

Climate Change Adaptation Strategies for Local Impact

Key Messages for UNFCCC Negotiators



Technical Paper for the IASC Task Force on Climate Change

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May 2009.

1. Introduction

The Copenhagen Agreement to be adopted at COP-15 offers opportunities to significantly advance the climate change agenda and to establish a solid enabling environment for climate change adaptation (CCA). Yet ultimately success in adaptation must be measured in terms of impact on the ground at local level. Compared to climate change mitigation, climate change adaptation policy development is still in its infancy. Since adaptation was put on an equal footing with mitigation in the Bali Action Plan, significant progress in policy development can be observed. Yet the main focus of the debate is on the development of **national** adaptation strategies and programmes and the support by regional centres.

This paper argues that the proof of effective climate change adaptation strategies will be in improved resilience of the hundreds of millions of people living in communities most vulnerable to the impacts of climate change. Involvement of local authorities and community based organisations in the development of adaptation strategies will be crucial. Risk reduction and risk management are key elements of adaptation. Humanitarian organisations bring decades of experience in working with local actors to support local stakeholders to lead adaptation measures to protect their communities against impending climate risks.

This paper outlines six key strategies for supporting local action on adaptation. These are summarized at right and also described in greater detail in the remainder of the paper.

Climate Change Adaptation Strategies for Local Impact

1. **Prioritize adaptation efforts in communities where vulnerabilities are highest and where the need for safety and resilience is greatest.**
2. **Build projected climate change related trends in today's risk and vulnerability assessment based on current climate variability.**
3. **Fully integrate adaptation into longer-term national and local sustainable development and poverty reduction strategies.**
4. **Prioritize the strengthening of existing capacities – among local authorities, civil society organizations, and the private sector – to lay the foundations for the robust management of climate risk and the rapid scaling up of adaptation through community-based risk reduction and effective local governance.**
5. **Develop robust resource mobilisation mechanisms for adaptation that ensure the flow of both financial and technical support to local actors.**
6. **Leverage the opportunities in disaster prevention and response, through improved early warning systems, contingency planning and integrated response, to promote effective community-based adaptation and risk reduction.**

2. Synergy between Adaptation, Development, Risk Reduction and Humanitarian Action

The Fourth Assessment Report of the IPCC (4AR 2007) observes that climate change is already happening. A further acceleration will likely lead to a global temperature rise of two degrees and related increase of extreme weather events.

More extensive adaptation than is currently being applied will be necessary to reduce vulnerability to future climate change. The 4AR states that the presence of other stresses can exacerbate vulnerability to climate change and therefore future vulnerability will depend not only on the degree of climate change but also on the development “pathway” taken. Sustainable development can reduce vulnerability to climate change by “enhancing adaptive capacity and increasing resilience”. Similarly, climate change can slow the pace of progress towards sustainable development through “increased exposure to adverse impact or ... through erosion of the capacity to adapt”.¹ Sustainable development, CCA and DRR agendas need to come together to maximize impact on the ground in reducing vulnerabilities and strengthening resilience.

Still, even with the effective application of CCA integrated into long-term development planning and programming, climate change related disasters are

very likely to increase and humanitarian action will be both necessary and appropriate. Humanitarian action can also provide the foundation for future CCA by creating the enabling environment for improved early warning, information management and community-based disaster preparedness. Ultimately, responding to disaster should be seen as a development action, the advocacy potential from the disaster’s profile itself offering opportunities to build longer-term agendas.

Within the framework of Disaster Risk Reduction (DRR) there have already been efforts to integrate the development and humanitarian perspectives through key policy commitments like the Hyogo Framework for Action (HFA). What is needed now is a scaling up of investment at the local level in the achievement of both development goals incorporating the outcomes of the HFA.

The *Stockholm Plan of Action for Integrating Disaster Risks and Climate Change Impacts in Poverty Reduction (Oct 2007)*, with participation from governments, bilateral and multilateral agencies, civil society organisations, experts and researchers, outlines the following five recommendations for linking these related fields:

- I. Disaster risk reduction and climate change adaptation cannot be dealt with in isolation.
- II. Risks due to disasters and climate change must be known and measured.
- III. Disaster and climate change risk analysis must be integrated into national planning processes, including the poverty reduction strategy process, in each country.
- IV. Disaster risk reduction and climate change adaptation are not sectors but need to be factors in all sectors.
- V. Capacity building is required at local, national, regional and global levels.

¹ Contribution of Working Group II to the Fourth Assessment Report of the Intergovernmental Panel on Climate Change – Summary for Policymakers, 2007

3. The Risks Facing Communities

Ultimately effective growth and development rely on the level of **safety** and **resilience** maintained by communities, where resilience is defined by ISDR as:

“The ability of a system, community or society exposed to hazards to resist, absorb, accommodate to and recover from the effects of a hazard in a timely and efficient manner, including through the preservation and restoration of its essential basic structures and functions.”

With the growing impacts of climate change existing threats to safety and resilience are being significantly exacerbated, tremendously increasing the vulnerability of those already at risk. Areas of particular concern include communities with vulnerable livelihoods, food and environmental insecurity, HIV/AIDS, gender inequalities, weak security and governance, lack of infrastructure and education, and lack of access to appropriate resources and capacities.

Experience has shown that safety and resilience can be addressed most effectively by building communities’ capacities to reduce their vulnerabilities to hazards, recognizing that risk is ultimately driven by the combination of the hazard environment and vulnerabilities to those hazards. Without addressing the vulnerability side of the equation, community exposure to natural hazards cannot be reduced in a sustainable way that contributes to resilience. Communities must also be willing to ground their efforts in the broader risk context, otherwise distributional issues between communities may arise – for example when communities downstream may face additional risks as a result of the construction of dykes or a reservoir upstream to capture water to enhance the adaptive capacity of communities there. These are critical lessons for climate change adaptation – adaptation can only be successful in a proactive and resilience-building process which is strongly linked to an ongoing agenda of risk reduction embedded in sustainable development.

4. The Roles of Local Actors

Local actors are the key to achieving real impact on the ground. While international donors and agencies and national governments play important roles in establishing effective enabling environments and channelling resources and technical support, ultimately effective adaptation takes place through the dynamics of local governance, civil society engagement, and economic development building from the actions of local authorities, civil society organizations, and private sector businesses. Recognized by international law and national laws as “auxiliaries to the public authorities in the humanitarian field,” National Red Cross and Red Crescent Societies are also a critical resource at local level, drawing on an extensive volunteer base and long presence in communities.

The level at which impact is achieved will be very dependent on the existing capacity of those taking action and the level of information available about the expected changes in climate and their effect at the local level.²

Over the last few years some activity with CCA content has been developed, much of it necessarily case and location specific, much of it implemented by NGOs (with the compliance but not necessarily the full involvement of government) and much of it project-focused rather than being part of an

integrated strategy (be it national or local). There is little evidence of systematic integration of disaster risk management and climate change adaptation other than coordination and awareness-raising. More worryingly, analysts consider that at the local level, where poverty levels are high and there is a limited adaptive capacity, there is a need to focus on current climate vulnerability and immediate risk rather than on the long-term impact of climate change.³

National governments have a specific role in establishing the policy and regulatory environment to encourage adaptation by individuals, households and private sector businesses. They can strengthen the knowledge base of climate risk assessments; strengthen the early warning chain of climate change trends, seasonal forecasts and weather alerts, from satellites to national radio stations to local rattles and megaphones and cell phones; provide the policy and legal framework for climate risk reduction measures related to land use planning, health and other sectors and ensure that infrastructure investments take climate change into account. Thus good governance – at all levels, but especially at national level – will be critical to the establishment of development effective across the range of necessary sectors.

² World Resources Institute, *Weathering the Storm: Options for Framing Adaptation and Development*, 2007, page 4

Beyond this, effective donor coordination can play an important part in ensuring that all stakeholders are working toward the achievement of common goals and objectives leading to a reduction in vulnerabilities and the building of resilience and safety. This coordination will also ensure that duplication is minimised. For both CCA specific funding and mainstream ODA, there are obvious priorities – vulnerability reduction and capacity building activities at local level, fostering inclusive, accountable decision-making, support to managing information and the understanding and interpretation of climate information.⁴

However it is also important to recognise that international policy formulation and donor assistance represent only a small portion of overall development input at local level, even though they can play a critical role in supporting local stakeholders to initiate and scale up capacity building for adaptation action. In the coming years it will be crucial to develop adaptation capacities leading to concrete plans to be implemented when the expected additional global adaptation funding becomes available after 2012. In this process international and national actors engaged in the climate change convention must recognize the critical role of local actors in developing the adaptation framework and channel resources to them. Communities themselves have significant experience and knowledge that

must be tapped through mutual learning and sharing approaches in which local populations, civil society organisations, governments, and other partners exchange their experiences and ideas on how to tackle present and future hazards and vulnerabilities.

This local capacity can and should also be supported in major disasters when the international community cooperates to provide humanitarian assistance. The need for such international cooperation will continue to grow as climate change increases and changes the profile of disaster risk in many countries. Yet few states have comprehensive laws and systems in place to manage such aid appropriately, so it is both speedy and effective in meeting humanitarian needs but also complementary to local relief efforts. Using established guidelines,⁵ states should make themselves more ready to address these problems before disasters strike.

It is ultimately the communities which do not have the benefit of living in good governance settings, or where risk reduction efforts have not yet been prioritised, have failed in the past, or are likely to fail in the future that will bear the brunt of climate change impacts. No action taken at national, regional or international levels will be effective unless there is a concomitant reduction in the vulnerabilities of people and communities on the ground.

³ See, for example, IPCC 30th Session, Scoping Paper – Managing the Risks of Extreme Events and Disasters to Advance Climate Change Adaptation, Antalya, Turkey, April 2009, and Tear fund, Adaptation and the Post 2012 Framework, London, 2007

⁴ World Resources Institute, Weathering the Storm: Options for Framing Adaptation and Development, 2007, page 3

⁵ In 2007, the State Parties to the Geneva Conventions adopted the “Guidelines for the domestic facilitation and regulation of international disaster relief and initial recovery assistance” at the 30th International Conference of the Red Cross and Red Crescent. In 2008, the UN General Assembly called on states to strengthen their domestic legal and insitutional frameworks for international disaster relief, making use, as appropriate, of the Guidelines (UN GA Res. 63/139 para.8 (2008) & 63/141 para .6 (2008)).

5. Key Strategies on the integration of DRR and CCA for Local Climate Risk Reduction

Recognising that climate change is affecting vulnerable communities now and mostly, the following strategies should be reflected in the development and implementation of the national adaptation strategies and programmes.

1. Prioritize adaptation efforts in communities where vulnerabilities are highest and where the need for safety and resilience is greatest. While national (supported by regional and global) policies and strategies are essential, the results of the implementation of these policies and strategies at local level will be the ultimate test of CCA. It is at this level that lives and livelihoods can be protected, development promoted and safety and resilience built.

2. Build expected climate change related trends into today's risk and vulnerability assessment based on current climate variability to craft effective short-, medium-, and long-term strategies to strengthen response capacities and preparedness, reduce risks, and promote effective adaptation. Current climate variability and dealing with ongoing disaster impacts is always going to be an essential focus for highly vulnerable communities. However, wherever possible these immediate concerns need to be integrated into longer term strategies that address future risk and the drivers of vulnerability. This can be done through development actions aimed at reducing overall vulnerabilities through addressing, for example, livelihoods, environmental degradation or HIV/AIDS which, whether they incorporate specific CCA actions or not, are crucial in supporting households and communities to manage climate risks. The rising impact of disasters, and the corresponding increase in the need for international cooperation, also call for improved systems at the domestic level to facilitate and regulate international disaster relief efforts to ensure that they are rapid, effective and complementary to local capacities.

3. Fully integrate adaptation into longer-term national and local sustainable development and poverty reduction strategies such as those related to poverty reduction. Not only will the integration of CCA and associated DRR into development offer protection of overall development goals (such as the MDGs) but it will also provide the basis for building community safety and resilience.

4. Prioritize the strengthening of existing capacities – among local authorities, civil society organizations, and

the private sector – to lay the foundations for the robust management of climate risk and the rapid scaling up of adaptation through community-based risk reduction and effective local governance. Capacity building and capacity development are among the most urgent requirements for addressing climate risk, particularly at local level. Community capacity to understand climate risk issues, effectively use available information, develop the necessary institutions and networks, plan and build appropriate CCA actions and evaluate and monitor these to learn from experience is an essential prerequisite for effective adaptation. A strong foundation already exists in the Hyogo Framework for Action on Disaster Risk Reduction (HFA), a globally agreed framework for achieving DRR. Applying the HFA at community level can help to create the necessary environment for achieving many of the goals of CCA.

5. Develop robust resource mobilisation mechanisms for adaptation that encourage the climate-proofing of development programmes, promote the integration into development planning of dedicated CCA measures, and ensure the flow of both financial and technical support to local actors. It is imperative to develop dedicated funding mechanisms to support local action on CCA and regulatory structures that align the broad range of development activities taking place at national and local levels. Further, it is important to ensure that whatever resources are mobilised, they are all committed to one integrated agenda – the achievement of development goals and the building of community resilience, protected from climate and other disaster risks.

6. Leverage the opportunities in disaster prevention and response, through improved early warning systems, contingency planning and integrated response, to promote effective community-based adaptation and risk reduction and to strengthen domestic systems for managing international disaster cooperation. It is important to recognise the positive opportunities in disaster prevention and response to raise awareness of the longer-term needs in CCA and DRR and to strengthen the enabling environment for advocacy and capacity development.

Appendix

Glossary of terms

adaptation	Adjustment in natural or human systems in response to actual or expected climatic stimuli or their effects, which moderates harm or exploits beneficial opportunities. Various types of adaptation can be distinguished, including anticipatory and reactive adaptation, private and public adaptation, and autonomous and planned adaptation (IPCC TAR, 2001a)
capacity building / development	The process by which people, organizations and society systematically stimulate and develop their capacities over time to achieve social and economic goals, including through improvement of knowledge, skills, systems, and institutions. (UN/ISDR, PreventionWeb)
coping capacity	The means by which people or organizations use available resources and abilities to face adverse consequences that could lead to a disaster. In general, this involves managing resources, both in normal times as well as during crises or adverse conditions. The strengthening of coping capacities usually builds resilience to withstand the effects of natural and human-induced hazards. (UN/ISDR, <i>On Better Terms: A Glance at Key Climate Change and Disaster Risk Reduction Concepts</i>)
development	Transformative process that promotes the economic, political, and social well being of people.
disaster	A serious disruption of the functioning of a community or a society involving widespread human, material, economic or environmental losses and impacts, which exceeds the ability of the affected community or society to cope using its own resources. (UN/ISDR, PreventionWeb)
disaster risk management	The systematic process of using administrative directives, organizations, and operational skills and capacities to implement strategies, policies and improved coping capacities in order to lessen the adverse impacts of hazards and the possibility of disaster. (UN/ISDR, PreventionWeb)
disaster risk reduction	The concept and practice of reducing disaster risks through systematic efforts to analyse and manage the causal factors of disasters, including through reduced exposure to hazards, lessened vulnerability of people and property, wise management of land and the environment, and improved preparedness for adverse events. (UN/ISDR, PreventionWeb)
early warning	The set of capacities needed to generate and disseminate timely and meaningful warning information to enable individuals, communities and organizations threatened by a hazard to prepare and to act appropriately and in sufficient time to reduce the possibility of harm or loss. (UN/ISDR, PreventionWeb)
preparedness	The knowledge and capacities developed by governments, professional response and recovery organizations, communities and individuals to effectively anticipate, respond to, and recover from, the impacts of likely, imminent or current hazard events or conditions. (UN/ISDR, PreventionWeb)
resilience	The ability of a system, community or society exposed to hazards to resist, absorb, accommodate to and recover from the effects of a hazard in a timely and efficient manner, including through the preservation and restoration of its essential basic structures and functions. (UN/ISDR, PreventionWeb)
sustainable development	Development which meets the needs of the present without compromising the ability of future generations to meet their own needs. (Brundtland Commission)
vulnerability	The characteristics and circumstances of a community, system or asset that make it susceptible to the damaging effects of a hazard. (UN/ISDR, PreventionWeb)