be conducive to better cooperation and creation of political will.

Operational opportunities mentioned in the interviews in the three countries zoom in on the cross-cutting concept of risk which we take as our point for departure. Risk assessments and risk management tend to take a technocratic perspective with a focus on natural disasters and physical infrastructure solutions, without due attention for people's subjective, local actor experiences. Mainstreaming experience-based risk assessments in development interventions, including its monitoring and evaluation, produces a full picture what may be called the 'risk landscape' which people face. DRR has historically looked into the past and how not to repeat it, while CCA looks at the effects of climate change in the future and how to prevent that. These time scales are neither necessarily in people's cognitive framework, nor on the donor's side. Broadening the time horizon and working across scales seems to be of the essence. Although lots of information is uncertain and outcomes of action unpredictable, scenario planning and step-by-step interventions will likely increase the flexibility, relevance and appropriateness of programs and interventions towards resilience. This relates to dealing with uncertainties, which not only local people but

also operational staff and, especially donors, who demand predictability and accountability are not always used to doing.

Our approach to resilience consists of eight key points for analysis and action aimed to foster resilience, which will be further detailed in the next parts of the handbook (figure 3). The key points do not follow a specific sequence except for key point 1 which forms the foundation for the resilience 2.0 approach: people's broad risk landscape.

KEY POINT 1

Exploring and analysing people's risk landscape

To ensure that interventions will be relevant, appropriate and a priority for local people, it is important to explore and analyze people's risk landscape. 'Risk landscape' refers to the wide range of risks to which local people are exposed, like disaster risks, but also risk as a result of diseases, famine, unemployment, insecure land rights or violence. Local people impressed on us not only to identify the immediate hazard risks, but also to understand why they are exposed to these risks, referring to the underlying risk factors, and how they deal with these and survive crisis. Were our attention limited to the occurrence of disasters, we would run the risk to be blind for more urgent community concerns which render interventions irrelevant and a waste of scarce resources and energy.

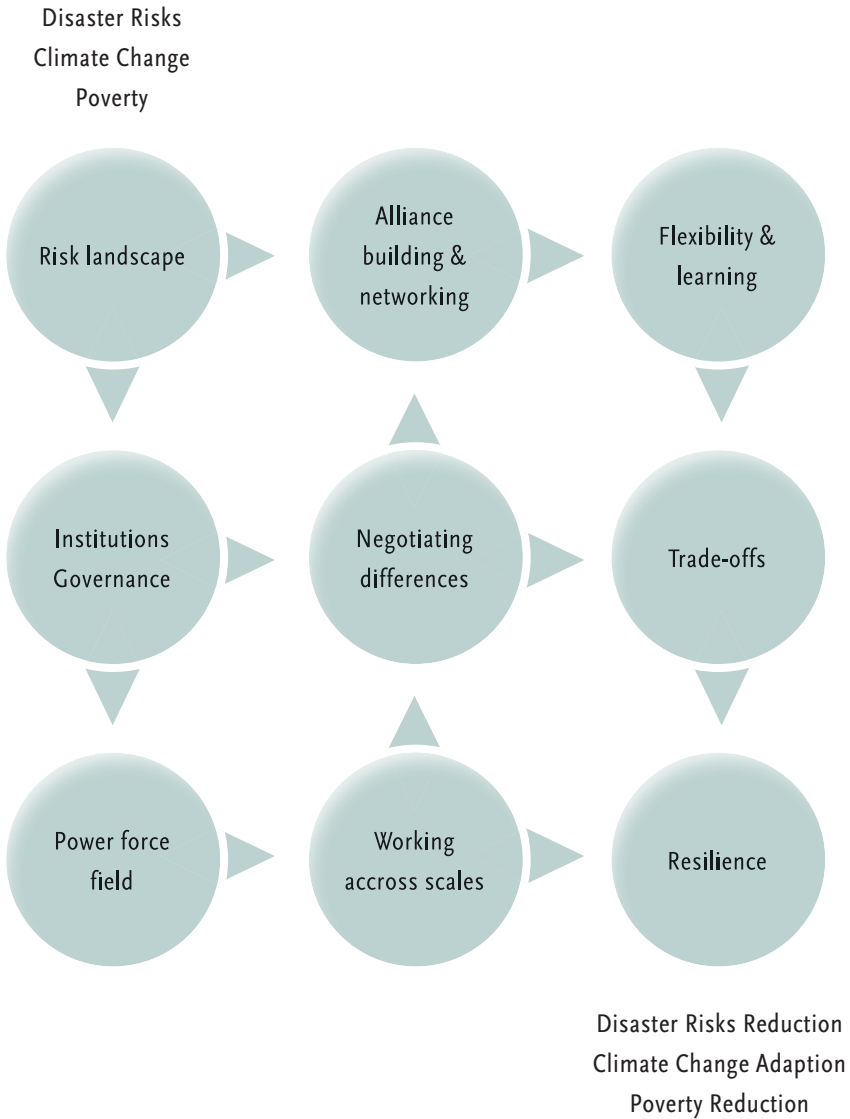
Another important reason to explore people's risk landscape is to understand the different risk perspectives between and within communities that may cause tensions between groups of people. A proper understanding of all the different perceptions and related social and political connections provides an opportunity to play a role in dialogue and negotiation between different communities and social groups.

KEY POINT 2

Exploring institutions and the governance context

At the (inter)national level, institutions, policy, plans, and funding are often disconnected from local realities and largely focus on single issues. These disconnects limit the cooperation between state and non-state actors and hamper integrated policy, action and interventions that are needed to foster resilience. With 'governance' we refer here to the diversity of institutions, actors, institutional relations and structures, and to interactive processes where local authorities (legitimate or contested), private and voluntary organizations exercise their power and/or rights to achieve favorable

Figure 3 | Resilience 2.0 approach: Key points for analysis and action to foster resilience at community level.



outcomes for, in the first place, themselves. It is important to understand these various interactive processes of governing before designing appropriate action: questions such as ‘why is there a lag or reluctance to cooperate across scales and levels?’ and ‘what are the results of these processes for local communities?’ provide clues for strategizing future action to foster resilience.

KEY POINT 3

Explore power force field and interrelationships between stakeholders

A sound analysis of the stakeholders' interests, values, position, accountability and capacity, as well as an understanding of the political spaces for interaction among stakeholders will increase the opportunities to design strategies and programmes that effectively address disconnects and barriers, and that leverage the opportunities to promote cooperation to foster resilience. This key point builds on the previous steps and will further detail the nature of the relationships between the stakeholders and the deeper features of the actors that shape the characteristics of the political arena. The analysis of power relations and positions will complement existing understanding with a more in-depth analysis of the root causes of poverty, people's vulnerability to disaster risks and social injustices related to power differentials and bad governance (CARE, 2012).

KEY POINT 4

Fostering resilience by engaging with similarly-minded stakeholders

Communities alone cannot solve all their risk problems and village authorities do not operate at the appropriate administrative level to address the underlying risk factors. Therefore local people need to engage with the broader institutional context. Horizontal linkages with other Community-Based organizations (CBOs) are instrumental for early warning, sharing the lobbying workload, portraying shared concerns and greater legitimacy as local representatives, and in settling disputes and reducing tensions between villages. Vertical connections with authorities and power-holders make it possible for local voices to be heard at district, provincial and national level, and to access national level financial resources for disaster risk reduction. Experiences show that local people should not wait for the government to create an enabling environment, but that they can actively enter or create political spaces to negotiate for safety and mitigation measures.

For supporting agencies it is important to link with similarly-minded stakeholders to coordinate specific support, to pool resources and to mobilize 'effective agency'. 'Effective agency' refers to the recognition of social action that makes a difference to pre-existing state of affairs or course of events (Long 1992). Effective agency requires organizing and mobilizing capacities, and rests on the emergence of a network of actors who become partly, though hardly ever completely, enrolled in the project of somebody else or other actors. Taking a local perspective, one looks 'upwards' and 'sideways' for room to manoeuvre in the broader institutional context where stakeholders interact with different sorts of knowledge and power (see key point 3).

KEY POINT 5

Negotiating differences between actors about agendas, values and scale

This particular key point offers clues and pointers on how communities at risk and aid practitioners can engage in the political arena and interact with stakeholders with different or even opposing agendas, values and interests. The examples from Ethiopia, Indonesia and Bolivia show convincingly the conflicting views and ineffective interventions to reduce risk rather than consensus and co-operation. These different perceptions are not cultural or accidental, but embedded in the stakeholders' social positions, while people's options are related to local institutional settings. The purpose of people's engagement and interaction with other stakeholders is to rework institutions and relationships with authorities so that they can no longer evade their responsibility to create a safe environment.

This key point discusses negotiation approaches based on the premise that local people have agency even if their space for manoeuvre is limited. In addition, interventions in the field of DRR, CCA and PR are regarded as negotiated processes, not simply the execution of a pre-conceived plan of action with expected outcomes. Through negotiation, dialogue and at times confrontational approaches, local people – with supportive civil-society organizations – could expand their opportunities to reduce their vulnerability by actively seeking connections with powerful actors as a way to have a political voice, to gain access to political resources, positions and to perform power to obtain safety and protection from the local to the national level. Fostering resilience means reworking and transforming relationships and institutions in such a way that relevant actors take on their roles and responsibilities before, during and after (climate-induced) disasters in an ever changing environment. Fostering resilience implies changing *how* we engage with other actors, rather than *what* we programme.

KEY POINT 6

Working across scales - linking village level interventions to ecosystem approach

This key point emphasizes first of all the *spatial* dimensions of climate change adaptation, disaster risk reduction and poverty reduction. When floods happen downstream and along the coast, it is strategically wise to involve communities and actors upstream in localities where the environment is degraded and to make connections through the intervention to address underlying risk factors. On the other hand, certain coping strategies also have spatial dimensions like the pastoralists in Southern Ethiopia who move with their cattle to less affected areas when they are affected by drought. Additionally, decisions about people, their interactions and space involves

politics, and therefore this key point also emphasizes again the political dimension of dealing with spatial planning, land use and environmental resource management.

KEY POINT 7

Designing and insisting on iterative, flexible interventions

Climate change results in erratic weather patterns and increasing levels of uncertainty for local populations. Traditional and current ways of dealing with climate risks fall short, also because of other social, economic and political pressures in society. The world around us is best characterized as unpredictable, made up of dynamic interconnected and interdependent systems with uncertain outcomes. Change is normal! For policy makers and aid practitioners it is challenging to accept uncertainty and unpredictability as our everyday reality, which requires reflection and adaptive planning. This implies acknowledging people's interests and agenda-setting as point of departure rather than implementing preconceived projects. Interventions will be designed step-by-step based on knowing just enough of the presence while accepting an uncertain future. Through regularly repeated action-reflection cycles and sense-making, emerging patterns will be analyzed so desired patterns can be supported and undesirable ones addressed. This way of working and relating to local people offers new ways to keep interventions relevant, appropriate and effective.

KEY POINT 8

Being aware of trade-offs

'Resilience' as a term represents good intentions and has a more positive image than 'vulnerability', but it hides the various ideologies, interests and views of different actors on how to achieve resilience as the country analyses showed. Adaptation or risk management strategies are rarely win-win, beneficial to all social groups and ecosystems, and some responses may increase the vulnerabilities of others. Therefore it is important that resilience-building interventions should be sensitive and understand how they impact on people and the environment, and avoid creating new risks or conflicts.

KEY POINT 1

Exploring and analysing people's 'risk landscape'

Why is it important?

To ensure that your intervention will be relevant, appropriate and a priority for local people, it is important to explore and analyze people's risk landscape. 'Risk landscape' refers to the wide range of risks to which local people are exposed, like disaster risks, but also risk as a result of diseases, famine, unemployment, insecure land rights or violence. Local people impressed on us we should not only identify the immediate hazard risks, but also to understand why they are exposed to these risks, referring to the underlying risk factors, and how they deal with these and survive crisis.⁶ When our attention would be limited to the occurrence of disasters we run the risk to be blind for more urgent community concerns which render interventions irrelevant and a waste of scarce resources and energy.

Another important reason to explore people's risk landscape is to understand the different risk perspectives between and within communities that may cause tensions between groups of people. A proper understanding of all the different perceptions and related social and political connections provides an opportunity to play a role in dialogue and negotiation between different communities and social groups.

⁶ During the first workshop in Kalimantan, community representatives stressed this point various times.

Action Points

ACTION POINT 1

Select communities using needs-based, geographical and strategic criteria

Selecting communities for aid programmes is always a crucial exercise for aid organisations since it involves multiple considerations and pressures to do something in a certain locality and not in another. Aid organisations need to maintain multiple relationships with various actors which put pressure on the selection process. Aid organisations need to show positive results and ‘value for money’ to donors to stay eligible for funding, and they need to prove that their efforts are legitimate by serving those most in need. These two demands are not always compatible, and in case resources are scarce, the selection tends to accommodate donor conditions. The need to profile the organisation, its broader agenda and values, personal interests of staff, accessibility and security issues are other factors that at times get priority over criteria like severity of community’s exposure to risk and its vulnerable conditions. Aid agencies tend to select communities for their programmes in so-called ‘safe areas of intervention’ with more chances for success, instead of remote areas or areas where support is most needed. Strategic reasons for selecting communities are for instance ‘areas where new risks are expected to occur’ to make communities aware of these new risks like exploration of mining sites which may deteriorate the environment causing landslides and floods in the future.

Box 1 | Neglect of remote indigenous communities in Northern Bolivia

During the first Resilience workshop in Cobija, Bolivia, representatives from indigenous communities, although a minority in the district, were very outspoken and actively claiming attention for the indigenous cause. The facilitator later explained that many NGOs do not work in remote, far away places such as those where indigenous communities are, because it is difficult, time-consuming and costly to get there. NGOs rather take the easy way out by working in communities nearby. This way, some indigenous communities are deprived of assistance.

Usually the entry-point for integrating DRR, CCA and PR are communities affected by recurrent small-scale disasters. However, selecting communities with the aim to foster resilience is not just an activity done at the start of an intervention process, but an ongoing activity. Integrating the long-term and spatial implications of climate

change and the care and restoration of the environment, requires a more strategic thinking about community selection taking a landscape or watershed approach. When floods happen downstream and along the coast, it is strategically wise to involve communities and actors upstream and to make connections through the intervention (see key point 5).

Pointers or key questions to ask when selecting communities:

1. Which area is most affected by disasters or where are losses highest?
2. In which area have people difficulty to cope and recover from the disaster?
3. Which areas receive the least assistance and are difficult to access?
4. Which area is likely to be affected in the (near) future?
5. Which areas should be explored, involved from a geographical, eco-system point of view to reduce risk in disaster-affected areas?
6. What are principles, mandate, values and interests of the aid organization?
7. Can we convince donor to select communities in remote, least served areas?
8. What is the level of community organization, willingness and readiness to engage in risk reduction within and beyond community level?

ACTION POINT 2

Take a people-centred perspective instead of involving people in a preconceived project

Local communities stressed that they want to be involved in the conceptualization of interventions that aim to improve their lives. Many people affected by disasters or crisis are seldom heard because they have little voice in the events and decisions that determine their lives. Aid practitioners do talk to affected people, but basically with the aim to collect facts and figures about immediate disaster impact and short-term needs to complete needs assessment forms, not necessarily to understand how people make sense of these recurrent events, or how they use their various resources to mitigate or overcome crisis.

It is essential that aid practitioners allow local people to tell their life stories, to listen to their concerns, to understand the difficulties and complexities, in order to ensure more relevant assistance. 'Listening to people' moreover means acting upon an understanding of people's priorities in finding structural solutions, as opposed to asking questions that match pre-conceived plans. Local people's risk perceptions steer the direction for action and shaping interventions.

Tools that can be applied are ‘story-telling’, ‘oral histories’, ‘life stories’ and ‘the coping strategy approach’ (Boås *et al*, 2006) allowing people to talk about their lives and livelihoods to understand how they make a living in adverse circumstances and what meaning they attach to events. Additionally participatory tools are essential to be conscious about how to involve people (see ALNAP and Groupe URD’s Participatory Handbook, 2009) and a literature study to better understand people’s context and history to place their stories in a broader perspective.

ACTION POINT 3

Realize that there are different definitions and operationalisations of ‘community’

The term ‘community’ has different meanings and consequently different kinds of boundaries. When initiating DRR, CCA and PR interventions, discussions start to emerge about where does the community begin or end. When asking local people what meaning they attach to ‘community’ they first view ‘community’ as a social group, as political and religious affiliations, or descendants of particular ancestors which put social boundaries. Secondly, people refer to ‘community’ as specific structures and regulations like village councils, reciprocal labour systems, rules that govern access to and management of resources like land, water and forests, setting geographically and territorial boundaries. These two views together link people and their interactions with space which set authoritative boundaries (i.e. who is accountable or responsible for something). Summarizing:

- Communities have social boundaries
- Communities have territorial boundaries through institutions and structures
- Communities have authoritative or administrative boundaries

When entering a community it is therefore crucial to understand these different conceptualizations of community and to be aware of the spatial consequences and boundaries.

ACTION POINT 4

Recognise the existence of differing risk perceptions of the same event and act as bridge-builder

Over the past ten years many handbooks have been developed about how to conduct participatory risk assessments at the local level. The handbook developed by

the Asian Disaster Preparedness Center (Abarquez and Murshed, 2004) is applied and adapted by (I)NGOs and government agencies. The handbook provides guidance on how to conduct a risk assessment with the involvement of communities. However, the book remains silent about how to act where field staff and different groups of people within the village, or between villages perceive risk differently, have a different explanation of why disasters happen and to whom, or (ab)use participatory approaches for their own agenda-setting. Risk solutions do not necessarily benefit all people in the same way.

In Khulm, Afghanistan, for example ‘floods are destructive’ for upstream villagers who invest efforts in flood protection, sandbagging, enforcement of irrigation canals, and in lobbying for flood protection measures at the side of the canal intake. Whereas ‘floods are a blessing’ for downstream farmers who rely on floods to access irrigation water during spring. It is in their interest to maintain good relations with the upstream villagers since they depend on them for drinking and irrigation water. This example shows how people perceive risk differently about the same disaster event, how risk perceptions are embedded in people’s social positions, and how people’s options are related to local institutional settings, in this case on rules of water distribution. Likewise, men and women may perceive risk differently as well and put different priorities as to what should be done to reduce risk.

Box 2 | Relevance to recognize different risk perceptions among adjacent communities – case from Kalimantan, Indonesia.

In Kalimantan, Indonesia, local (indigenous) people mentioned that the occurrence of fires is the most severe risk in their area since they negatively affect their livelihoods. They attribute the forest fires to their changing environment since the 1960s when contractors entered the area for logging purposes, but especially since the 1990s when the Mega Rice Project started, initiated by the Suharto government. Local people have lived off the forests for generations, practicing ‘slash and burn’ to cultivate land according to *adat*⁷ rituals and rules. Fires were controlled then and never resulted in vast areas burning, as was the case in 1997-1998 or 2002-2003. This changed when the national government decided to clear forests areas in Central Kalimantan to turn one million hectares of ‘unproductive’ and sparsely populated peat swamp forest into rice paddies in an effort to alleviate Indonesia’s growing food shortage. The government made a large investment in constructing

⁷ Adat refers to cultural norms, values, traditional laws and practices.

irrigation canals and removing trees. The project failed and was eventually abandoned after causing considerable damage to the environment. Due to the removal of trees and lowering of groundwater levels, peat lands turned into high-risk areas for fires, particularly during the dry season. When asking local people living in the transmigration areas, such as Lamunti village, about the fires, they regard their insecure land rights and unregistered villages as a more urgent risk than the fires. As long as these villages are not yet officially registered and recognized as a formal administrative unit, they are not formally able to raise their voice, to submit plans and to oppose policies and regulations they do not benefit from. When aid practitioners ignore the differences in risk perceptions among various villages, their interventions will not get support from all local people. Therefore they need to be sensitive to variations in risk priorities.

Instead of conducting one overall community risk assessment exercise, aid practitioners and field staff will have to navigate through the village to explore and engage with different groups of people and to not just limit their attention to the most vulnerable groups. The example below shows how a field staff explored who is who in the village.

Box 3 | Entering Sambiroto village, Pati district, Central Java, Indonesia.

Sambiroto – located down-stream along Tahu river, which runs from Muria Mountain to the sea - was selected by a local NGO because it experienced a severe and destructive flood in 2006. Floods happen regularly. The local NGO has a mandate to reduce disaster risks and to halt environmental degradation.

Agung, the field staffer, knew a person in Sambiroto who works in the fish market. Through him Agung got in touch with Elistiono, the head of the fishermen's group in the village. This fishermen's group is member of the sub-district's fishermen's group headed by Seroto. To explore the situation in Sambiroto and to introduce the NGO, Agung also contacted the village officials and the village midwife Annie. He also met with vendors in the market, religious groups, the youth and with Mohammed Matun, who is a legislative member of the district government and advisor of the fishermen's group. 75% of the total 3900 households in Sambiroto are traditional fishermen, 20% are involved in aquaculture and 5% are farmers.

Through discussions with these various actors, Agung learned that the floods in Sambiroto affect aqua-culturists, fishermen and rice-farmers. A few times the dike collapsed causing damage to rice-fields, houses and fish floated away. Aquaculturists and farmers attribute the floods to deforestation upstream, while the fishermen frame their problem as 'sedimentation' which causes the river to overflow the embankments, but more importantly, sedimentation impedes their access to the sea during low tide if they want to go fishing. Due to sedimentation they have to push their boats through the sand to the sea. This is heavy work, requiring many people and it takes hours before the boats are brought from the small 'harbour' in the river to the sea. Their fishing equipment does not allow them to fish during night or to wait for high tide to leave the harbour. They usually fish from 4:00 am to 4:00 pm. They catch shrimp and crabs, rather than big fish.

Based on an initial assessment, Agung - supported by the NGO field office - concluded that the fishermen form the most vulnerable group in the community. The basis for his conclusion is that sedimentation leads to less income for a large, marginalized group, and they are the ones in the village most neglected by government officials considering other urgent issues, like lack of enforcement of fishing zones causing intrusion of commercial fishing boats into the waters of traditional fishermen. While farmers received government's support after flooding, the fishermen did not receive anything. The relationship between the fishermen and the other sectors in the village is not so smooth.

The examples above further reveal the importance to look into the history of why disasters happen and into the underlying risk factors that may explain why different groups view disaster events differently.

The pressure-and-release (PAR) model developed by Blaikie *et al* (1994) is a helpful tool to analyze the underlying risk factors to understand the reasons for why people are vulnerable to risks stemming from disasters, climate change and poverty. The PAR model allows field staff to ask local people *why* they live in unsafe conditions, why do dynamic pressures exist, leading to the identification of the root causes of people's vulnerability (see figure 4 on page 32-33).

Figure 4 | The Pressure-and-Release (PAR) model.



UNSAFE CONDITIONS

Physical Environment

Poor self-protection

House on lowland and lacking artificial mound

-

House materials easily eroded or damaged (collapse may cause injury)

-

Land erodible

Public Actions and institutions

Poor social protection

Inadequate warning

-

Excluded from flood protection

-

No insurance scheme

-

No vaccination

Fragile Economy

Unable to replace assets which might be lost

-

Livelihood liable to disruption (e.g. no wage work on flooded fields)

Health

Poor existing health raises risks of infection

-

Waterlogging of home area increases disease vectors

DISASTER

FLOODS: HAZARD TYPES

Flash flood

-

Riverine slow-onset flood

-

Rainfall / impounded water floods

-

Tropical cyclone floods (sea surge; rainfall); see Chapter 7

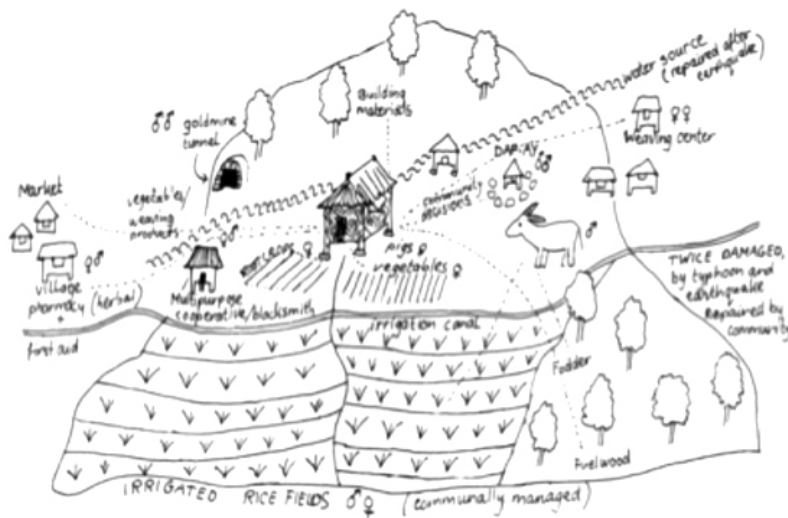
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Tsunami floods

This model links floods to diseases, migration and insecure land rights. The three country analyses of the RESILIENCE project all relate the occurrence of disasters to various forms of unclear land rights or to competing claims of natural resources. The Ethiopia country analysis concluded that risk reduction strategies go beyond saving lives and include protection of livelihoods. The risk of drought is linked to multiple underlying risk factors like the overall degradation of the environment, overgrazing, reduced land availability due to land grabbing, and economic risk due to low prices for livestock.

A natural resource analysis is suggested to be included in the risk assessment to uncover how different groups control or are excluded to access these resources like land, water, forest, animals, pastures, minerals etc. Below is an example of a gendered resource map from the Philippines indicating how men and women use and have access to resources. When looking for risk solutions, this tool helps in finding the relevant stakeholders at village level that are engaged with specific resources. In cases where different villages compete over the same resources, the resource map activity needs to be adapted to the relevant scale and kind of actors involved given the specific situation.

Figure 5 | A gendered resource map from the Cordillera, Philippines.



Tip

Before giving shape to interventions it is crucial to understand the broader risk landscape of marginalized and vulnerable communities, and understand their coping and survival strategies. Their priorities for action may be remote from the immediate experience of drought or floods.

ACTION POINT 5

Use risk maps as an instrument for dialogues and negotiation

The previous action point highlighted that various actors may frame and explain disaster events differently. 'Framing and explaining' refers to how people give meaning to events and experiences around them. The way actors 'frame and explain' disasters has implications for how they formulate priorities for responses and the kind of risk reduction measures they favour. In addition, also aid agencies and government departments have their own explanations of disaster events which may differ from how local people understand and explain disasters. This often results in debate, resistance or negotiations between different groups in the village, between villages or between the aid agencies and the community.

The following example illustrates how risk maps can serve as a tool for dialogue to smoothen or rework relationships between groups with competing risk perspectives on how to reduce risk or whom to held accountable.

Box 4 | Using risk maps as an instrument to facilitate dialogue among different actors within a village and between downstream and upstream villages to reduce floods.

Agung, an NGO field staffer, facilitated a process of participatory risk mapping in Sambiroto, Indonesia. He identified the fishermen's group as the most vulnerable group in the village, and encouraged fishermen and their wives to look critically at their environment. Priority issues were identified like sedimentation, coastal erosion, enforcement of zoning laws for fishing, garbage disposal, flooding and retribution. Then they discussed which issues they can address themselves, and which require government's response at and beyond the village level. They further distinguished between specific fishermen's problems (enforcement of zoning laws for fishing, sedimentation, retribution), and community problems (garbage disposal, flooding, coastal erosion).

Reworking relationships at village level

The fishermen planned a workshop with the village government to present the risk map and to discuss their problems, but this workshop never took place because the village authorities were not responsive. Then the fishermen presented their map at different moments to different groups in the village and as a result information was added and the analysis improved. The aqua-culturists for instance, experience negative impact from river flooding from January until March, *and* from seawater intrusion due to high waves in May. Additionally, villagers adjusted their opinion about the fishermen's group, since its efforts no longer focused on 'fish' only, but on community concerns as well. Fishermen told us that they are less regarded as 'troublemakers'. The majority agreed that flooding and garbage disposal, particularly lots of plastic and glass, are major problems that require action. The village leaders remained irresponsive however, despite media coverage about the garbage problem.

Reworking relationships between Sambiroto, a downstream village, and Jrahi, an upstream village

In 2006 there was a big flash flood along the Tayu river, causing severe damage and some deaths downstream in Sambiroto. The villagers from Jrahi went down to offer their help in clearing debris and cleaning roads, but what they got were negative comments. They were blamed for irresponsibly cutting trees and mining stones from the riverbanks causing landslides, flash floods and sedimentation downstream. Although both communities have a history of disliking each other, the people from Jrahi were dazed by these negative reactions and accusations.

The NGO has field staff working with the peasant group in Jrahi. Initially people found it either funny to talk about 'disasters' because '*there are no disasters in Jrahi*' or did not *want* to talk about disasters, despite the occurrence of landslides. 'Disaster language' was new and the field staff together with some peasant group leaders had to collect comprehensive historical and current data on changes in land use, water management and environmental conditions to convince community people and authorities about potential disaster risks and the need to address environmental degradation. The risk assessment and maps were presented, discussed, corrected, and through discussions and debates, people's awareness about the occurrence, recognition and causes of landslides and floods increased over time.

The NGO then organised a forum inviting both upland and downstream villages including Jrahi and Sambiroto. While CBO leaders from Jrahi presented their risk map and explained the condition of the forest, likewise people from Sambiroto presented the conditions of the Tayu river downstream and their impact on local livelihoods. Through recurrent meetings and discussing the underlying risk factors of floods and the unsafe conditions along the Tayu river from its source to the river mouth, the 'blaming' attitude of the fishermen in Sambiroto shifted towards an attitude of understanding and respecting the arguments of Jrahi people. Deforestation and mining could not be solely attributed to the Jrahi villagers. When people from Jrahi cleared and sold land to farmers from Tayu, near Sambiroto, for cassava production, also people from other places came to the uplands to illegally cut trees during the financial crisis at the end of the 1990s. Risk maps were instrumental in awareness raising, improving and reworking relationships among upland and downstream villages, and in creating effective agency for lobby purposes to enhance law enforcement against deforestation and mining.

An early warning system has been set up. When it rains more than two hours in Jrahi, the CBO sends text messages to the CBO in Sambiroto that flood may be expected within three hours. The warning is sent to all villagers. Fishermen, when not at sea, evacuate their boats from the parking lot and go to the sea where their boats cannot be damaged by the flash floods, while women go with children and belongings to higher places, away from the river. Formation of a network of upland and downstream villages along the major rivers running from Muria Mountain aims to have a community-based network which can negotiate and lobby government to enforce proper land use planning and environmental protection. Particularly the youth is motivated and active.

(Source: Heijmans, 2012)

Pointers

As aid practitioners one has to find a balance on several issues:

- Engage with the most vulnerable sectors, *and* with village authorities *and* with elite without biases and prejudices to make risk analysis
- Act as a bridge-builder to facilitate a risk dialogue to arrive at risk priorities, and to rework relationships between different risk groups
- Understand the nature of power relationships and connections between these groups

- Move from risk assessment (identification, characterization and quantification of risks) towards risk analysis (understanding different risk perspectives, negotiation and dialogue about risk solutions, consciousness about which risks are addressed and which ones are not).

KEY POINT 2

Exploring institutions and the governance context

Why is it important?

At the national and international level, institutions, policy, plans, and funding are often disconnected from local realities and largely focus on single issues. Governments for instance, operate through line departments each concerned with a specific issue like social welfare, health, public works, or natural resource management. NGOs are likewise structured in separate departments with a specific focus like emergency aid, disaster preparedness, development programmes or peacebuilding, and have a particular mandate or target group of beneficiaries. These disconnects limit the cooperation between state and non-state actors and hamper integrated policy, action and interventions that are needed to foster resilience. 'Governance' here refers to the diversity of institutions, actors, institutional relations and structures, and to interactive processes where local authorities (legitimate or contested), private and voluntary organizations exercise their power and/or rights to achieve favorable outcomes for, in the first place, themselves (Nuijten *et al*, 2004). It is important to understand these various interactive processes of governing before designing appropriate action: questions like 'why is there a lag or reluctance to cooperate across scales and levels?' and 'what are the results of these processes for local communities?' provide clues for strategizing future action to foster resilience.

This key point is largely based on the analytical framework we developed for the three country studies for Bolivia, Ethiopia and Indonesia. This framework helped

to find gaps and disconnects between the risks experienced at the local level and the extent to which these risks are dealt with or not, and to identify the obstacles and opportunities for effective collaboration between actors active in the fields of DRR, CCA and PR. Do governments, for instance, interpret and explain disaster risks in the same way as local communities do? If not, why not? Based on such an analysis, bottlenecks between risk identification and risk reduction strategies can be determined and opportunities for the future emphasized.

The framework for the analysis consists of four steps, namely:

1. Identifying risks and risk perception of state and non-state actors
2. Identifying existing risk policies, laws and regulations, and trends in spatial planning
3. Identifying disconnects between risks and policies
4. Identifying obstacles that should be addressed and opportunities to be seized

With each step of the framework the different stakeholders and levels of operation need to be taken into consideration. The different levels and stakeholders that can be identified are summarized in table 1.

This table could also be imagined as a cube, so that not only horizontal and vertical linkages can be visualised, but also diagonal ones, for instance between a local CSO network and a national level government agency. We further refer to CARE's guidance note on 'Towards Better Governance: Governance context Analysis & Programme Design' (2012).

Action points

ACTION POINT 1

Identify risk perceptions of state and non-state actors

Whereas key point 1 explores and identifies risks prioritized by local people, this action point investigates how other actors at the different institutional levels frame and explain disaster risks, that is how actors give meaning to events and experiences around them. The way actors frame and explain disaster risks has implications for how they formulate objectives and set priorities for their responses (see tables 2, 3 and 4). The first step is to identify who are the actors involved in DRR, CCA and PR whose actions impact on the risks experienced by local communities.

Table 1 | Levels and stakeholders to be considered in risk identification, perception and management.

Levels of operation	Stakeholders involved
Village/Community	Community members, village head, village authorities
Local/district/regional/national	Government/authorities (local, regional, national)
International	CSOs /NGOs (local, national, international) International/multi-lateral organizations Private sector (local, national, inter/transnational)

The risk perceptions of the various actors presented in the tables above have been collected through separate interviews with each actor and through interactive discussions during workshops. They were asked how they would explain the occurrence of the particular risk that was prioritized by local people (key point 1), and what are, in their view the underlying causes of the risks. The tables illustrate the divergent definitions and views of the actors and a large variety in explanations. This is not because the different actors cannot agree on a common explanation, but because they have different worldviews and intentions in mind that determine their actions and strategies. This causes, at times, misunderstanding and confusion when actors engage with each other, but also irritation. These emotional experiences refer to the existence of 'politics', to a political arena where different views, values and framings on disasters and risks interact and where actors try to convince the other of their risk explanation.

The different explanations further illustrate that the actors define risk problems at different scales: local people define and explain risk problem in terms of the impact on their livelihoods, while traders, humanitarian aid agencies or the national government define risk in terms of profit, mortality, national stability or quantity of greenhouse gas emissions. Some actors ignore history or leave out the human dimen-

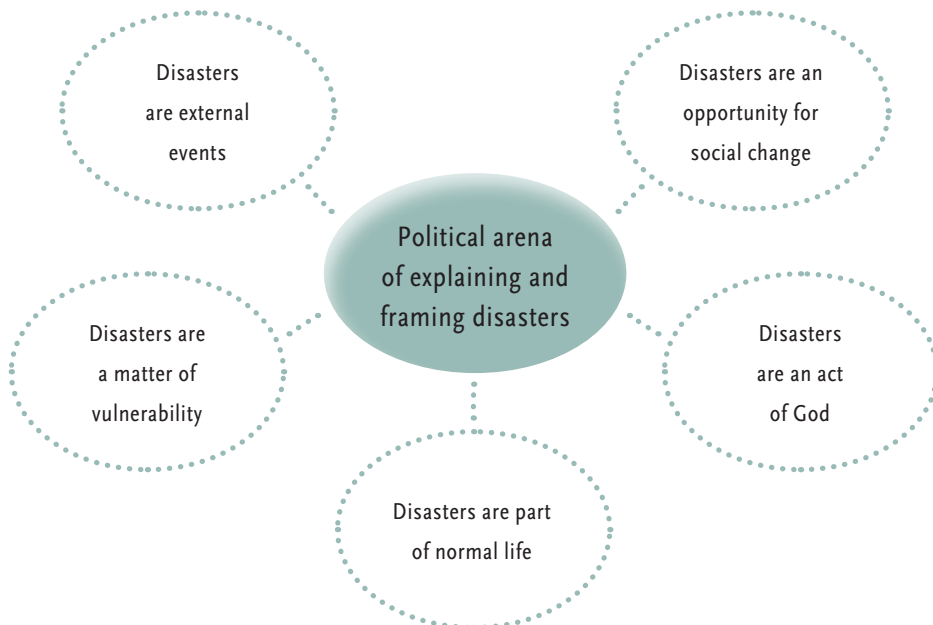


Table 2 | Differing views on forest fires and risk reduction measures in Kapuas district, Central Kalimantan, Indonesia.

Actor	Framing and explaining forest fires	Risk reduction measures
Local farmers	Fires occur due to the establishment of the Mega Rice Project. Rain forests were logged and converted into agricultural land through draining peat land. As a result the dry peat lands are prone to fire like cigarette burns and to the slash and burn practices by various stakeholders	<ul style="list-style-type: none"> • Slash and burn of 2 ha maximum while taking obligatory safety measures. • Recommend to reforest abandoned lands + improve water management.
NGOs and CSOs	Natural conservation NGOs attribute fires to 'slash and burn' practices of local people. Indigenous people NGOs share the risk perception of local people	<ul style="list-style-type: none"> • Conservation NGOs: restoring forests and peat lands + alternative livelihoods • Indigenous and environmental NGOs: recognition of Dayak institutions (a.o. land rights) and practices; enforce zero-burning
Government	District: due to drainage of peat land and clearing of land by oil palm companies Province: due to natural factors, ignorance of local people and lack of fire equipment National: due to global warming and drought	Most regulations, policies and laws are in place but lack enforcement or implementation (early warning, zero-burning, disaster risk reduction, alternative land clearing techniques, reforestation)
Private sector	They attribute forest fires to slash and burn practices of local people.	Applying alternative land clearing techniques for 'slash and burn'. They use 'slash and burn' however for plantation expansion

Table 3 | Differing views on floods and risk reduction measures in Pando, Northern Bolivia.

Actor	Framing and explaining floods	Risk reduction measures
Local people	People attribute floods to changing weather. They accept the risk of floods as the lake is an important source of livelihood. They don't find floods disturbing.	Adaptation of livelihoods, houses are elevated and canals for controlled flooding.
NGOs and CSOs	Floods occur due to deforestation upstream and across borders to make way for rangelands.	Livelihood diversification to increase income, safe drinking water and emergency health, disaster preparedness
Government	Floods are dangerous due to snakes and alligators that enter the village and can attack people.	Evacuation and resettlement

Table 4 | Differing views on drought and risk reduction measures in Borana zone, southern Ethiopia.

Actor	Framing and explaining drought	Risk reduction measures
Local pastoralists	Drought is defined as lack of grass in pastures to feed cattle, deteriorating conditions of cattle and crop failures which are attributed to shortening of rainy seasons, and higher rain intensity causing erosion washing away of grass seeds and water flowing away instead of infiltrating into soils. Only thorny species are left,	Migration with cattle to better grazing areas and communally managing water points and wells; pasture land management; solidarity and traditional social insurance; managing herd size; early warning systems; livestock diversification; diversification of income sources, and forming cooperatives
NGOs	Drought occurs due to a combination of climate change and marginalization of pastoral areas by the Federal Government, decreasing access to land and pastures, increasing population pressures and land conflicts.	Development NGOs: Land management; better land clearing techniques; privatization of land so pastoralists can farm, water points. Humanitarian NGOs: early warning systems; feeding programs for cattle; destocking of animals through supporting cooperatives and act as bridge-builder between pastoralists and traders.
Government	Drought occurs due to climate change, and is regarded as an expected and normal event in (semi) arid areas. Government refers here to regular seasonal drought cycles.	Short-term humanitarian drought responses: Livestock Emergency Guidelines and standards (LEGS); Productive Safety Net Program (PSNP); Climate Change mitigation and adaptation; National early warning system
Private sector	Drought creates large market openings: e.g. there is an opportunity to buy cattle at lower prices because of high supply of cattle, but livestock is of a lesser quality.	Instead of buying cattle from pastoralists, cattle is fattened on ranches.

sion of their risk explanation. What the variety of actors have in common however, is that most of them consider DRR and CCA as top priorities or at least as major issues without necessarily labelling them as such, while some actors prioritize non-climate related problems. All focus however, on adaptation, prevention or mitigation strategies that they embed in local or regional livelihood strategies.

Based on the information gathered, it must be possible to answer the following evaluative questions:

- Is there a consensus or mutual understanding of the risk faced (direct and indirect) and the underlying causes among the stakeholders?
- Which actors share risk perspectives, and which ones deviate? Is there a room for dialogue or mediation by getting them to speak together?
- When actors consider DRR and CCA as top priorities, why is it so difficult to put these intentions into practice? Which are the bottlenecks? This question will be explored in the next steps.

ACTION POINT 2

Identify existing risk policies, institutions, laws and regulations, and trends in spatial planning

This step aims to identify the risk reduction strategies that are in place. Analysis of the institutions, policies, laws and regulations ('rules of the game') entails gaining a sense of the overall governance set-up by undertaking a mapping of the formal and informal institutions.

Formal institutions are codified and include constitutional rules, laws, regulations and policies. They usually entail formal sanctioning mechanisms to make them effective. Informal institutions refer to family and kinship structures, traditions and social norms. They are rooted in history and culture. They are often decisive factors in shaping policy outcomes in environments of weak states and poor governance structures (CARE, 2012).

Where formal rules are poorly designed, regulations for the application of law are not developed, or laws are not fully enforced. In many contexts the distinction between formal and informal institutions is not always clear, since local authorities blend official law with customary law to settle disputes, for instance. Informal rules normally regulate how things actually happen. In many developing countries there is

a tension between formal and informal rules, very often making politics unpredictable and prone to conflict. The interaction between formal and informal institutions can be characterized in the following ways (CARE, 2012):

- **Complementary**
Informal institutions support the effectiveness of formal institutions.
- **Accommodating**
There is an acceptance of formal institutions, but informal institutions circumvent these to some degree.
- **Substituting**
Informal institutions fill in a void that is left by missing or incomplete formal institutions like informal credit markets.
- **Competing**
Informal institutions diverge from, contradict, or contravene formal institutions. For instance, formal and informal institutions concerning land ownership in Ethiopia (*kallos*) and Indonesia (*adat*) illustrate this point.

Institutions are locality specific, influenced by historical trajectories and culture. Consequently, particular institutional arrangements work in one context but fail in another (Jütting, 2003). Jütting (2003) proposes to pay considerable attention to the hierarchies in institutions at stake, and to how institutions at different levels affect each other. Table 5 presents a hierarchy of institutions and their time horizon for change.

Institutions are not static, but change and evolve continuously. The relationship between institutions and actors is mutual and dynamic. People respond to changing contexts and rules. They create, reproduce and adapt institutions, while at the same time institutions govern people's behaviour and perceptions. Institutions act as a point of reference for actors and they only become effective in everyday practice. People defend and mobilize around practices and institutions that are meaningful to them, or resist institutions and practices that convey or embody meanings they find disagreeable (Bebbington *et al*, 2004).

In the three country analyses we used the following key questions to facilitate the analysis of risk policies, laws and regulations while considering both formal and informal institutions:

Table 5 | Hierarchy of institutions and their time horizons for change (adapted from Jütting, 2003).

Level	Examples	Frequency of change	Effect
Institutions related to the social structure of society (level 1)	Traditions, social norms, values, gender norms, customs.	2 - 3 generations but may change faster in times of shocks/crisis	Defines the way a society conducts itself
Institutions related to the rules of the game (level 2)	Rules defining access to resources, property rights, judiciary system	10 - 100 years	Defines the broader institutional context
Institutions related to the players of the game (level 3)	Rules defining governance arrangements, authority, contractual relationships	1 - 10 years	Leads to the formation of organizations
Institutions related to allocation mechanisms (level 4)	Rules related to resource allocation, like social security systems, humanitarian aid,	Short-term horizon and continuous	Adjustments to prices, outputs, incentives

Box 5 | Key questions to ask when compiling risk policies, laws and regulations.

- How are risks managed at the different levels by different stakeholders? (*Think of institutions, mechanisms or regulations in place e.g. traditional regulations and practices, official laws and regulations*).
 - Which stakeholders cooperate in the field of DRR, CCA and/or PR? Are there partnerships between different stakeholders in the field of DRR, CCA and PR?
 - At all levels of government: which (if any) policies, strategies and implementation plans are in place concerning DRR and CCA? Also look into the possible integration of DRR with CCA and PR.
 - Allocation and management of funding: what levels of funding (% of GDP) are allocated to DRR, CCA and PR? To what degree are the budget funds made available in timely ways and spent as planned?
 - How do the different stakeholders view the relation of DRR, CCA and PR?
 - Is there effective control/reinforcement of risk management policies and structures at the different levels?
 - Do spatial plans exist that ensure appropriate land-use planning and protect the environment?
 - Do all stakeholders have access to relevant disaster risk and climate change/ weather information?
 - What are the views of the different stakeholders on the policies, strategies and implementation plans of the government?
 - Is there a clear understanding among all stakeholders regarding DRR responsibilities, authority and decision-making?
-

Based on the information gathered and outlined, it must be possible to answer the following, more evaluative, question:

'Are community risk management strategies understood by other stakeholders (NGOs, private sector and government)? Do they support them, or are they being undermined by regional and (inter)national policies and plans?'

These questions are derived from the framework on characteristics of a disaster-resilient community formulated by John Twigg (2009). Twigg considers consensus on different DRR, CCA, PR and resilience issues as central characteristics of resilient

communities. Consensus within the community however is difficult to achieve, let alone among different stakeholders holding different power positions. It is good to keep this in mind while following the next steps.

Box 6 | Policies that weaken local traditional risk reduction systems in Borana, Southern Ethiopia.

'Recurrent droughts have been a major issue throughout history in the Ethiopian lowlands, and strategies to cope with, and adapt to these droughts are embedded in communities' traditional social structures and resource management systems.' (AWUOR 2009).

Communities' main traditional mitigation strategies are the following:

- **Migration** with cattle to areas where pastures and water are available to sustain their herd, and to limit adverse impacts of staying too long at the same fragile place. Migration is however impeded by several factors like through the privatization and enclosure of land, and constraints for pastoralists to cross regional and international borders particularly to Kenya. Through these measures, the government aims to restrict the mobility of pastoralists and to force them to settle down and shift to a sedentary life.

- **Traditional land management** schemes for the dry season grazing areas and so-called *kallos*.

Dry season grazing areas are pastures that are not used during the wet season so as to keep them in optimal conditions for the dry season or during drought. Located near river beds and in lower areas where water accumulates, dry-season areas are among the best pastures. Being less dependent on rainfalls, grass continues to grow and can sustain herds even when there is no or very little rain. However, because they are among the best lands in Borana, dry season areas are increasingly used for agriculture or occupied for private purposes. Pastoralists are therefore progressively losing access to dry season areas, which makes them all the more vulnerable during droughts.

- **Kallos** are traditional communal grazing areas that are kept unused during non-drought years, and reserved as extra pasture or feed production for weak animals – lactating cows, calves – when difficult conditions arise. This way, weak animals are spared the long journey to better pastures that other animals of the herd experience. *Kallos* represent approximately 1/10 of the total land area surrounding communities (Hurst, 2011). However, these valuable lands are targeted by NGOs and government for settling pastoralist which causes conflicts

over natural resources and environmental degradation.

- NGOs and other development agents often fail to effectively consider the impacts of the interventions that they support on the greater rangeland and/or pastoral society: rather, they focus on the immediate area or community where their intervention is placed. As a result, some of the interventions have contributed to the long-term negative trends of land use change seen in Borana (Flintan, 2011).
-

ACTION POINT 3

Identify disconnects between risks and policies

Knowing the risks in place, the risk perception of different stakeholders and the way risk is managed gives the opportunity to identify obstacles and opportunities in the governance context of risks.

In Kalimantan, Indonesia, for instance, conflictive views exist on what causes the fires. Some point to climate change as main cause of forest fires while others blame the slash and burn practice of oil palm plantation owners and local communities. Consequently risk policies and solutions differ. Although laws and regulations exist to prevent fires in Kalimantan, these are not being enforced. Particularly the zero-burning for plantations is neglected or ignored. While conservationist NGOs blame local people for deforestation and forest fires, local communities can't be held responsible for deforestation. The latter considers the implementation of the Mega-Rice Project as the main cause of deforestation in Kapuas district. Local people have been using the forests in a responsible way since they depend on the forests during times of adversity. These opposing views obstruct their cooperation in lobbying for reforestation, which both local communities and NGOs wish to happen.

The following questions will help in identifying disconnects (box 7):

Box 7 | Key questions to identify disconnections between risks and policies.

- Where are gaps and disconnections between risks faced and risk policy and risk reduction strategies?

Between different stakeholders at the same level: do existing risks, risk perception and risk reduction strategies match?

Between different levels of stakeholders: do existing risks, risk perception and risk reduction strategies match?

- Are there disconnections between policies and the needs/demands of the local people/target groups?
 - Are legislation, regulations, policies, procedures and mechanisms in place and enforced in practice?
 - What, if any, kind of stakeholders are missing in the field of DRR, CCA and PR? Where are gaps in cooperation and information sharing?
 - Are the different stakeholders in line concerning their aims or is there conflict in the interests of different stakeholders?
-

ACTION POINT 4

Identify obstacles that should be addressed and opportunities to be seized

This step aims to identify the bottlenecks and opportunities in risk reduction that should be emphasized considering the urgency or priorities set by local people. The three country analyses show that obstacles and opportunities differ and that no blueprint exist on how and where to start. In Ethiopia for instance the space for humanitarian NGOs is limited and controlled by the government, whereas in north Bolivia, the presence of the government is almost zero. These different settings determine the kind of obstacles and opportunities. What the three countries have in common is they are signatories to the Hyogo Framework for Action (HFA).

The HFA is a ten-year plan for 2005-2015 adopted by 168 UN Member States aiming to reduce disaster losses worldwide. The HFA includes the need to anticipate changing risks due to global climate change. The HFA calls on state-actors to promote '[...] the integration of risk reduction associated with existing climate variability and future climate change into strategies for the reduction of disaster risk and adaptation to climate change' (Mitchell *et al*, 2010). As the three countries included in this research are signatories to the HFA, it could be used as a back-up framework and reference for lobby and negotiation between state- and non-state actors. It should be taken into account however that the HFA is not a legally binding agreement.

In Indonesia, for instance, the HFA facilitated the Indonesian House of People's Representatives to approve a new Disaster Management Law in July 2007, stating that the State of the Republic of Indonesia has the responsibility to protect all people of Indonesia and their entire native land against disasters, both life and livelihoods. This implies a shift from emergency relief to a pro-active approach to reducing

disaster risks. However, most government officials at the various levels do not know what this entails. The national disaster management framework still contains crucial ambiguities in terms of concepts (exact meaning of disaster management), organisational structure (National and Regional Disaster Management Body), process and procedures. These ambiguities affect regional government's adoption of the framework and its translation into regional policies and instruments. A critical issue in for instance Kapuas district is the apparent reluctance of district government to enact District Regulation on Disaster Management, to establish District Disaster Management Body, and formulate a five-year Disaster Management Plan using these legal ambiguities as primary justification. Local communities and local NGOs in Central Kalimantan, however, could make use of this ambiguity which provides room for negotiating how government from the village to district level could translate disaster risk reduction policy into practice.

An opportunity to stimulate cooperation and improve coordination between relevant actors is for instance the establishment of a Provincial Disaster Management Body (Badan Penanggulangan Bencana Daerah (BPBD)) to address the disconnection between policy and risks that people face at the village level. The BPBD has the responsibility to formulate a five-year DRR plan for the district, which is an opportunity to get the responsible departments together in creating a pro-active DRR plan and to address underlying risk factors. It is important that village representatives and other civil society organizations are involved and do not wait till the district government makes a plan. There are already sufficient regulations in place for DRR; what is lacking is the implementation and clearer roles and responsibilities of the parties involved.

Box 8 | Key questions to strategize action.

What are the most important, most acute/pressing obstacles for effective risk management (or effective integrated DRR, CCA and PR)?

- What are possible ways to remove them?
 - What are opportunities to seize for more effective risk reduction?
 - Which processes (and practices) in place are crucial for effective risk reduction?
-

Pointers

- It is essential that governance context analysis should build on local staff and partners' understanding and experience. Local staff should not be treated merely as key informants; they should lead (or at least be involved) in the design, planning and rollout of the analytical process.
- In practice the four steps described above run simultaneously when talking to the different actors. The four steps should therefore be regarded as a guide to analyse the governance context.
- Ensure that the mapping of relevant actors is done by community representatives like village heads and NGO staff in a workshop.
- The analysis of the governance context should be built to the extent possible on existing analysis and rely on a wide range of reputable sources. Important sources of information to consult as a starting point include documents produced by academics, think tanks, official governmental organizations, civil society organizations, as well as public opinion surveys, media coverage, records of parliamentary debates and independent reports.
- When written sources are limited, interviews with knowledgeable informants like researchers, academics, journalists, government and civil society representatives can be used to complement existing information. Discussion and workshops with INGO staff and partners are crucial to draw on local staff knowledge of the context and to start to build ownership of the analysis from the outset. For a well-structured, clearly written and relatively short document on secondary data analysis, see CARE's *'Tips for collecting, reviewing, and analysing secondary data'* on the Program Quality Digital Library.

The outcome of this step is an overview of risk perspectives, policies and laws, disconnects, obstacles to tackle and opportunities to be seized. With the information gathered so far, communities and aid agencies could strategize their actions to address urgent felt risks and to foster resilience.

KEY POINT 3

Analysis of power force field and relations between stakeholders

Why is it important?

A sound analysis of the stakeholders' interests, values, position, accountability and capacity, as well as an understanding of the political spaces for interaction among stakeholders will increase the opportunities to design strategies and programmes that effectively address disconnects and barriers and leverage the opportunities to promote cooperation to foster resilience. This key point builds on the previous steps and will further detail the nature of the relationships between the stakeholders and the deeper features of the actors that shape the characteristics of the political arena. The political arena refers to encounters, debates and negotiations among relevant stakeholders where different views on disasters and risks interact and where the stakeholders try to convince the other of their risk explanation and solutions (see key point 2). The analysis of power relations and positions will complement existing understanding with a more in-depth analysis of the root causes of poverty, people's vulnerability to disaster risks and social injustices related to power differentials and bad governance (CARE, 2012).

In this section the following action points will be discussed:

- Knowing all relevant actors before acting from local to (inter)national level.
- Analysis of governance spaces and room for manoeuvre to demand safety and protection.
- Place your own organization in the political arena of DRR, CCA and PR.
- Design strategies for action and programming.

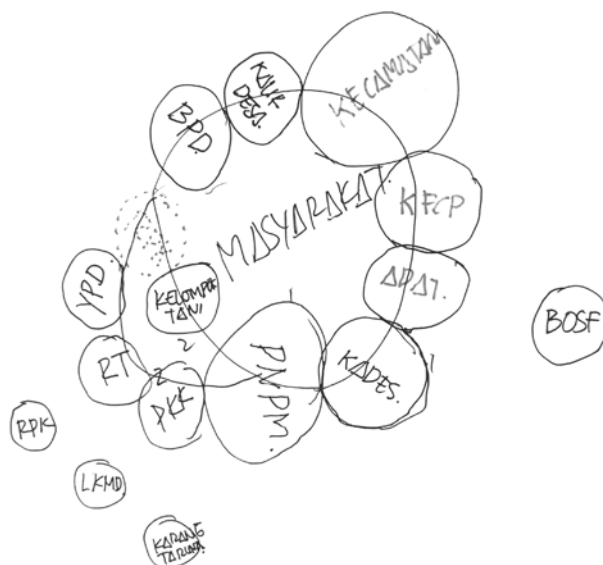
Action points

ACTION POINT 1

Knowing all relevant actors before acting from local to (inter)national level

In key points 1 and 2 the relevant stakeholders in DRR, CCA and PR were identified as well as their risk perceptions and which risk reduction measures and policies they favor or say they do. This step analyzes each actor's motives that shape governance outcomes, promote or hinder pro poor reforms and influence decisions around policies, programmes and budgets concerning DRR, CCA and PR. This analysis aims to uncover what stakeholders really want and do in practice.

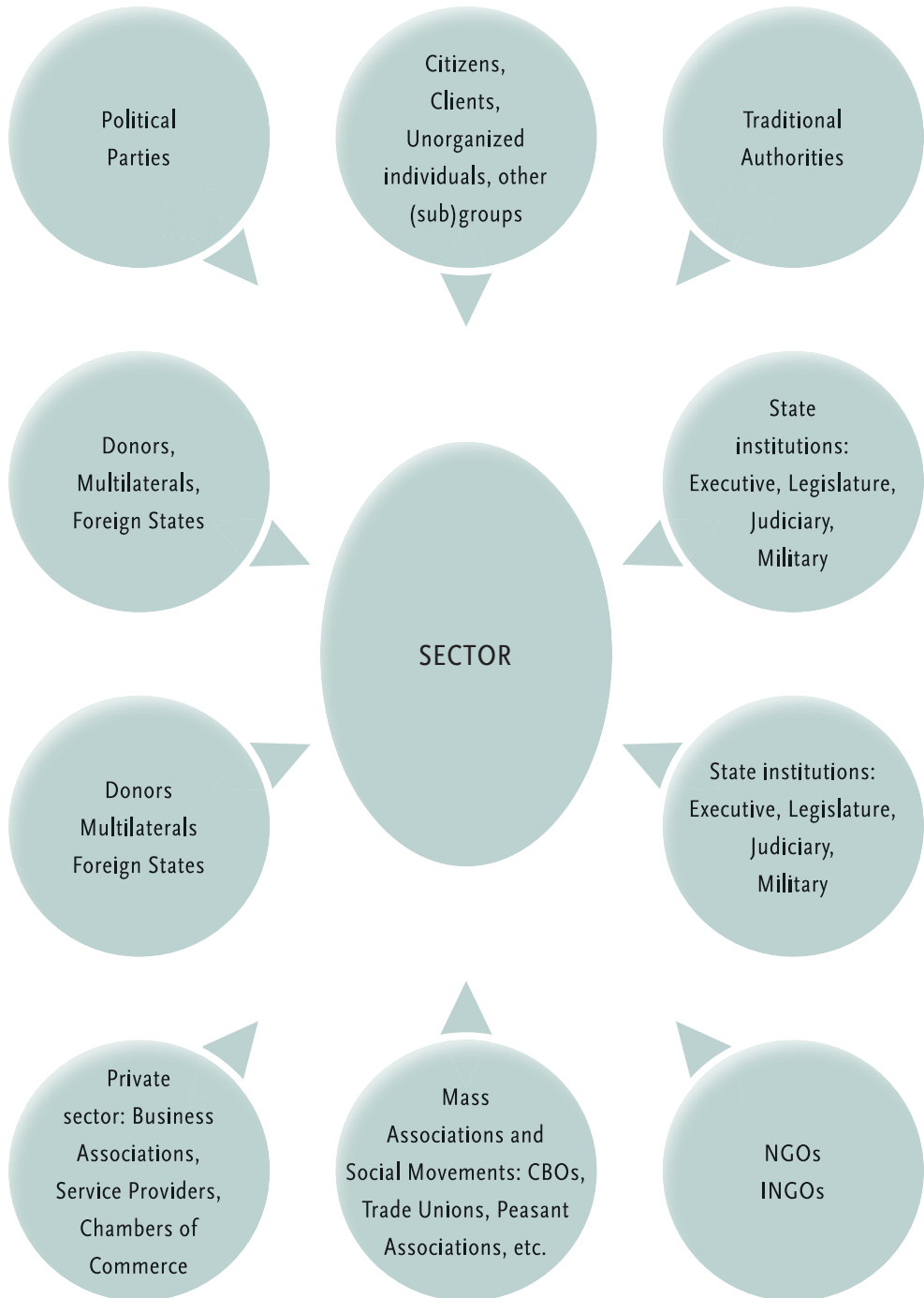
Figure 6 | Stakeholder mapping for a specific sector.



The picture of figure 6 was taken in a village in Central Kalimantan, Indonesia, where community people mapped the relevant stakeholders and visualized their relationship with these stakeholders in terms of closeness and cooperation using the Venn diagram tool.

Such maps can also be drawn focusing on provincial and national actors that are relevant for a specific sector, DRR, CCA and/or PR (see figure 7 | Stakeholder mapping).

Figure 7 | Stakeholder mapping.



The following box (box 9) provides a series of questions to be asked about each actor in order to further analyze stakeholders' interests. It may not be necessary to ask all questions in every context for all actors since it is time-consuming, especially in contexts where many actors operate.

Box 9 | Questions for analysing stakeholder interests.

Role, mandate and responsibilities

What are the official and unofficial roles/mandates and responsibilities? What is the balance between central/local authorities in provision of services?

Interests pursued

What is the actor's short and long-term agenda? Which mix of formal and informal objectives is the actor pursuing? What is the mix between pro poor objectives and objectives linked to power struggles and individual positioning?

Power and resources for influencing agendas

What power and resources does the actor utilize? Which part is formal, which part is informal? Is the formal power undermined by the counteracting informal power of other actors? What is the balance of power across the organization? Are there pockets of resistance and support? What are values of key individuals (prominent and less visible) and their effect on the support or resistance of others to policy? To what degree is power vested in certain individuals or quarters? How do different interest groups outside the government (e.g. private sector, NGOs, media, religious groups etc.) seek to influence policy?

Key linkages

To whom is the actor connected – who knows whom? Which connections and alliances does the actor have? (i.e. State institutions, customary or traditional authorities, political parties, leaders & socio-political organizations, Donors, INGOs & Foreign interests, academia, research institutes & think tanks, the media, the private sector, and movements - NGOs and CBOs, etc.)?

Incentives

How are the sector civil servants' pay and overall employment conditions? Is a performance culture generally present? Which positive and negative incentives does the actor have to maintain or change his/her governance behaviour? What reward

(benefits) and sanctions (losses) would the actor get for maintaining or enhancing the sector governance? What constraints would the actor face for pursuing or resisting change (i.e. Career progression opportunities; Level and distribution of remuneration, etc.)? Who are the main groups that benefit or are excluded from the incentive system?

Capacities

How well is the actor organized, resourced and able to deliver adequate services, especially to poor and excluded citizens? Do front-line service providers have the means and relevant autonomy to deliver?

Accountability

How open is the actor to sharing information? Is there any formal transparency mechanism in place to share timely and accessible information? Are resources flows and management transparent? To what extent and to whom is the actor accountable for its operation? Are there any formal accountability mechanisms to check performances, abuse of power, corruption, etc.? Does civil society engage in the monitoring of this actor?

Responsiveness

How far is the actor responsive to poor and marginalized citizens' needs and rights? Is there a broad tradition for formal and informal consultation? To what extent are citizens involved in the decision-making processes (decisions about policies, programmes and funds allocation)? Is there any formal or informal mechanism for consultation or participation? How far are service users involved in the planning, provision and evaluation of service provision?

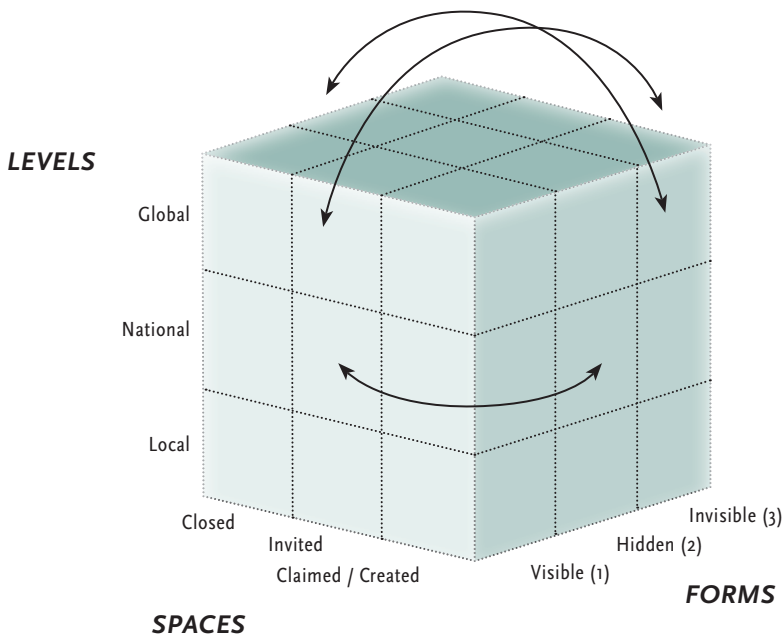
(Source: CARE, 2012. *Towards better governance – Governance Context Analysis and Programme Design*. A Guidance Note, pp. 21-22)

The questions in this table investigate power relations between stakeholders and what forms of power they use. Very often, power is perceived as a 'property' that persons or groups can 'possess', and which can be 'enlarged', as suggested by the notion of 'empowerment'. This 'property notion' of power ignores the fundamental fact that power is always 'relational'. Power has to be constantly performed rather than being achieved (Foucault, 1980). Foucault defined power as a set of relations which are dispersed throughout society – in family relations, within an institution,

or an administration – rather than being located within particular institutions of the state or government. Instead of seeing power as oppression – curtailing freedom and constraining individuals – he views power as constructing a set of relations which tend to position people in ways which make the political system work. ‘Soft power’ (power of persuasion and attraction, Nye, 1990) can be performed to reach consensus, or to enrol others in mobilizing concerted action to accomplish more than people can do individually. In principle, all actors are capable of effecting change through negotiation, innovation or experimenting, even if their social space to manoeuvre is restricted. Actors perform different forms of power or encounter in the political arena.

A tool to analyse power relations and how power is performed during interactions between stakeholders is the power cube, see figure 8 (Gaventa, 2006). This tool is increasingly used by humanitarian and development agencies to strategize action and interventions while being conscious about constraints and power dynamics.

Figure 8 | The ‘power cube’: the levels, spaces and forms of power (Gaventa, 2006).



1. *Visible and publicly performed power*

This form of power refers to visible manifestations of power like observable decision-making, procedures of decision making about resource allocation, involving the 'who, how, and what' of policymaking and interventions. However, power in relation to space and place also works to put boundaries on participation, to exclude certain actors or views from entering the arenas for participation (Gaventa, 2006: 29). This form of power is also referred to as strategizing, which can be observed in the many daily interactions between people and groups aimed to influence the action of others.

2. *Hidden power: setting the political agenda*

The construction of power relations takes place through institutions like policies, laws, regulations which regulate people's behaviour. They refer to 'the rules of the game' as well as to 'the players of the game'. Certain powerful actors and institutions have authority and maintain their influence by controlling who gets to the decision-table and what gets on the agenda, and are found from local to global level to exclude or devalue the concerns and representation of less powerful groups. Empowering advocacy strategies that focus on strengthening organisations and movements of the poor can build the collective power of numbers and new leadership to influence the way the political agenda is shaped and increase the visibility and legitimacy of their issues, voice and demands. (Gaventa, 2006)

3. *Invisible power: shaping meaning and what is acceptable*

Power operates, amongst others, through discursive means which relate to the actors' value perspective, worldview, identity and meaning given to issues. This form of power shapes people's beliefs, sense of self and acceptance of the status quo. 'Processes of socialization, culture and ideology perpetuate exclusion and inequality by defining what is normal, acceptable and safe' (Gaventa, 2006, 29). It refers to hierarchical, antagonistic power relations in which the subordinated persons or groups have little room for manoeuvre. Discursive means can also be deployed to mobilize and organize 'effective agency'. For instance, 'social arrangements that are ordinarily perceived as just and immutable must come to seem unjust and mutable' (Snow, 2004: 383). Different actors struggle to secure support for their definition of reality. An example are the different risk perspectives that each actor has (key point 2, action point 1) in the political arena they all try to get support for *their* risk solution.



These various forms of power are closely linked and cannot be isolated from each other. Going back to the notion of ‘political arena’ where various actors debate, negotiate and struggle to further their interests, these various forms of power should be considered and related to the broader institutional context.

Box 10 | Using various forms of power by government and civil society organisations to negotiate for sustainable livelihoods in disaster-affected areas in the Philippines.

This example describes how local communities gained a political voice through local institutions linked to the broader political context up to *Malacañang*, the Office of the President. Communities organized themselves in an alliance called UGNAYAN. Its aim was to demand land and livelihood support from the Government after they lost their farms due to mud flows from Mount Pinatubo. The Philippine Government however, was very reluctant to comply with the demands of Pinatubo survivors, because of lack of resources and due to vested interests of business.

In 1992, one year after Mt Pinatubo erupted, grassroots communities still experienced on-going mud flows from the slopes of the volcano triggered by recurrent typhoons. Lahar flows – at times covering land and houses up to 5 meters or higher – destroyed properties and took lives. Urban residents, wage labourers, and a large number of displaced peasants, formed UGNAYAN-Pampanga, an alliance of People’s Organisations to lobby for resettlement for all mudflow-affected families living in evacuation centres without land or any source of livelihood. UGNAYAN later ex-

panded to include POs from other provinces as well creating a region-wide survivors' association whose membership has different political levels. In 1995 UGNAYAN was ready to openly address vulnerability issues as landlessness, poverty, unemployment and the government's Central Luzon Development Plan which aimed for land conversion favouring the private sector. UGNAYAN got the support from humanitarian NGOs, human rights groups, and local media to mobilize more evacuees, to create favourable public opinion and influence policy makers from the local and national government. They were able to cultivate idle land within Clark Airbase, one of the former US military bases until 1999, while negotiating with the Department of Agrarian Reform for land titles. Until 2011, the Philippine Government has not rewarded UGNAYAN's demand. Instead, People's Organisations (POs), alone or in groups, were able to access idle lands of big landowners in their respective municipalities, took the risk to cultivate abandoned mud-covered land, or tried to adopt alternative livelihood options. It remains a big challenge for civil society to change this unjust system in favour of landless peasants and displaced families.

In this example the different forms of power are used in the interaction between the different stakeholders. Visible and publicly performed power refers to the kind of interventions that government and civil society implement. Government prioritized infrastructural works like dikes to stop the mudflows and the construction of evacuation centres for survivors. It didn't recognize the livelihood needs of the affected population but spent its resources to protect towns and industries.

More hidden forms of power are performed through institutions like landownership policies which favour big landowners over disaster-affected peasants and labourers. On the other hand, civil society created institutional arrangements beyond community level, both horizontally and vertically, facilitated collective action raising grass-roots voices, and claimed entry-points to political arenas from local to the national level for addressing the causes of their vulnerability, although with varying success. In the context of the Philippines with very polarized civil society-state relations, these institutional mechanisms to generate collective action, or active citizenship, function as parallel governance challenging the central government in Manila. Humanitarian NGOs expressed their ambivalent opinion on how to relate with the government. On the one hand they blame the government for the continuing vulnerabilities experienced by the people. The Philippine frames disasters as external events that are beyond their control. It uses its limited financial resources as an excuse for not responding adequately to the needs of affected people. Civil society

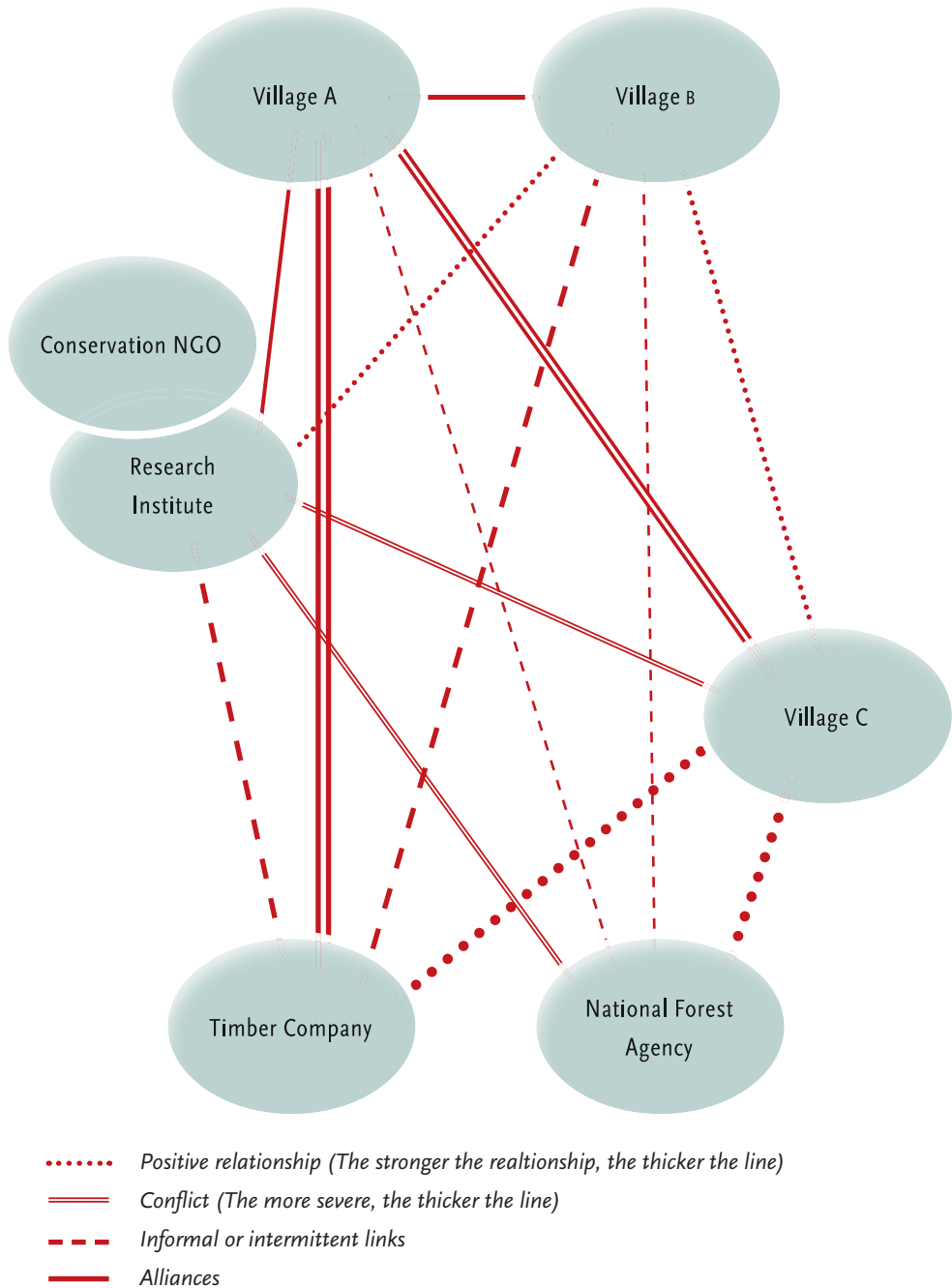
on the other hand, frames disasters as political events for which the government can be held responsible. It criticized some agencies for graft and corruption like the Mount Pinatubo Commission, and condemned the military harassments of PO leaders and NGO staff. These repressive forms of power limit people's room for manoeuvre. Humanitarian NGOs get invited to national, provincial or municipality consultations. Every time it is a dilemma for them whether or not to attend such meetings where government plans are discussed, NGOs are afraid to be co-opted. In many instances, the Department of Social Welfare and Development included the NGO-served communities in its compliance reports claiming these to be served by the government. These invisible forms of power-plays are difficult to alter.

The power (im)balances and relations between the various actors can be visualized by drawing the different stakeholders on a map and to mark the different types of relationships between them (see Figure 10). The analysis of the stakeholders' interests and how they perform their power while interacting with others results in an understanding of the interrelationships between actors. To summarize this analysis the following questions can be asked:

- Who supports communities at risk and who neglects or ignores local people's problems;
- Who supports the agenda of climate change, disaster risk reduction, and poverty reduction and who has no interest in investing resources in these issues;
- Who can potentially be opposed to the initiatives to foster DRR, PR, CCA because these initiatives could hinder their economical or political interests?
- How is power distributed among institutions including the military, legislature, judiciary, public enterprises, the mass media, civil and uncivil society and religious organizations? And what are the policy consequences?
- Where are key alliances or conflicts between influential institutions and actors?

The answers to these questions could be visualized in figure 9.

Figure 9 | Stakeholder mapping and nature of relationships.



(Source: Castro, A.P. and A. Engel, 2007, Negotiation and mediation techniques for natural resource management, case studies and lessons learned. FAO)

Box 11 | Power differentials in Kalimantan, Indonesia.

In the Indonesian context, we observed power differentials within communities, between different government departments, between the private sector and some communities, and between government and communities among others. While the government provides concessions to palm oil plantations, land rights for transmigrating villages remain undefined. Further different regulations on slash and burn exist depending on who is in charge to set the rules.

After making a power force field analysis communities and aid agencies can use the results to strategize their action such as defining an advocacy approach, or identify the organization to engage with. See also action point 3.d.

ACTION POINT 2

Analysis of governance spaces and room for manoeuvre to demand safety and protection

This action point focuses on the assessment of the spaces and levels for interactions between actors using Gaventa's Power Cube as a tool (previous page). The spaces dimension of the cube refers to the potential arenas for participation and action, including what we call closed, invited and claimed spaces. The levels dimension of the cube refers to the differing layers of decision-making and authority held on a vertical scale, including the local, district, national and global. How and where are decisions de facto taken? Who decides whose risks are prioritized and which risk reduction measures will be implemented?

The way governments manage disaster risk, respond to and explain disasters and extreme weather events, influences their interaction and relationship with its citizens. Governments may see disasters as a window of opportunity for social and spatial reordering which can have both positive and negative consequences for the most vulnerable. Governments that lack the capacity or will to respond adequately tend to resort to brute force and repression, or rely on (I)NGOs, UN agencies and private organizations that provide public services, like in Haiti and Afghanistan.

The objective of this action point is to assess how inclusive the DRR-CCA-PR arena is in order to ascertain whether or not a culture exists of formal and informal consultations between the various actors, and to map out existing spaces.

A non-exhaustive set of guiding questions is set out below:

- Is there a culture of openness and engagement between state and non-state actors in the area of DRR, CCA and PR? Is civil society sporadically consulted in ad hoc processes or is civil society formally invited to take part in government decision-making processes in an institutionalized manner? At what levels?
- Are there mechanisms, fora, or spaces to ensure that citizens voices are heard and their demands addressed? What type of spaces are there (formal, informal, claimed, invited, created)?
- Are formal spaces for participation actually accessible to all citizens? Who participates in them, and who is excluded from such spaces? What types of decisions are taken in these spaces? Are decisions then implemented and enforced?
- Are there mechanisms for social monitoring and accountability in place in the sectors? Do parliaments and councils function? Is there an independent body where one can file complaints?
- Is there freedom of expression and space for civil society to claim and fight for their rights and battles outside the institutionalized processes? Is a more challenging and confrontational culture accepted by authorities responsible for DRR, CCA and PR? In Ethiopia for instance, freedom of expression and room for NGO support to drought-affected populations is very limited and constantly monitored by authorities.

It is crucial to be *selective* and really focus on essential information to generate a *concise overview*. The outcome of the analysis of participation in political spaces and levels is crucial to assess what are the spaces and levels for negotiations and dialogues, or do they need to be created? Action points 3.a. and 3.b. form the basis to design strategies for action and programming.

ACTION POINT 3

Place your own organization in the political arena of DRR, CCA and PR

Each organization has a specific mandate or a mission and aims to implement programmes accordingly which not necessarily matches with new developments and changes in the field. Organizations with a predominant 'development' agenda may hesitate to take on disaster management activities. Organizational set-ups often separate development work from disaster risk reduction which they consider to be part of short-term humanitarian aid assistance.

This compartmentalization is a state of mind: it allows us to see disciplines in isolation from each other rather than in relation to each other. This is typical of organizations structured like machine bureaucracies, whose logic requires categories or 'boxes' to function. Not only European and national agencies but also NGOs and large enterprises can work this way. The logic has been adopted by organizations in order to access funds and organize their accountability system; it is a way of getting things funded and accountable. As a result, it can easily incite project workers to look 'upward' to please funders, rather than 'downward' or 'sideward' to optimize links with the realities on the ground. Of course people working in said 'bureaucracies' are not ignorant of the problems of compartmentalization. They themselves need to be increasingly resilient: donors and NGOs will need to adapt to a changing political climate: they themselves are faced with budget cuts and a declining popular as well as financial support base for aid.

Yet, a conceptual change seems vital as the reality on the ground is more integrated and holistic. Adhering to separate domains can lead to counterproductive interventions and duplication of efforts. Sending different teams to the field, each working separately either on DRR, on CCA or on PR projects, without linking with each other is:

- very confusing for local communities who live in multi-risk environments and are simultaneously impacted by interrelated shocks (key point 1);
- not very efficient for organizations who multiply efforts by working in the same area, towards the same goal, but with different conceptual backgrounds, approaches and sources of funding;
- masking some of the real issues: Whereas climate change is increasingly regarded as an uncontested fact, many actors see the interdependence between mounting vulnerability of poor people, environmental degradation, urbanization and the occurrence of disasters as a credible hypothesis while others still lack evidence to support this idea.

In order to become conscious about one's own organization role and position in the political arena of DRR, CCA and PR, the following questions could be answered:

- What are the organizations' priorities to work in the country, or area? Which themes do you work on? Do they match with the changing local realities?
- The experience of CARE Indonesia with its SLUICES programme revealed that the project didn't match with changing local realities. The programme aimed to reform the Mega Rice project through reforestation, and the promotion of rubber

and agricultural activities. It didn't pay attention to the palm oil sector which expanded into the area and changed the power relations between the various actors.

- With whom do you maintain good working relations, and with whom is the relationship tense or cumbersome?
- What are the operational strengths and opportunities?
- What are the operational limitations and threats?
- What 'walls' are there between departments, and between policy people and practitioners that need breaking down?
- Be explicit to whom you are accountable at donor *and* community level while taking a community perspective.

Based on this organisational assessment, choices can be made regarding with whom to build partnerships, which relations require attention for improvement, or which entry-points get priority.

ACTION POINT 4

Design strategies for action and programming

A governance context analysis can produce an overwhelming amount of information, difficult to process, digest and eventually put to good use for the design of effective programmes (CARE, 2012). It can be challenging to make sense of all the information collected and answer the 'so what' question. In order to translate the analytical findings into operational recommendations, it is crucial to capture implications of analysis for programming, and organize relevant information in a way that shows links to programmes.

This step proposes a series of guiding questions to start exploring what to do (areas of work), at what level (local to national) and with whom (actors we want to partner with):

- What are the underlying challenges at the most profound level regarding DRR, CCA and PR governance?
- How do these underlying challenges influence specific aspects of DRR, CCA and PR governance? Look into levels of corruption, specific interests, human rights violations, law enforcement, economic trends, etc.
- What local incentives, opportunities or pressures for reform and positive change exist? This question focuses on the entry points and the opportunities to support

pro poor reform and transformative change (see also key point 2, action point 4). This exercise should go beyond the analysis of individual reform champions (analysis of actors) and look at more medium and long term factors. These may be related to institutions and rules of the games (e.g. growing middle class pressure for action on corruption, business demanding for a better regulatory environment to face increasing international and regional competition, social mobilization around right of access to information, etc.).

- Who do we need to work with? And how? (see previous action point)
Once the priorities and objectives have been determined, we need to choose with whom to work. In order to answer this question, we should take into consideration:
 - Which actors are most strategic and which ones are most accessible? Is there a trade-off between being more strategic and being more accessible?
 - Who are the key individuals? How influential are they? To what extent do their perceptions, ideologies correspond with your organizations objectives? Who do they (claim to) represent?
 - Are there unconventional or previously unidentified groups and partners? How legitimate are these groups? Are they politically and culturally acceptable? Is it feasible to work with these groups? Are they accessible?

At the end of this section, adding the information gathered in the key points 1 and 2, you should have a first idea of which areas you could work at, at what level and with whom. This level of analysis can inform the more targeted sector and theme level analysis.

For any given issue or action, there is no single strategy or entry point. Much depends on navigating the intersection of the relationships, which in turn can either contribute to new misalignments and distortions of power, or simultaneously creates new boundaries of possibility for strategic action (Gaventa, 2006). For instance, linking local – national – global campaigns to open up previously closed spaces may be important, but in so doing, they may re-enforce forms of hidden and invisible power, if they simultaneously exclude certain potential actors or forms of knowledge. On the other hand, the opening of previously closed local spaces can contribute to new mobilizations and conscientisation, which may have the potential to open other spaces more widely, and to create momentum for change at national or global levels.

KEY POINT 4

Fostering resilience by engaging with similarly minded stakeholders

Why is it important?

Communities alone cannot solve all their risk problems and village authorities do not operate at the appropriate administrative level to address the underlying risk factors. Therefore local people need to engage with the broader institutional context. Horizontal linkages with other Community-Based Organizations (CBOs) are instrumental for early warning, sharing the lobbying workload, portraying shared concerns and greater legitimacy as local representatives, and it supports in settling disputes and reducing tensions between neighbouring villages. Vertical connections with authorities and power-holders make it possible for local voices to be heard at district, provincial and national level, and to access national level financial resources for disaster risk reduction. Experiences show that local people should not have to wait for the government to create an enabling environment, but that they can actively enter or create political spaces to negotiate for safety and mitigation measures. In specific cases, however, it can be quite difficult to secure livelihoods or to protect people against processes of mounting vulnerability because of laws favouring economic interests of the private sector, or because the government is absent or passive in a certain area.

In Bolivia, Ecominga – a spin-off of the local university - trains community leaders into 'ecoleaders' who speak up on behalf of their communities to the local authorities on community 'eco-friendly development' and environmental health.

Consequently, communities and supporting agencies need to engage with different actors at various levels: with both similarly-minded actors *and* with actors competing agendas, values and views. The latter will be the focus of next key point, while this key point deals with engaging with similarly-minded stakeholders to coordinate specific support, to share resources and to mobilize ‘effective agency’. ‘Effective agency’ refers to the ability to convince others, to influence, change or transform conditions, state of affairs or course of events into favourable ones. Effective agency requires organizing and mobilizing capacities, and rests on the emergence of a network of actors who become partly, though hardly ever completely, enrolled in the project of somebody else or other actors. Taking a local perspective, one looks ‘upward’ and ‘sideward’ for room to manoeuvre in the broader institutional context where stakeholders interact with different sorts of knowledge and power (see also key point 3).

Action points

ACTION POINT 1

Cooperation between actors who share common interest with community agenda

Based on the analysis of the governance context and power relations (key point 3), it becomes clear which actors share a common interest with (part of) the community’s agenda. It has been said before that there is no fixed entry-point. The following points can serve as possible entry-points depending on local people’s priorities and capacity of supporting organizations.

A. Awareness-raising about existing laws, regulations, policies and plans

This action point can be done after the conduct of a risk assessment with the community. A thorough analysis with the help of the pressure-release model (figure 4) generates information about the underlying risk factors to understand the reasons why people are vulnerable to risks stemming from disasters, climate change and poverty. Root causes often refer to policies and laws that are not implemented or enforced by certain stakeholders resulting in vulnerable conditions locally.

The pressure-release model helps in finding the nature of policies and laws to look for. These are not necessarily Disaster Management policies, but more likely laws and regulations concerning land rights, watershed management, spatial planning and participation in decision-making around competing claims of natural resources

(democratization and decentralization policies) as we learned from the three country analyses. By converting the pressure-model into positive statements to address the pressures (release model) the relevant policies, laws and regulations that need to change or to be re-enforced will pop-up. Key point 2 (action point 2) *Identify existing risk policies, institutions, laws and regulations, and trends in spatial planning* serves as a basis to enable supporting agencies to conduct this step.

Box 12 | Policies and regulations affecting resilience of remote communities like in Pando, Northern Bolivia.

The department of Pando in northern Bolivia consists of sparsely populated low-land tropical rainforest. Apart from a few remote indigenous settlements, the area became populated since early 1920s, when rubber became a profitable product to exploit. When that market started to collapse in the 1990s, large company owners left while many of the migrants who had come to work in Pando preferred to stay and live the easy and quiet life in the forest without too much government interference. Subsistence farming and brazil nut production became important sources of livelihood.

Over the last decade, Pando increasingly experiences flooding as a result of cross-border deforestation to establish cattle ranges (mainly in Brazil), opening of roads, exploitation of minerals and in-migration due to favourable tax policies for settlers and traders to populate the area. The landscape is changing from rainforest into grasslands. The NGOs discussed the institutional context, particularly those policies and practices that can be viewed as drivers for deforestation causing flooding. Since government influence is very limited in this remote department, civil society organizations aim to focus on policies and regulations that allow private sector to use the forest without consent of local people. Secondly, CSOs intend to engage with the national government to negotiate for a tri-national level risk reduction agreement (Bolivia, Peru and Brazil).

(Source: Bolivia Country Analysis)

Box 13 | Awareness raising about village autonomy under new decentralization and democratization laws in Indonesia.

Indonesian NGOs can play a role in socialising village authorities and village parliaments about their room for manoeuvre provided by the new democratization and decentralization regulations initiated after the fall of Suharto. Villages have more rights than currently assumed, and can seize opportunities in forwarding their interests and priority issues regarding DRR, CCA and PR. Under the new decentralization regulations, village authorities have the autonomy to formulate village development plans according to their interest and can submit their budget to higher administrative levels, instead of waiting for plans coming from the sub-district level. Not many village authorities know about this or feel confident to do this.

(Source: Antlöv, 2003)

B. Create community-networks and alliances for lobby and advocacy purposes

As stated earlier, communities can not address the underlying risk factors on their own, and the country analyses revealed that adjacent communities experience often similar risks, such as flooding, forest fires or drought. During the interviews, villagers expressed that they often feel powerless and marginalized in dealing with government policies and how these are implemented. In Kapuas district, Kalimantan, local people are often blamed for starting the fires while they cannot be held fully responsible for them due to underlying constraints that justify their slash-and-burn practice. They articulated that they possess local knowledge that should be tapped in finding risk solutions but which are not recognized by outsiders. Experiences elsewhere in Indonesia demonstrate that villagers can become a legitimate actor in the political arena of DRR to negotiate with government when they operate through community-networks or alliance with civil society organizations (Heijmans, 2012). Mobilizing and organizing local communities in seeking horizontal support and engagement with other communities and citizens can be an effective strategy to address their priority risks, to address environmental issues and their livelihoods.

Box 14 | Creating community-networks and alliances with civil society organizations.

The different NGOs that implement programmes in Central Kalimantan, and in Kapuas have different mandates and views, but they all offer opportunities for local communities for joint lobbying efforts and alliance building:

- Local people, together with Borneo Orangutan Survival Foundation (BOS) and World Wildlife Fund (WWF) – two environmental organisations – could try to find common grounds for action by bringing together differing interests like people’s livelihood needs and climate change adaptation issues. Together they could explore options to promote reforestation on abandoned lands to reduce fires and greenhouse gas emissions. They may start with mapping the areas of abandoned land as a tool for debate, negotiation and lobby.
- With the *Adat Community Alliance in the Archipelago* (AMAN) and the *Dayak Panarung Institute* (LPD) – two indigenous people’s organizations – local people could engage with government agencies to clarify land rights and boundaries.
- WALHI, an environmental forum, has a CBDRR agenda and can support local people in lobbying fire prevention and environmental issues like water management, canal blocking, and regarding resources for constructing deep wells.

Instead of integrated programming, as was previously done through two CARE-Indonesia programmes, it may be more effective to create tactical and strategic alliances between civil-society organizations and local representatives to engage with government officials and the private sector. This approach recognizes people’s interests and agenda-setting better than preconceived projects, and requires an iterative approach to formulate interventions (step-by-step) and implement aid programmes.

The strategies and options for networking and alliance building depend very much on the local context of state-civil society relationships like explored in key point 3 as well as whether or not there is a presence of a (strong) civil society. In Ethiopia, for instance, government controls and limits CSO operations to respond to drought, and therefore alternative options are explored like engagement with local traders.

C. Establish vertical and horizontal linkages across scales to improve early warning systems

Local people whom we interviewed in Indonesia, Bolivia and Ethiopia developed mechanisms and precautions for disaster risks, but not all rely on a reliable early warning system to timely take measures (see box 15). While the pastoralists in Ethiopia have developed traditional early warning and mitigation strategies, the indigenous Dayak people in Kalimantan have not: forest fires only started to occur in their area since the 1990s when the Suharto government initiated the Mega Rice Project near their villages as part of its transmigration policy and to alleviate Indonesia's growing food shortage. The project did not succeed and was eventually abandoned after causing considerable damage, particularly to the peat land ecosystems. Fires particularly start on idle abandoned lands far away from the residential areas of the Dayak, and therefore difficult to spot. The hotspots are only visible through remote sensing or satellite images used by the Conservation of Natural Resources Body (KSDA) and the Provincial Meteorological Institute.

In the case of the fires in Kapuas district, Kalimantan, Indonesia, the early warning systems – vertically and horizontally – are disconnected hampering timely preparedness measures. There are two early warning systems that matter for this region: (1) The weather forecast and interpretations to assess dry and wet seasons, which involves the Meteorological, Climatic and Geologic Institute (BMKG); and (2) Early warning for identifying 'fire hotspots' which is the responsibility of Conservation of Natural Resources Body (KSDA). These two warning systems are not linked, but operate through separate institutions which convey their information to specific actors locally. In Central Kalimantan there are only five automatic weather stations, of which one is situated in Kapuas district. The information collected by the weather stations, however, doesn't reach the villages because of defective equipment and absence of an early warning system up to village level. On the other hand, local knowledge and interpretations of villagers about changing weather patterns is not taken seriously by authorities, (I)NGOs or donors.

The North Oceanographic and Atmospheric Administration (NOAA) satellite system is working slowly since it cannot produce real-time images. Often there is false alarm too. Satellite information is being communicated to the provincial Meteorological, Climatic and Geologic Institute, to local fire brigades (Manggala Agni) of particularly oil palm companies, but not to local NGOs or local communities. There is no early warning system among villages when fires spread from one village to another.

In such circumstances, it is crucial to connect the different early warning systems and to make sense of the different kinds of knowledge systems: blending local indigenous knowledge with scientific knowledge. This can be realised in combination with the next action point: using the Hyogo Framework for Action as a back-up to encourage government to implement its policy, particularly to clarify roles and responsibilities of the relevant departments and between the state and civil society organizations including communities.

Box 15 | From early warning systems for drought and relief to strengthening adaptive capacity of pastoralists.

In Borana, southern Ethiopia, traditional early warning systems become less reliable due to climate change in the sense that pastoralists experience increasing frequency of droughts. Climate change adds another layer of complexity to existing development challenges, such as promotion of sedentary livelihoods by government and NGOs resulting in decreasing access to grazing areas, diminishing access to water points, and land degradation, among others. A national early warning system exists but climate change information does not reach the local levels. 'The most common problem with climate information systems is that users' needs are not taken into account in the generation and delivery of information and technologies', according to a participant of the 5th National Conference on Pastoral Development in Ethiopia in 2010. Instead of investing in an improvement of early warning systems, pastoralists prioritize commercial destocking as one of the best solutions to their problems facing drought.

Commercial destocking is a livelihood relief intervention which is currently implemented during the alert/alarm phase of drought cycle management for a definite period of time using the indicators of the traditional early warning system (table #). The primary objectives of implementing commercial destocking are: (1) to reduce the sensitivity of pastoralists to food insecurity through providing cash that they can spend to buy food items and to fulfill other needs and strengthen their well-being; and (2) building adaptive capacity and resilience of the livestock based livelihood system through re-investing on livestock related activities such as purchase of feed and concentrate, transport livestock to other grazing areas, and veterinary drugs, and to enhance their resilience capacity through protecting their assets (Country analysis Ethiopia, annex 3, 2011).

The Ethiopian case stresses the need to shift from short-term relief and preparedness interventions towards investing in adaptive capacity of livelihood systems. In order to achieve these objectives, cooperation between government, NGOs, the private sector and communities should be enhanced in terms of creating an enabling environment to make commercial destocking a viable adaptation strategy. This is much more complicated than the current humanitarian strategies applied by NGOs and government separately. Therefore the following action points are crucial.

D. Encourage governments to implement HFA at local levels

It is important to create ‘institutional homes’ for sustainable DRR, CCA and PR by encouraging governments to implement HFA at the local level, and by finding a balance between government supply and community demands.

In Kalimantan, Indonesia, the establishment of a District Disaster Management Body (BPBD) in Kapuas district can be a crucial step forward in this context. NGOs like CARE Indonesia could play a facilitating role in bringing the relevant actors together, and to get support from the provincial level Disaster Management Body in initiating negotiations. The BPBD has the responsibility to formulate a five-year DRR plan for the district, which is an opportunity to get the responsible departments together in creating a pro-active DRR plan and to address underlying risk factors. It is important that village representatives and other civil society organizations are involved and do not wait till the district government made a plan. There are already sufficient regulations in place for DRR; what is lacking is the implementation and clearer roles and responsibilities of the parties involved.

In the study areas in northern Bolivia and southern Ethiopia, the government is hardly present, and local people prioritize to address the underlying risk factors that cause a mounting vulnerability to climate change. Reducing the underlying risk factors is one of the priority actions in the HFA (action point 4 of the HFA). It promotes strategies which deal with institutional reform, like improving communication channels, land-use planning, access to safety nets, or are physical in nature. Unfortunately, ongoing monitoring of the HFA’s progress reveals that action point 4 has seen the least progress.

As explained in key point 2 (action point 1) local people may well explain the underlying risk factors that lead to disasters differently than state actors. The UNISDR definition of risk does mention people’s vulnerable conditions, but the ‘why’ remains unmentioned. The Living with Risk document explains that the reason why especially poor people

Table 6 | Examples of early warning signals at community level.

Forest fires in Kalimantan, Indonesia	Drought in Borana, Ethiopia	Flooding in Pando, Bolivia
<p>Rainy season kept off; no other details since most fires start on idle abandoned lands</p>	<ul style="list-style-type: none">• Complete rain failure, i.e. below average of two consecutive rainy seasons• Non-seasonal changes in market activities• Body condition of livestock worsens• Increase in cereal price• Unseasonal migrations and uncommon migration routes	<ul style="list-style-type: none">• Water level in Tahuamana river rises and fills the lake bordering the village• Listening to the radio to learn how much it rains in Peru

are worst affected by disasters, 'is because the poor outnumber the rich and live in greater density in more poorly built housing on land most at risk' (UNISDR, 2004, p. xi). This implies that HFA views vulnerability in terms of numbers, poverty, and physical exposure to hazard events, not in terms of marginalized or excluded segments of society. The HFA leaves existing power relations unchallenged, while addressing underlying risk factors require a transformation or re-ordering of power relations. How to deal and rework power relations will be subject of key point 5.

An important pointer is to look for similarly-minded staff within government departments who can facilitate relationship building and dialogue. Or invite government staff to workshops and seminars to discuss and exchange ideas about supporting communities at risk.

ACTION POINT 2

Collaboration with the private sector

Increasingly, civil-society actors and the private sector cooperate in the field of fair trade and socially responsible entrepreneurship to ensure that production or mineral extraction is sustainable and environmentally sound. Additionally, initiatives are taken to support private sector action in climate compatible development, for instance through stimulating investments in renewable energy, energy efficiency and low carbon projects (Whitley, Amin and Mohanty, 2012). However, cooperation in the field of DRR and CCA is still limited since civil society and the private sector do not share the same interests. The country analyses illustrate this point. In Borana, Ethiopia, pastoralists engage with traders to sell their cattle but don't get a good price, while in Kalimantan the relationship between local communities and oil palm companies is quite tense due to conflicts over land. These two examples show that the notion of the 'private sector' is ambiguous. The private sector comprises large multinational companies as well as local entrepreneurs or farmers who are considered community members rather than representatives of the private sector like e.g. local cooperatives that are part of people's livelihoods or in a negative sense, small-scale miners and contractors whose activities degrade the environment. In this action point we encourage you to look whether shared interests exist, to both foster resilience for local communities and to consider the interests of the private sector instead of assuming that only conflicting interests exist.

A. Explore whether common interests exist between local communities and private sector

The study on commercial destocking in Ethiopia offers opportunities to better match the interests of pastoralists with those of local traders, provided that civil society and government support are appropriate. Pastoralists aim for a good price for their cattle while traders look for cattle with a good body condition. This requires a view among relevant stakeholders (especially of the government and NGOs) that commercial destocking is not a relief intervention but that it is integrated with normal livestock marketing. In a joint workshop where different actors were present to discuss commercial destocking the following recommendations were formulated to narrow and match interests:

- Widen and strengthen the livestock marketing through improving the body condition of animals, veterinary services, and marketing structure
- Parallel to this, it is quite important to create more awareness among the community to sale part of their livestock before affected by drought and lose weight
- Incentive and adequate motivation for traders (domestic and export markets) and marketing cooperative who engaged in commercial destocking
- Providing livestock holding grounds close to terminal markets and at local level
- Promote the establishment of feed processing plants in Borana zone (feed price reduces) this facilitate commercial destocking and save the life of livestock during times of drought
- Establishing livestock feed reserve
- Facilitating bank loans
- Providing transportation facilities for traders on cost recovery bases

These recommendations demands careful planning and quick action, strong linkages, trust and commitment among the stakeholders.

B. In case of multi-national companies, take a bird's-eye perspective first

While pastoralists and local traders in Ethiopia may have different interests, the efforts to match them require negotiations at the local level looking upward into the trade chain. In case of multi-national companies this may not be applicable since they enter countries through (inter)national level actors. Oil palm plantations in Indonesia, for instance, operate through incentives for national government provided by the IMF and World Bank. Oil palm plantations bring economic benefits and livelihood opportunities, but also face a lot of negative criticisms from both non-state and state actors for unsustainable practices and unwillingness to consult local

interests. One of the most important negative impact associated with oil palm production in Kalimantan is the increase in greenhouse gas emissions due to deforestation and land conversion. Other criticisms relate to land tenure conflicts, increased risk for fire due to deforestation, loss of water retention capacity of soils (especially peat), loss of biodiversity under mono-culture, and weak enforcement of regulations meant to prevent these negative effects. Consequently, the oil palm industry is associated with corruption and illegal practices.

There are some indicators that the private sector and government departments take these critics seriously. The government and the oil palm industry espouse the intention to shift towards more sustainable palm oil production. This intention is embodied in the Round Table for Sustainable Palm Oil (www.rspo.org).

However, 'sustainability' as framed here has a different meaning: viewing palm oil as a sustainable alternative to fossil fuels. 'Sustainability' has only scant connection to sustainable land use practices locally. Another recent development is that the Indonesian President has stated that any further expansion of plantations should take place on degraded land and not on forest or peat land as part of the national REDD strategy. 'Degraded land' is however still an ill-defined concept and open to various interpretations. However, engaging with the private sector at national levels to get an understanding of changing positions, recent intentions and perspectives could be an entry-point to private sector involvement in re-thinking their practices locally.

ACTION POINT 3

Collaboration with media – newspapers, radio, community film, social media – can be a powerful means to exposing community issues to the general public, to encourage debate, and to gain public support. The three country analyses did not consider the media as potential relevant actors but they can play a supportive role.

The Indonesian government, for instance, has increasingly become sensitive to negative reporting about its role in DRR and on lack in law enforcement. Local communities and civil society organizations look for media that are willing to support their cause, for instance, to report incidents of uncontrolled fires and flooding caused by inappropriate land use. Government also use their media to promote their agendas, but local people should become more aware about existing laws and regulations that actually back-up their position and views (key point 2, action point 2). The strategy of using media will hold the government accountable to perform its duties, and to allocate national level resources for DRR to local levels.

Box 16 | Using social media in DRR, CCA and PR.

Sequential flooding in Metro Manila, the Philippines, has demonstrated the capacity of social media sites such as Twitter, Facebook and blogging to make a real impact in disaster relief efforts. Affected populations communicated directly with government for support. Tweets of encouragement, the postings asking for information on loved ones, and the immediate eyewitness accounts and photographs spreading across the world all herald a new age of social connectivity in the face of disaster.

Social media have not yet proven the potential to report and encourage debate about what causes disaster risk, and to mobilize similarly-minded actors to take action in the field of DRR, CCA and PR like in conflict contexts or in demanding democratic rights. Social media offers opportunities to further develop 'citizens journalism' to complement traditional media.

Pointers

- Look for similarly-minded staff and individuals within government departments and the private sector who are interested and willing to support the community agenda. These individuals can act as bridge-builders between relevant actors later on. For instance people within the government who were NGO workers before and familiar how to engage with civil society actors.
- Invite similarly minded stakeholders to workshops, seminars or other activities to build meaningful relationships
- Meanwhile, combine interventions that aim to achieve safe conditions for the short term at village level like contingency planning, preparedness measures, with linking local emergency response to DRR and securing/protecting livelihoods. Combining short-term interventions with addressing underlying long-term risk factors is crucial for maintaining people's motivation and energy to invest their time and resources in activities that do not immediately result in concrete benefits.
- Debate, negotiate, create or adapt village regulations to reduce people's risks that are within the responsibility and ability of village authorities.

KEY POINT 5

Negotiating differences between actors about agendas, values and scale

Why is it important?

Reducing disaster losses, implementing effective responses to climate change and meeting the Millennium Development Goals are aims that can only be accomplished if they are undertaken in an integrated and coordinated manner; addressing each of these issues independently may be redundant or even conflicting (Schipper and Pelling, 2006). The lack of integration can be largely attributed to the lack of interaction among the different stakeholders and disciplines, and to a lack of political will to address the underlying risk factors. Progress monitoring of the Hyogo Framework for Action and evaluations of risk reduction measures on the ground show that a huge gap exists between policy and the way development projects and interventions evolve in practice.

This particular key point offers ideas on how communities at risk and aid practitioners can engage in the political arena and interact with stakeholders with different or even opposing agendas, values and interests. The examples from Ethiopia, Indonesia and Bolivia convincingly show the conflicting views and ineffective interventions to reduce risk rather than consensus and co-operation. These different perceptions are not cultural or accidental, but embedded in the stakeholders' social positions, while people's options are related to local institutional settings. The purpose of people's engagement and interaction with other stakeholders is to rework institutions and relationships with authorities so they no longer evade their responsibility

to create a safe environment. This implies changing prevailing norms, values and 'frames of realities' that legitimated previous institutional arrangements and relationships. This change process refers to processes of empowerment: to strategies and options that arise from the local institutional context, and where local people expand relationships outside their own social networks, using their organizational, motivational and political resources to create effective agency and to change oppositional relationships.

With Gaventa's power cube in mind (see key point 3), this key point offers ideas for strategies and tactics on how to deal with closed or limited political spaces where citizens are excluded from the decision-making process about who gets what, where, when and how. Or when they are invited to the decision-making table how to negotiate effectively to ensure that policy and regulations to reduce people's vulnerability to disasters and climate change get implemented. Further it is important that people's traditional institutions and knowledge are considered during the negotiation process and not undermined by new proposed risk solutions. The negotiation approaches discussed in this key point are based on the premise that local people have agency even if their space for manoeuvre is limited. In addition, interventions in the field of DRR, CCA and PR are regarded as negotiated processes, not simply the execution of an already-specified plan of action with expected outcomes (Long and van der Ploeg, 1989). We want to emphasize that entering the political arena of DRR, CCA and PR through negotiation processes is not without its problems and does not necessarily offer *the* solution. Negotiation involves conflict, unproductive consensus or fruitful competition (Leeuwis, 2000).

Through negotiation, dialogue and at times confrontational approaches, local people – with supportive civil society organizations – could expand their opportunities to reduce their vulnerability by actively seeking connections with powerful actors as a way to have a political voice, to gain access to political resources, positions and to perform power to obtain safety and protection from the local to the national level. Fostering resilience means reworking and transforming relationships and institutions in such a way that relevant actors take on their roles and responsibilities before, during and after (climate induced) disasters in an ever changing environment. Fostering resilience implies changing *how* we programme, rather than *what* we programme. The actions points below set out possibilities to deal with conflicting perceptions and unwillingness of actors to take the other actors' viewpoints and interests seriously.

Action points

ACTION POINT 1

Overcoming oppositional relations among people within and between communities

Key point 1 (action point 4) already indicated how risk assessments and risk maps could be used as an instrument to start dialogues between different and competing groups within and between communities. This action point, however, highlights the role of field staff or facilitators in situations where relationships among people within villages can be regarded as oppositional and antagonistic. We refer here to situations where people fear the other, where intimidation, harassment and even physical coercion occur as a form of ‘hard power’, as in the case of Bungu, Indonesia (box 17). In such situations where different groups are not on speaking terms, alternative strategies are needed to build relationships, trust and to create favorable conditions to start dialogue and negotiations. One has to look for creative ways to circumvent sensitive issues by talking and mobilizing the various actors around issues that do not immediately challenge power differentials, positions and interests.

Box 17 | Dialogues between farmers, miners and village authorities in Bungu, Jepara district, Indonesia.

Bungu is situated on the slopes of Muria Mountain, where, like in surrounding villages, the practice of illegally mining stones for road construction has taken place since 2002. Most villagers are afraid to openly oppose or even talk about illegal mining despite the negative consequences of their immediate environment and livelihoods. They are intimidated by the miners who threatened them, beat them and even destroyed paddy fields. In Bungu, there are two farmers’ groups who are not very active, because village officials control and suppress farmers so they do not oppose illegal mining. The two groups do not cooperate causing fragmentation among villagers. The social relations are not harmonious. Village authorities deny that disasters occur in their area or downstream. The village head however, a woman, is willing to openly discuss the mining threats with the NGO field staff since she herself is marginalized by the male village officials and not taken seriously. She expects that the NGO will support her, and the villagers, in opposing the illegal miners.

The NGO field staff insisted on getting permission to work in the village from the village officials to not raise suspicion, and he explained to them that the NGO

promotes sustainable agriculture. The permission was given. The government has agriculture programmes but these are not implemented in Bungu because the district officials do not reach Bungu. Farmers do not gain access to seeds and inputs and information, because the village authorities set other priorities. The community organiser fills this gap, and used agriculture as a mobilizing topic to enhance interaction between village officials, district government officials and farmers' groups. He lives and moves from one sub-village to another (Bungu consists of 12 sub-villages) to avoid that he will be associated with one faction of the village officials. Instead of talking about illegal mining, he focused the discussion on water issues, farming practices, and food security issues, topics which were non-threatening and had the potential to re-activate the two farmers groups and encourage interaction with village officials. In these discussions the NGO field staff did not totally avoid DRR issues when he asked about immediate daily problems like water supply. He asked, for instance, what was the situation in Bungu before, and how is the situation now? And then people discussed the reasons for changes. The NGO assumed that the issue of illegal mining would be raised once confidence and trust had been built among the farmer groups. Secondly, this approach aimed to increase the commitment of government to support people's livelihoods in Bungu.

His strategy worked. He established good relationships with the village head, the village administrator, the village water manager, and with the leader from one farmer group. Together they produced a risk map with about 20 illegal mining points within the village borders. In July 2010, they discussed this map with all members of the farmers group while using 'food security' as main theme. The community organiser assumed they could make a plan on how to discuss the risk map with village authorities supportive to illegal mining. However, he noticed that landslides and mining are still not regarded as threats, and that people keep silent about mining. In September 2010 he organised a community exchange visit to Tempur, an upland community badly affected by flash floods in February 2006, where villagers, particularly the youth group, initiated community forest management practices to reduce landslides. There, the Bungu representatives dared to speak about illegal mining in their village. 'Mining brings benefits for the miners, but has negative effects on our irrigation system – eroding canals and drying up of water sources – and big trucks damage the tarmac road' according to the village water manager. In October 2010, this small group of village officials organised a village dialogue, and invited six miners and the farmers group from Bungu as well as the sub-district governor. During the dialogue, the sub-district governor declared the closure of all mining sites in Bungu. The media reported about the mining closure, while farmers

constructed a steel road blockade to prevent trucks to enter Bungu. The illegal miners, backed by powerful authorities in the district and province, did not give up, but through the process illegal mining is now openly questioned by the majority of the villagers. This is a major outcome in terms of reworked relationships.

The community organizer consciously built relationships with all crucial actors in a non-threatening way by focusing on food security and people's livelihoods. It took him nine months before the farmers and village head dared to speak about illegal mining practices and to publicly confront the miners during a dialogue. The community organizer manoeuvred between the different groups to maintain his legitimacy. (Source: Heijmans, 2012)

An important lesson drawn from this case is that instead of targeting, searching and working with the most vulnerable groups – as often espoused in development and DRR policy – field staff and aid practitioners need to engage with the vulnerable groups, *and* with village elite, *and* with village authorities and understand the social and political relationships between them. In fact field staff needs to adhere to the principle of 'impartiality' (for more details see box 18).

Box 18 | The meaning of 'impartiality' in the field of DRR, CCA and PR.

'Impartiality' has various meanings. In the field of humanitarian aid 'impartiality' means that response should be guided by human practical *needs* alone, rather than political or any other criteria (Leader, 2000). This implies that aid providers do not interfere in a conflict but provide assistance to those people most in need. In the field of peace building 'impartiality' refers to the performance of a mediator or peace builder in order to build trust. It is found crucial that all parties feel fully respected as equal human beings, and that one group does not receive more attention than another (Patfoort, 2001: 462). In the context of the DRR, CCA and PR, the interventions aim to respond to people's needs before, during and after disasters, to reduce the underlying risk factors *and* tensions. In this context we suggest a politically sensitive meaning of 'impartiality': the ability of field staff to bring opposing actors together without having personal prejudices or preconceptions about the actors, in order to reach a comprehensive understanding of the actors' needs (Vaux, 2001: 5). This means understanding the actors' needs within their full social and political context, and seeing the connections and power relationships between

them. 'Impartiality means distinguishing one actor from the next, and being aware that many people have an interest in the vulnerability of others' (Vaux, 2001: 20). The community organisers in Sambiroto and Bungu, for instance, focused on connections and interests of the various actors, and carefully managed to bring opposing groups together, on speaking terms, without explicitly taking a preconceived position.

ACTION POINT 2

Overcoming differences between communities, government agencies and the private sector

It depends on the local context which strategy or tactic may work or not. The idea is that contacts, alliances and networks established (key point 4) are used as support and back-up when engaging with actors that have different agendas or are not willing to cooperate. Building on elements of negotiation literature, a number of tasks, listed below, have been identified by Van Meegeren and Leeuwis (1999) in order to facilitate integrative negotiations. 'Integrative negotiations' refer to interactive processes where stakeholders develop new (and often wider) problem definitions and perceptions on the basis of a creative collective learning process, resulting in the identification of so-called 'win-win' solutions.

Task 1: Preparation – this is what have been done through key points 1, 2 and 3

- Explorative analysis of conflicts, problems, relations and practices, taking a historical perspective.
- Identify the relevant stakeholders to be involved.
- Secure participation of stakeholders.
- Establish relations with the wider (policy) environment.

Task 2: Agree upon a process design and process protocol

- Create an agreed-upon code of conduct and process protocol.
- Reaching agreement about procedures, approaches etc.
- Process management and maintenance of process agreements.
- Securing new process agreements as the process unfolds.

Task 3: Joint exploration and situation analysis⁸

- Exchanging perspectives, interests and goals.
- Analyzing problems and interrelations from different perspectives (see box 19).
- Integration of visions into new problem definition (see box 20 and 21).
- Preliminary identification of alternative solutions and win-win strategies.
- Identification of gaps in knowledge and insights.

Box 19 | Joint exploration and situation analysis in Ethiopia.

In one of the multi-stakeholder workshops in Ethiopia everybody complained about the issue of livestock mortality during drought. They all pointed at each other until the facilitator created a turning point in the workshop when everybody realized they were all part of the same puzzle. Each actor is responsible for a small part of the problem. From this moment the workshop turned around and became constructive, looking all forward on how to take responsibility of their part of the problem.

Box 20 | Integration of visions into new problem definition – reframing risk problems in Central Java, Indonesia.

A local NGO initially engaged with local peasant organisations representing small and middle-class farmers in the district and with village leaders to formulate local level disaster management legislation. Landless labourers' views were not represented through Farmers Groups despite their vulnerable position. This subgroup could not get access to village institutions and resources. The NGO's multi-stakeholder approach involved stakeholders who are either responsible for relief and risk reduction efforts like local government, or those who visibly suffer from the floods like peasants. Groups like landless labourers and migrants were ignored. The NGO staff affiliated themselves with the peasants who framed their risk as 'crop failure due to floods caused by sedimentation of the river'. Landless labourers and migrants framed their risk problem as 'loss of livelihood'.

Later, the NGO realized that fishermen, living closer to the sea, also experience negative effects from flooding, who frame their risk problem differently: it is not

⁸ This is what the RESIENCE Programme intended to do during the various workshops in Indonesia, Ethiopia and Bolivia.

sedimentation that they view as main problem, but the big waves from the sea and the chaotic parking of boats in the harbour near the river mouth that obstruct water to flow to the sea. The NGO facilitated the interaction between the fishermen and the peasants. The latter had frequent inter-village peasant group meetings where the idea was born to form a broad network of people concerned about the flooding in Pati district aimed to be more influential during negotiations with the district government. To mobilize the fishermen, farmers groups, landless and other concerned citizens into the broader network, the risk problem should be framed in such a way to mobilize a larger constituency. After lengthy discussions peasants and fishermen agreed to frame the problem as 'Juwana river is in a bad condition' referring to the problems of sedimentation and boat parking. On May 20, 2009, they officially established their network *Jampi Sawan - Jaringan Masyarakat Peduli Sungai Juwana*, meaning People's Network that cares for the Juwana River. In addition Jampi Sawan refers to an herbal medicine to cure diseases; it also symbolizes 'solutions'. All villagers living along the river Juwana or who are indirectly affected by floods – like labourers – can become a member of Jampi Sawan. (Source: Heijmans, 2012)

Box 21 | Exploring ways to finding common problem definition between private sector and civil society.

CARE's RESILIENCE programme in Indonesia revealed the difficulty of engaging directly with the private sector at the local level and to get their presence in the workshops. Entry-points at the national level – discussing the private sector's perspectives on sustainable entrepreneurship and climate change in more general terms – may reduce barriers for engagement. Instead of confronting the private sector with critical voices from local communities and civil society in a workshop, it may be more effective to get introduced by their national level allies and to talk about sustainable entrepreneurship. A second option is to find entry-points in Europe through government officials and investors promoting sustainable bio-fuels through the production of palm oil in Kalimantan. One key actor is the World Bank which strongly supports the Round Table on Sustainable Palm Oil certification system for sustainable palm oil production which slowly gains traction. It is expected that planting will gradually shift away from forested areas with high conservation value to existing agricultural land or areas designated as degraded. Commonalities

between state and non-state agendas to protect the environment can be explored as an entry-point to discuss differences in interests later on.

Task 4: Joint fact-finding

- Develop and implement action plans to fill knowledge gaps.
- A joint situational analysis may result in information gaps. It is not necessary that both parties get involved in fact-finding missions. They could also agree on a third partner who will provide the lacking information like a university, knowledge institution or lawyer.

Task 5: Forging agreement

- Manoeuvre: clarify positions, making claims, use of pressure to secure concessions, create and resolve impasses.
- Secure agreement on a coherent package of measures and action plans.

Task 6: Communication of representatives to constituencies

- Transferring of learning process; what went well, what went wrong,
- ‘Ratification’ of agreement by constituencies.
- In case constituency fails to agree, make a plan on what to do next.

Task 7: Monitoring implementation

- Implement the agreements made.
- Monitor progress.
- Create space for re-negotiation.

Some of the tasks are especially important at the beginning of the negotiation process, whereas others become important as the process progresses. However, all tasks remain relevant throughout the process as much repetition is likely to happen. The seven tasks should therefore not be regarded as linear ‘stages’ or ‘phases’, as they can require attention in a different or concurrent order. For instance, in case constituencies do not agree with an agreement forged by their representatives, or new facts are brought up, the negotiation may go back to the task of situational analysis and forging a different agreement.

Task 8: Looking for political spaces

In addition to the seven tasks it is important to look for spaces – invited or created

– that offer opportunities to engage regularly with the other to show goodwill and sincerity to cooperate (invite actors for instance to meetings or workshops) with the aim to rework relationships. Usually spaces refer to decision making arenas and forums for action, but they can also include other ‘spaces’ or niches that are seen as opportunities, moments and channels where citizens can act to potentially affect policies, discourses, decisions and relationships which affect their lives and interests (Gaventa, 2006). ‘Closed spaces’ refer to decisions made by a set of actors behind closed doors, without any pretense of broadening the boundaries for inclusion. Closed spaces are where elites such as politicians, bureaucrats, experts, bosses, managers and leaders make decisions with little broad consultation or involvement. When these political spaces remain closed and there is little room for manoeuvre, local people could claim political space and dialogues using more confrontational means like protests, rallies, petitions, etc.

If key stakeholders do not believe that they need each other in order to arrive at an acceptable solution to their risk problems, a negotiation approach does not make sense. Actors then explore opportunities to win the battle with whatever means they have available. In this phase, conflicts often reach a climax with relations between the opposing parties deteriorating (Leeuwis, 2000: 952). They will eventually realize that fighting does not lead to a satisfactory solution for either party, and that the only way forward is to restore relations and negotiate a solution (*ibid*).

ACTION POINT 3

Linking traditional, practical knowledge to scientific knowledge systems

This action point aims to emphasize that the majority of conflicts and competing perspectives are embedded in actors’ worldview, interest and social position they have in society. Instead of stressing differences and trying to convince others of one’s correctness, we support the idea that all actors bring with them their specific everyday forms of knowledge, whether they are scientists, practitioners, policy makers or local villagers. Through negotiations different bodies of knowledge interact with the aim to produce, translate or transform knowledge to address risk problems that can’t be addressed by a single actor or discipline. Examples are:

- Bridging the gap between scientific/high-tech early warning systems at global and national level, and local early warning systems as discussed in action point 3.a.3.
- Bridging the gap between climate change discourse by scientists at global level, and how local populations observe, interpret and make sense of climate change.

In Kalimantan for instance, local people refer to changing weather patterns as the will of God, and when a staffer of the Meteorological, Climate and Geological Agency (BMKG) held a presentation on ‘climate change’, the content was incomprehensible for most in the room.

- Bridging the gap between traditional ways to arrange land rights (e.g. *adat* in Indonesia) and formal land policies, including clarifying ambiguous and contradicting land policies.

In the HFA and multi-stakeholder literature, all actors involved in negotiation processes or debates are considered competent in articulating their views and opinions, while projecting and accepting critical remarks during discussions. However, we cannot assume that all will adopt or have an open attitude, or are equal partners in the debates. Sharing experiences, open communication, admitting weaknesses, and trust should be regarded as goals in negotiation processes considering the hidden and invisible forms of power at play that shape the nature of political spaces. The seven tasks described above serve as a guideline to facilitate a negotiation process between the different bodies of knowledge while being aware about the politics of knowledge and whose knowledge counts. Negotiation and multi-stakeholder meetings encounter agony, conflicts and tense debates rather than collaboration or teamwork. As said earlier the HFA and Climate Change Agreements can be used as leverage to open up discussion and negotiate space as these are agreements that governments signed.

Pointers

- Engage with vulnerable groups *and* village authorities *and* village elites and understand the social and political relationships between them.
- Practice impartiality (added value to have legal assistance support through *pro bono* lawyers, university departments)
- There may be situations in which an interactive negotiation trajectory is not (yet) an option. However, policy-makers and interventionists can employ various strategies to change this situation, including starting negotiations with a sub-set of relevant actors who do already feel interdependent (Leeuwis, 2000).
- The ability of relevant stakeholders to communicate with each other can be hampered in various ways. Physical distance for instance, when stakeholders may be spread across the country or even abroad. It is therefore important that stake-

holders are well organised (key-point 4) in order to be represented, and to allow effective communication between representatives and their constituencies during the negotiation process.

KEY POINT 6

Working across scales

Linking village level interventions to an ecosystem approach

Why is it important?

The entry points for integrating DRR, CCA and PR in interventions are communities affected by recurrent small-scale disasters (see key point 1). The underlying risk factors of why local people are vulnerable to disasters and experience recurrent risks are often situated outside the community, and have a social, political and spatial dimension. The three country studies show how increased pressures on the environment like removal of tropical forests, drainage of peat land, overgrazing result in disaster risks. Risk solutions like flood mitigation (Bolivia), fire control (Indonesia) and drought cycle management (Ethiopia) involve decisions about people, their interactions, space and the environment. In order to design appropriate interventions that address people's safety, their immediate livelihoods needs *and* the underlying risk factors to foster resilience, local people need to engage – in one way or another – with the broader institutional context of norms, traditions, and the judiciary system and policies related to decisions about allocation of resources and land use.

This key point emphasizes, first of all, the *spatial* dimensions of climate-change adaptation, disaster risk reduction and poverty reduction. When floods happen downstream and along the coast, it is strategically wise to involve communities and actors upstream in localities where the environment degrades and to make connec-

tions through the intervention to address underlying risk factors. On the other hand certain coping strategies have also spatial dimensions like the pastoralists in Southern Ethiopia who move with their cattle to less affected areas when they are affected by drought. Additionally, decisions about people, their interactions and space involve politics, and therefore this key point also emphasises again the political dimension of dealing with spatial planning, land use and environmental resource management.

The importance to link disaster-affected areas with the wider landscape and ecosystems is to become conscious about the interaction and impact of human activities on the environment, and to design interventions that consider the maintenance, protection and improvement of environmental resources. A so-called landscape or ecosystem approach tries to identify the factors that have a stake in conflicts and competing claims that may rise between meeting human needs and protecting the resources. It aims to ensure that 'ecosystem services' are protected and maintained for equitable use by future human generations. 'Ecosystem services' are referred to as benefits people obtain from ecosystems like food, water, minerals, energy, clean air, climate regulation, waste decomposition, purification of water and air, pest and disease control, cycling of nutrients, recreation, cultural, intellectual and scientific discovery (MEA report, 2005). There are also negative ecosystem services like red tide, pests and diseases, and therefore a balance is needed to promote the positive services and mitigate the negative ones. An 'ecosystem' refers to a dynamic complex of plant, animal and micro-organism communities and their non-living environment interacting as a functional unit, which provides the elements that enables the species to thrive ⁹.

An ecosystems approach is a way of looking at the natural environment throughout people's negotiation and decision making process that helps to think about the way that the natural environment works as a system. In doing so one will also think about the spatial scale of human interactions with the natural environment, the range of constraints and limits at play and the people involved in supplying and receiving ecosystem services and benefits. Carrying out economic valuation of the ecosystem services involved will help to incorporate the value of the natural environment in decision making.

Working across scales implies considering time scales like recognizing people's immediate short-term needs and their long term strategic needs to obtain safety and protection. This includes considering the impact of long term climate change pro-

9 Convention on Biological Diversity (CBD), <http://www.cbd.int>.

jections on the local level, i.e. localized climate change. Localized weather trends for the next 10 years can inform stakeholders to take appropriate and relevant risk reduction measures to mitigate climate change impact.

Action points

ACTION POINT 1

Focus on relationships and interactions between social groups and ecosystems

Instead of viewing communities and villages according to village administrative boundaries, it is important to focus on social relationships and interactions, and on processes within ecosystems which matter around a risk concern. This means taking a systemic approach within and beyond village level. This implies, for instance, that to address flood problems, one has to consider a watershed approach, understanding the connections between upstream and downstream systems. In case of Southern Ethiopia one has to consider the traditions of Borana pastoralists, such as migration and their land management practices involving different kinds of grazing areas, which are increasingly claimed by others.

Figure 10 | Mining and logging upstream results in landslides, flashfloods upstream and flooding downstream.



These relationships and processes determine the scale and spatial boundaries that aid agencies and policy makers have to consider when designing interventions to foster resilience. The scale and spatial boundaries furthermore determine which other stakeholders need to be involved, especially those who also make use of the same natural resources. This is called the *'ecosystem approach'* which is a strategy to identify relevant issues for the integrated management of land, water and living resources that promotes environmental protection and sustainable use in an equitable way. An ecosystems approach provides a framework for looking at whole ecosystems in decision making, and for valuing the ecosystem services they provide, to ensure that society can maintain a healthy and resilient natural environment now and for future generations.

Figure 11 | Environmental concern in Bangladesh. © Palash Khan/Drik News



Practical tools exist to facilitate discussions with local people about human interactions with ecosystems and for measuring ecosystem services. One is developed by Wetlands International and incorporates a disaster risk reduction lens. It offers criteria for 'ecosystem-smart' interventions and for the capacity development of practitioners and community people (see table 7).

The second tool is offered by CCI and Birdlife International (2011) www.unep-wcmc.org. This toolkit:

- helps users with limited capacity (technical knowledge, time) and resources (money, 'man' power) to measure ecosystem services;

- provides simple gross assessments of ecosystem services at sites, and a way of assessing how these would change if the sites were altered;
- provides scientifically robust information on ecosystem services - a first step which can guide practitioners on whether more detailed studies would be useful;
- indicates who will be the 'winners' and who will be the 'losers' as a result of any change in land use and ecosystem service delivery;
- helps decision-makers appreciate the true value of nature, and the consequences of destruction and degradation of natural habitats.

ACTION POINT 2

Identify and involve the administrative scale appropriate for the issue being addressed, with decentralization to lowest level, as appropriate

An ecosystem is a functioning unit that can operate at any scale, depending upon the problem or issue being addressed. This understanding should define the appropriate level for management decisions and actions, as well as the appropriate authorities and government's line departments to be involved. In key point 1 we stressed the importance of taking a local people's perspective and to acknowledge their involvement in any step towards fostering resilience. This implies that local people are involved in the identification of relevant stakeholders and authorities that play a role or are responsible for ecosystem management and environmental protection and those who are responsible in depleting natural resources. These could very well include local people themselves, as in the example from Bungu (box 17). This step builds on key points 3, 4 and 5 and in combination with an ecosystem approach it implies that each stakeholder has the opportunity to assume responsibility and gain the capacity to carry out the appropriate action, and negotiate for an enabling policy and legislative environment. Where common property resources are involved, the most appropriate scale for management decisions and actions would necessarily be large enough to encompass the effects of practices by all relevant stakeholders. Appropriate institutions would be required for such decision-making and, where necessary, for conflict resolution and negotiation. Some problems and issues may require action at still higher levels, through, for example, trans-boundary cooperation, or even cooperation at global levels.

Box 22 | Pando, Bolivia.

In the case of Pando, Northern Bolivia, the ecosystem covers the Amazon Rainforests and when one aims to mitigate floods in Pando, trans-boundary cooperation is required between the governments of Bolivia, Peru and Brazil. The forest cover is almost gone on the Brazilian border, dwindling in Peru and in reasonable shape in the Bolivian Amazon. This is in part attributable to legislation and lack of economic development which is framed as ‘poverty’ by powerful actors, but not necessarily in the perspective of the rainforest dwellers. ‘Poverty reduction’ through indiscriminate logging would erode the land, and in so doing the very base that supports flood and resource management and keeps life in Pando sustainable – which is exactly where the three domains of CCA, DRR and PR interact and, on occasion, clash.

ACTION POINT 3

Generate climate projections

At the local level, people are concerned with drivers of change directly linked to livelihoods, land rights, access to markets and changing power relations between the rich and the poor, rather than they are with climate change. ‘Climate change is fifth on our list of priorities’ according to a farmer in Rajasthan (Shah *et al*, 2012 in box 23). However, translating global weather trends into localized ones can help local actors to understand and raise awareness about the local effects of climate change and about the need for adaptation in the future. Accurate scientific tools that can predict seasonal and yearly weather forecasts and make 10-year projections can have an added value for mitigation measures.

Box 23 | Generating climate projections (Shah *et al*, 2012).

Scientific global climate models (GCMs) that provide information for large areas are available to generate localized climate projections. ICCO and Seva Mandir (Local NGO – www.sevanmandir.org) decided to use a method that downscaled these GCMs to smaller areas (in this case Seva Mandir’s working area in Rajasthan) to get more specific and adequate information. Reliable meteorological data over a longer period is needed for it to be effective, particularly on precipitation and temperature patterns. Seva Mandir obtained meteorological data spanning over 25

Table 7 | Examples of ecosystem-smart criteria (Wetlands International, 2012).

Theme	Ecosystem smart criteria
Institutional capacity of the implementing organization	<ul style="list-style-type: none"> • Staff at all relevant levels (local, provincial, national) are able to explain what natural and humanized ecosystems are, what services they deliver and how these services are related to their work. • Staff at all relevant levels are aware of the trends and projections with regards to degradation of ecosystems and their services in their region. They are able to explain the basic root causes of this degradation and are aware of related implications to disaster risk. • The organisation is able to engage, facilitate and coordinate the full range of partners and stakeholders required for the development and implementation of an integrated risk reduction programme.
Project team assembling	<ul style="list-style-type: none"> • DRR project teams are multidisciplinary and include experts on livelihoods, ecosystem functioning and hydrology who participate as a full member in all phases.
Creating an enabling environment	<ul style="list-style-type: none"> • The organization has identified and established relationships with relevant stakeholders in land use and development planning at local, provincial and national level. • The organization is able to explain current environmental government policies and legislation. It participates in climate change, biodiversity conservation and agricultural/ fisheries (or other land use) groups and can identify whether existing policies accurately reflect ecosystem-smart disaster risk reduction. • The organization designs advocacy strategies to address ecosystem considerations and defines a modus operandi to deal with sensitive issues such as logging, mining and aquaculture.
Community capacity	<ul style="list-style-type: none"> • Communities understand the basics of ecosystems functioning, the services they provide and how these are related to their livelihoods and the risk conditions they live in. Upstream – downstream implications of ecosystems’ functioning are understood in their geographical and policy dimensions. • Community perceptions of the risk of ecosystem degradation, as well as current and traditional coping methods, are documented during a community based risk assessment. • Communities are capable of taking action to manage or restore natural and humanized ecosystems efficiently, as well as to advocate for sustainable land use policies and practices as a strategy to reduce disaster risk.

years from the Maharana Pratap University of Agriculture and Technology in Udaipur. Rainfall data from 20 stations in the area were collected from the state of Rajasthan's irrigation department. All data was provided to the Alterra (Wageningen) scientists, who used it as input in the downscaled scientific regional climate models (www.alterra.wur.nl/UK/). The scientists used different emission and development scenarios in their calculations. The outcome was an accurate assessment of weather trends in recent decades and a set of clear graphics indicating the expected changes in annual temperature, annual rainfall and extreme events.

The scientists reached the following overall conclusions regarding climate projections in Seva Mandir's working area:

- A likely rise in temperature of one to two degrees Celsius between 2040 and 2080 (though the magnitude of this increase depends on the emission scenario).
- Continued heavy local showers at prolonged intervals.
- An increase of extreme variations of precipitation until 2040.
- A decrease of extreme events in the long run (after 2040), but a slight increase in annual precipitation levels.
- More rainfall as a result of longer monsoons.

Sharing results, right mind-set for the future

The results of the climate projections were shared with the inhabitants during two rounds of meetings in five representative villages. The number of families living in each village ranges from 180 - 400. All five villages – Gadunia, Dhala, Som, Nichala Talab and Chhali – are rural. The families of the first three depend on agriculture for their livelihoods, while the families of Nichala Talab and Chhali rely more on labour from outside their villages.

Each village was visited at least twice for this study. During the first round of visits, a comparison was made between what farmers had experienced so far in terms of changing rainfall and temperature patterns and the scientific data obtained from the local university. What proved to be very helpful about the process was that the scientific assessment of past trends confirmed farmers' experiences of the changes in climate.

Overall, the projections for the area did not come as a big surprise for the farmers, even though the projected long-term increase in yearly precipitation contradicted the droughts these farmers had recently experienced. Their experiences did not coincide with the prediction of increased cloud development during the end of monsoon

either. The dialogue on the results of the climate models helped to build awareness and create the right mind-set among the farmers for the formulation of appropriate community-based adaptation strategies. In between the two visits, discussions were held with scientists, government officials and policy makers. The meetings aimed to obtain views on the results of the models, share farmers' experiences and learn about adaptation initiatives in the region. During the second round of meetings, potential adaptation measures were shared and discussed. The following suggestions were put forward by the different villagers:

- *Homeyards*: Introduce biodiversity, select less weather-sensitive varieties of fruit trees and vegetables, keep goats, improve house isolation, harvest water from roofs, and manure collection.
 - *Agriculture*: Develop a defensive strategy by means of experiments and innovations such as crop rotation; mixed cropping and resilient crops; shorter duration crops; more reliable winter crops; more organic fertilizer and better pest management; weather predictions and seasonal forecasts; and agro-advisories.
 - *Forest and watershed*: Combine conservation and effective use of products; fruit collection and herd management, and efficient use of labour; better protection of wells; more water storage; combine water storage with fishing; forest with drought-resistance trees; vegetation on slope to check erosion.
-

Pointers

- The essence of this key point is balancing human needs with the ability of the environment to provide 'ecosystem services' for current and future generations
- Combine village level to an ecosystem approach links everyday livelihoods problems of communities to past land use decisions *and* to global climate concerns in the far future. It is not just a spatial dimension but also a time-dimension that needs to be considered when designing interventions with realistic objectives.
- What the ecosystem approach does not explicitly highlight is the interconnectedness between rural and urban livelihoods. In Indonesia, for instance, we found young generations prefer urban jobs over farming. Many rural and particularly remote rural villages therefore face an ageing population with difficulties to continue farming and without someone to whom to transfer local knowledge about ecosystems.
- Check the learning platform of www.elanadapt.net for resources on ecosystems, livelihoods and adaptation strategies.

KEY POINT 7

Designing and insisting on iterative and flexible interventions

Why is it important?

Climate change may result in erratic weather patterns and increasing levels of uncertainty for local populations. Traditional and current ways of dealing with climate risks can fall short, also because of other social, economic and political pressures in their societies. Economies, social and political systems are complex and dynamic. Fluctuating food prices, changing markets, global regulations feed back into local interactions affecting livelihoods and people's vulnerability. Therefore the world around us is best characterised as unpredictable, made up of dynamic interconnected and interdependent systems with uncertain outcomes and the emergence of new processes and relations. 'At the heart of many disasters, there are seldom single causes but instead many interacting and interdependent dimensions and factors' (Buckle, 2005).

Much development and humanitarian thinking and practice is, however, still trapped in a paradigm of predictable, linear causality and maintained by mind-sets that seek accountability through top-down command and control, and expressed through logical frameworks in policy design. It is assumed that causal chains are unequivocal and linear, while on the ground there may be chicken-and-egg dynamics: it is not always clear what caused what, and what is ultimately 'the problem'. The three country analyses illustrate this point. Our research revealed that most interventions designed by state and non-state actors are based on pre-conceived ideas about local

realities which do not match with local people's changing urgent needs, their traditions in dealing with adversity and climate risks, and with long-term strategic solutions. Pre-conceived interventions focus on what aid agencies can offer, not on what local people see as their priority or as appropriate support.

In Kalimantan, Indonesia, different non-state actors piloted integrated programming to combat forest fires, meaning that the interventions were implemented by different actors representing the three fields of DRR, CCA and PR. This integrated approach appealed to different kinds of actors working together on one risk problem, but unfortunately it didn't work out to the benefit of local communities affected by the fires; particularly because local people have often felt left out of dialogues and negotiations about what should happen, and the different aid interventions were counter-productive and at times undermining local people's survival strategies rather than supporting them.

Taking the heterogeneous perspectives of local people as the starting point and understanding their risk landscape is a first important step towards changing 'aid thinking and practice' that will lead to greater realism on the part of planners, sponsors and interveners. Realism means more modesty and more honesty about what is possible through aid interventions, which will not be easy. The key points in this handbook promote a different aid practice requiring transformations of power relations, procedures, mind-sets, behaviours, and professional education and training. More than anything, these changes demand the exercise of agency by individuals, groups and networks with the vision, commitment and courage to learn from and champion new and challenging approaches (Chambers in Ramalingan *et al*, 2008).

A challenging approach for policy makers and aid practitioners is to accept uncertainty and unpredictability as our everyday reality, which requires reflection on programmes and interventions and adaptive planning. This implies acknowledging people's interests and agenda-setting as point of departure rather than implementing preconceived projects. Interventions will be designed step-by-step based on knowing just enough about the present while accepting an uncertain future. Through regular action-reflection cycles and sense-making emerging patterns will be analysed so that in the next action step desired patterns can be supported and undesired ones addressed. This way of working and relating to local people offers new ways to keep interventions relevant, appropriate and effective.

Action points

ACTION POINT 1

Doing by learning, and learning by doing

Since each context is unique, it is impossible to produce a standardized guideline for interventions or strategies to foster resilience. Complexity and local specificity mean that outcomes are not straightforward to assess. Taking an iterative approach to developing interventions includes the creation of a culture of learning from experience as the appropriate way to deal with uncertainty and unpredictable societal processes. Learning and adapting to new circumstances and eventualities requires flexibility, diversification of skills, resources, an open attitude and to link up with new stakeholders. Interventions will follow uncertain and unknown paths.

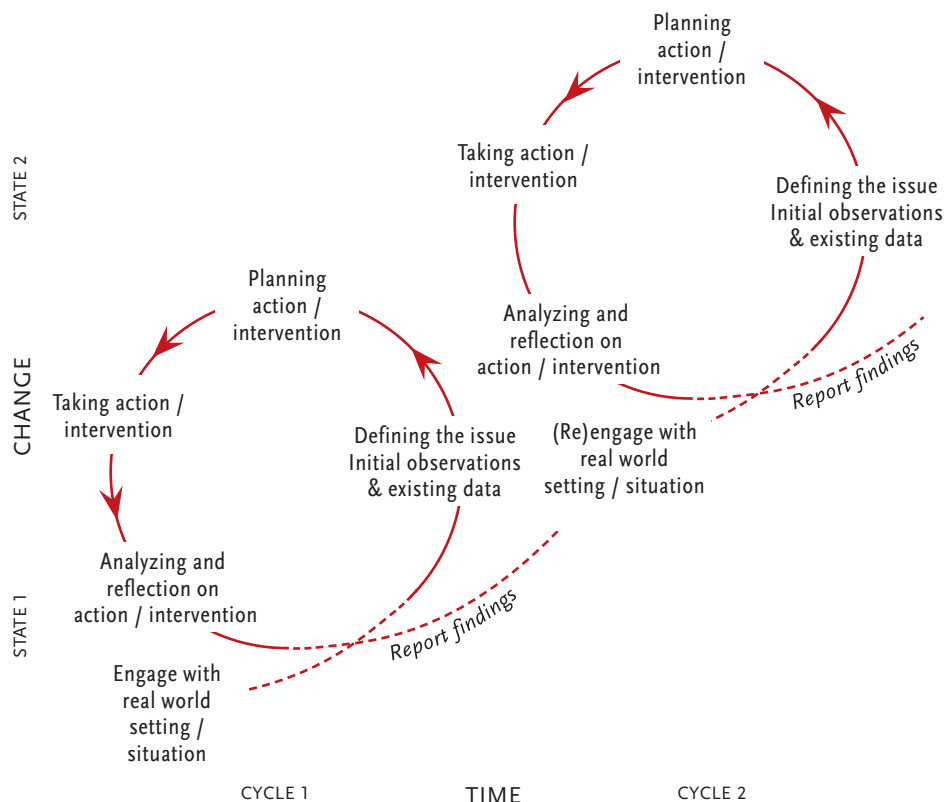
An iterative approach to designing interventions means that engaging with local people and understanding their world and act upon findings, consists of a spiral of action-reflection cycles in which the following steps are taken:

1. Initial observations to understand people's risk landscape to define the issue, ideally in close dialogue with the actors concerned.
2. To develop a plan of action to improve what is already happening
3. To act to implement the plan
4. To observe the effects of the action in the context in which it occurs (monitoring)
5. To reflect on these effects as a basis for further planning, subsequent action and affect change through a succession of cycles (see figure 12)

The action-reflection cycles intend to blend knowledge from the practical wisdom of grassroots communities with knowledge from aid practitioners developed through their interaction with these communities. These are then linked to formal knowledge systems which, taken together, aim to bring about a positive outcome for local vulnerable and marginalized people affected by disasters.

However, not all stakeholders are immediately open to reflection on their practices and routines, and we can't assume that all actors are equal partners in the debates. Sharing experiences, open communication, admitting weaknesses, and trust should be regarded as goals in the intervention process in order to attain reliable relationships.

Figure 12 | Interventions as spiralling cycles of action and reflection (Muir, 2007).



Since the essence of consolidating resilience among local populations is situated in reworking power relations and institutions, the focus of monitoring work is on changes in interrelationships between actors and between actors and the environment rather than on the cause-effect chains of activities like written in logical frameworks.

Groupe URD developed a crisis preparation and anticipation mechanism, primarily for operational actors implementing medium and long-term programmes in the Sahel (see figure 13). This mechanism ensures better adaptation to changing contexts like drought or an upsurge in violence in an area, and reduces the effects of new crisis on the programme’s achievements (Sokpoh, 2012). It aims to enable organisations present on the ground to react early in the face of disasters. The mechanism is based on the following principles:

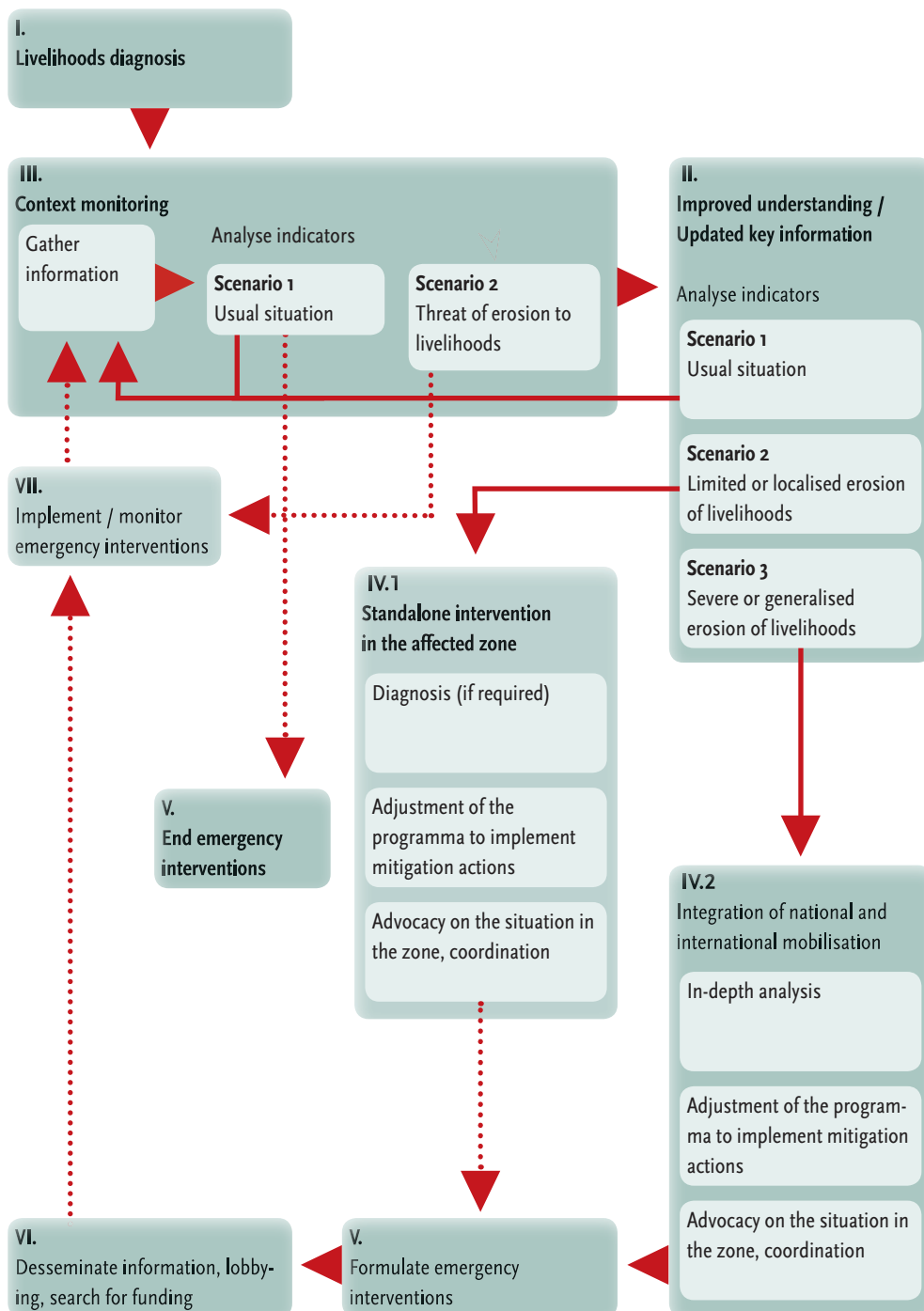
- Formulate crisis responses so as to facilitate transition and development actions (avoid responses that undermine development actions)
- Reduce the impact of a new crisis on the progress made by development actions (prevention and resilience enhancement);
- Take account of the new realities caused by the crisis and its origins to rebuild in a new way, possibly even taking advantage of the changes caused by the crisis to make new improvements.

To ensure that early response is possible in the future, context monitoring indicators were developed collectively by all the operational partners. They were designed to provide the basis for the monitoring phase of the crisis preparation and anticipation mechanism over the programme's remaining period. The following indicators were chosen (in order of priority): the price of basic foodstuffs and livestock, rainfall, farming production, and the malnutrition rate.

The initiative demonstrated that the programme's flexibility and its operational partners' speed of reaction made it possible to timely intervene and adjust emerging processes. The effectiveness of such mechanism rests on several factors:

- The quality of the original risk analysis and of communities' livelihoods, definition of indicators to monitor the context, and collection and analysis of information.
- The existence and effectiveness of national and regional early warning systems, and the sharing of information between the various actors involved in any given zone.
- The programme's predefined flexibility. In order to guarantee the capacity to prepare, anticipate, and manage crises likely to arise during programmes, a preliminary agreement between stakeholders when the programme is launched is necessary in order to provide a flexible framework that suits all concerned. It is important to be able to act rapidly without having to deal with administrative complications.
- Stakeholders' ability to mobilise additional funds in the event of a generalised erosion of livelihoods. As this initiative has shown, adjustments to programmes underway and mitigation actions are in themselves rarely sufficient to provide all the means needed to protect communities' livelihoods in the event of a major crisis.

Figure 13 | Crisis preparation and anticipation mechanism (Sokpoh, 2012: 23).



Another tool that recognises ‘messy realities’ and helps in monitoring and adapting planning of interventions in insecure and uncertain environments is Outcome Mapping. As development is essentially about people relating to each other and their environment, the focus of Outcome Mapping is on people and organizations. The originality of the methodology is its shift away from assessing the products of a program (e.g., policy relevance, poverty alleviation, reduced risk) to focus on changes in behaviour, relationships, actions, and/or activities of the people and organizations with whom a development program works directly.

Outcome Mapping (see IDRC’s website www.idrc.ca)

- Defines the program's outcomes as changes in the behaviour of direct partners
- Focuses on how programs facilitate change rather than how they control or cause change
- Recognizes the complexity of development processes together with the contexts in which they occur
- Looks at the logical links between interventions and outcomes, rather than trying to attribute results to any particular intervention
- Locates a program's goals within the context of larger development challenges beyond the reach of the program to encourage and guide the innovation and risk-taking necessary
- Requires the involvement of program staff and partners throughout the planning, monitoring, and evaluation stages

This tool is especially useful to monitor changes in relationships between actors that engage in the political arena and to assess the influence of negotiations on these relationships and policy.

ACTION POINT 2

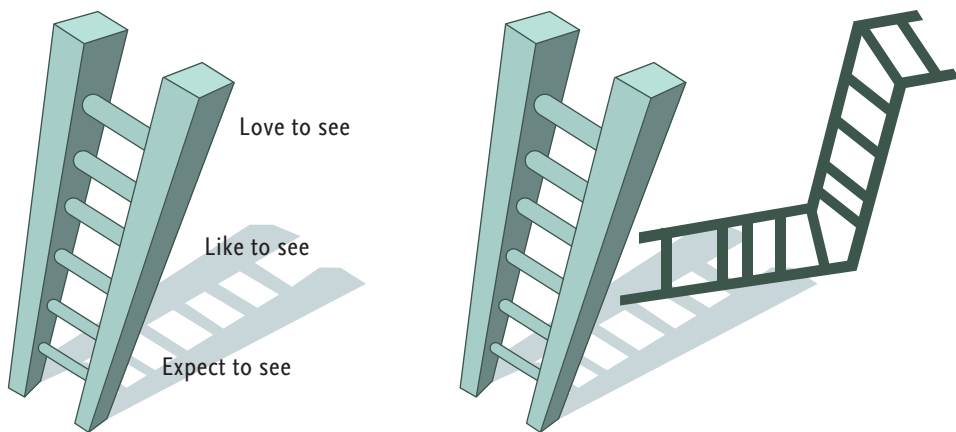
View fostering resilience as a long-term political process with local, district, provincial and (inter)national results

When taking the potential transformative nature of ‘resilience interventions’ seriously, it means that aid practitioners will engage in re-ordering social relationships and institutions within and beyond village level. Addressing root causes of people’s vulnerabilities to consider, adapt, or oppose policies, laws, norms, values, structures and decisions about resource allocation – that not only deal with reducing disaster risk, climate change effects and poverty, but rather entails institutions dealing with

spatial planning, natural resources management, and often the judicial system. These processes of social change usually require more time than the usual project duration of two to four years. Taking a flexible and iterative approach to developing action plans and interventions, one may require three or four subsequent projects of two years each which build on each other. A six-year time frame is realistic, for instance to achieve a change in attitudes and behaviour of both government officials and civil society actors towards each other, and to engage in a partnership or a certain form of collaboration¹⁰.

The Outcome Mapping tool assists in formulating progress markers that describe what changes local people want to happen in the behaviour, attitude and nature of relationships of relevant stakeholders. These progress markers are divided into three kind of progress markers: what we expect to see changing; what we like to see changing and what we would love to see changing without attaching yet a fixed timeframe (figure 14).

Figure 14 | Ladder of change.



Interventions, however, do not follow a linear path. There are setbacks, changing course of events, and unexpected opportunities. There the ladder of change is never straight.

The progress markers express a gradual desired change process towards the characteristics of a ideally resilient community. It has been stressed several times that change doesn't occur in a linear manner. There are always set-backs, unexpected events or disappointments that make change processes unpredictable.

¹⁰ Estimation is based on PhD research in Indonesia and Afghanistan (Heijmans, 2012).

The strength of gradual progress markers is that they:

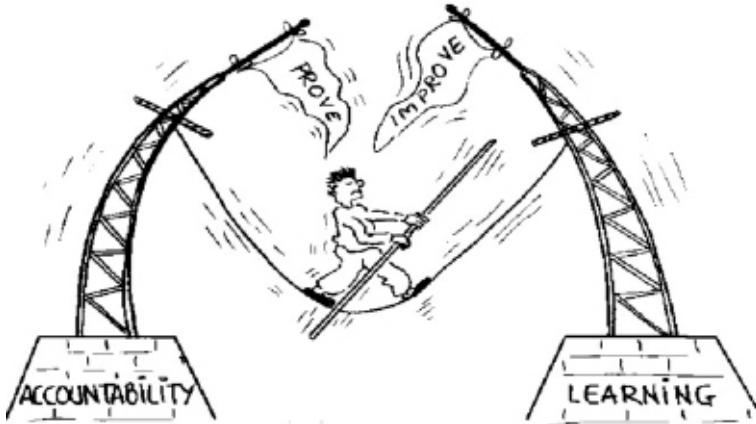
- articulate the complexity of the change process;
- allow negotiations of expectations between the interventions and its partners;
- permit on-going assessment of stakeholders' progress;
- facilitate mid-course corrections and improvements;
- encourages to think about how we can intentionally contribute to the most profound transformation possible.

The progress markers moreover allow us to explicitly envision changes in institutions and relationships at multiple levels with the ultimate aim to reduce people's vulnerability locally. Therefore interventions have to think ahead of objectives to be achieved at institutional levels beyond the village. Rather than simply aiming for isolated village-level progress markers and objectives, results have to be achieved at provincial and even national level.

Pointers

- Aid organizations and their sponsors are under pressure to demonstrate that their programs result in significant and lasting changes in the well-being of large numbers of their intended beneficiaries. Such 'impacts' are often the product of a confluence of events for which no single agency or group of agencies can realistically claim full credit. As a result, assessing aid impacts, especially from the perspective of an external agency, is problematic. Yet many organizations continue to struggle to assess and measure results far beyond the reach of their programs to stay eligible for funding. The increasing competition for funding adds to this pressure. This not only results in a tension between upward and downward accountability, but also between accountability and learning.

Outcome Mapping can be adapted for use at the project, programme, or organizational levels as a monitoring system or it can be used to reflect on on-going or completed activities. It takes a learning-based and use-driven view of evaluation guided by principles of participation and iterative learning, encouraging reflective thinking throughout the program cycle by all actors involved. This shift significantly alters the way a program understands its goals and assesses its performance and results. Outcome Mapping establishes a vision of the human, social, and environmental betterment to which the program hopes to contribute and



then focuses monitoring and evaluation on factors and actors within its sphere of influence (Earl *et al*, 2001).

- Many donors and funding agencies however, are not yet convinced of the need to shift, or used to shifting to more flexible forms of interventions, combining monitoring with learning, and to equally focus on unpredictable processes as on tangible results. Ongoing dialogues with donors to be flexible to the realities on the ground is part of the puzzle that needs to be solved. Without their support it will be difficult to practice iterative and flexible interventions.

KEY POINT 8

Being aware of trade-offs

Why is it important?

‘Resilience’ as a term represents good intentions and has a more positive image than ‘vulnerability’, but it hides the various views and interests of different actors on how to achieve resilience as the three country analyses showed. Adaptation or risk management strategies are not necessarily beneficial to all social groups and ecosystems, and some responses may increase the vulnerabilities of others. Likewise short-term responses to current risks may increase vulnerability in the long term. Therefore it is important to be aware of and understand the trade-offs actors are forced to make against multiple risks. Resilience-focused interventions should be sensitive to and understand how they impact on people, their livelihoods and the environment, and avoid creating new risks or conflicts.

Our proposed approach to resilience focuses on people, power dynamics, history of institutions and relationships among the relevant stakeholders. By fostering resilience for the marginalized, poor and vulnerable groups we do challenge the powerful and the status quo which has its own interest in how the livelihoods of the less powerful are developed. To maintain a level of realism around what can be achieved it is important to understand the pros and cons of interventions, balancing winners and losers, and the trade-offs between the present and the future (Levine *et al*, 2012).

Action point

ACTION POINT 1

Realize how your work and interventions relate to others, the environment and to the future

Key points 2 and 3 contribute to an understanding of the governance context, power dynamics, policies and laws, and disconnections and opportunities to be seized. Taken together, they help in designing strategies for action and programming, while key point 7 supports the monitoring and learning aspect of resilience-building interventions. The latter analyses emergent patterns in relationships among actors and the environment and supports decisions to continue desired processes and to address or stop undesired and negative processes and outcomes. These feed-back loops are important instrument to ensure that interventions to foster resilience do not do harm.

In the three-country studies we observed that the selected intervention did not benefit all actors or were short-term oriented. In Kalimantan we saw how villages affected by forest fires remained dependent on donor funds for maintenance of equipment such as radios and meteorological instruments, or how blocking canals to stop draining peat lands, negatively affected transportation of goods and people by boat. In Northern Bolivia the government tried to convince flood-affected villages to evacuate or even resettle in new areas, while NGOs assisted the same people to improve their livelihoods and invested in drinking water and communication. People are reluctant to leave their place, but in the long run, evacuation may be needed. In this case, our recommendation is to base interventions on what local people prioritize and to discuss the different strategies with their advantages and disadvantages, and to understand why government promotes evacuation; are there hidden interests (logging, land conversion, etc.)?

This action point could also be a reversed brainstorm; after project design try to list all potential negative effects for all groups. It may stimulate thinking 'out of the box' and highlight potential harm that could affect different stakeholders.

Epilogue

The book you have just read has taken some tentative steps into the territory of integrating Climate Change Adaptation, Disaster Risk Reduction, and Poverty Reduction under the banner of Resilience. We are far from consensus about what resilience actually means and implies, and far from uncritical of the resilience concept, and of the role it is assuming as ‘policy speak’ in the post-millennium goals. But we have decided that there is enough in there that can bring insights and energies in our efforts to lend it serious attention.

We have deliberately refrained from adding a conclusion with ‘the answers’. We trust that the steps, in whichever order you prefer to take them, create an interesting dance that leads to dialogue crossing borders and mutual learning beyond the conventional wisdom. While resilience is the pot at the end of the rainbow, the journey could be as important as the goal. Resilience and decompartmentalisation is a state of mind!

The journey does not end here. This ‘handbook’ was conceived as a living document. We very much welcome your comments and tips for improvement and follow-up. In fact, we are creating a web-based forum, Reaching Resilience, in which to continue the trip, and a website, www.reachingresilience.org.

Moreover, the book was intended to be used as a complement or accompaniment to our three 20-minute films, each on one of countries we studied and dialogued with, to facilitate education, intervision, discussion and reflection. We have developed a serious game that takes you along the various steps introduced in this handbook, to help you assess projects and interventions. Further details may be found on the website, reachingresilience.org, which also hosts the forum on Resilience 2.0, and domain integration for professionals.

Finally, we would like to extend our gratitude to the European Commission for its funding and flexibility, to present and former colleagues who participated in this effort, to our project partners and consultants, administrators and note takers, to the participants in our various RESILIENCE workshops, to the ‘giants’ on whose shoulders we stand, and especially to the countless community, NGO and policy people in Indonesia and Bolivia, Ethiopia as well as partners in dialogue from other countries

as well as for the ideas, insights and experiences they were willing to share with us. Bonaventure Sokpoh, Eve Schneider, Francois Grunewald (Groupe URD), Wouter Bokdam, Jolien van der Steen (CARE) and Jeroen Warner (WUR) also provided valuable comments, feedback and ideas on the outline, content, cases, tools, literature, etc. and without their support it wouldn't have its current shape.

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Abbreviations

ACCRA	Africa Climate Change Resilience Alliance
AMAN	Alliansa Masyarakat Adat Nasuntara – Adat Community Alliance in the Archipelago
BMKG	Badan Meteorologi Klimatologi dan Geofisika – Meteorologic, Climatologic and Geologic Agency
BOS	Borneo Orangutan Survival Foundation
BPBD	Badan Penanggulangan Bencana Daerah – Provincial Disaster Management Body
CBDRR	Community-Based Disaster Risk Reduction
CBO	Community-Based Organization
CCA	Climate Change Adaptation
CPKK	Central Kalimantan Peatland Project
CSO	Civil Society Organization
DRR	Disaster Risk Reduction
Groupe URD	Groupe d’Urgence, Rehabilitation, Développement
HFA	Hyogo Framework for Action
(I)NGO	(International) Non-Governmental Organization
KSDA	Konservasi Sumber Daya Alam – Conservation of Natural Resources Body
LPD	Lembaga Dayak Panarung – Dayak Panarung Institute
PO	People’s Organization
PAR	Pressure and Release
PR	Poverty Reduction
REDD	Reducing Emissions from Deforestation and forest Degradation
SLUICES	Sustainable Lowland Use through Innovative Community-based Environmental management Systems
UNISDR	United Nations International Strategy for Disaster Reduction
WUR	Wageningen University and Research Centre
WALHI	Wahana Lingkungan Hidup – Environmental Forum
WWF	World Wildlife Fund

