

Published 2010-2011

## Mainstreaming Climate Change Adaptation: The Need and Role of Civil Society Organisations

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Question Nine: How can civil society best support, and hold accountable, national-level governments in their efforts to integrate climate change risks into planning and policy-making processes?

The author argues that countries' adaptation plans are largely state driven and top-down in approach, while climate change is locally experienced and can only be effectively addressed by engaging local groups and institutions. He contends that all adaptation is local, and that local agencies, especially civil society organisations (CSOs), being closest to the problem, are best suited to creating adaptive capacities within communities. He then describes different areas in which CSOs can help communities adapt to climate change, before concluding with proposed next steps for countries towards a multi-tier, multi-stakeholder institutional framework for adaptive action.

#### 1. Climate Change is happening and is here to stay

Climate change is already being experienced all over the world in varying degrees as judged by the frequency, length and severity of extreme events occurring.

Countries are grappling with its implications, the effects of locally experienced

climate variability and how to meet the challenge both individually and collectively. The severe disagreements that have arisen between nations reflect the enormous complexity of the climate challenge, the painful tradeoffs that will have to be made, the humongous costs, and the thorny ethical and moral issues involved.

It is clear that technology, investments, policy and regulations alone will not be able to provide the solution. A multi-stakeholder engagement of all concerned parties, on a sustained basis, starting at the community, regional and national levels, is required to arrive at a consensus, convergence and compact on the principles, content and metrics of what is to be done. With this mandate and clarity at the national level, international negotiations can be expected to be less contentious and more focused on arriving at do-able and acceptable solutions, since international regimes, while influencing national policies, are themselves a product of domestic factors and vested interests.<sup>1</sup>

#### 2. Adaptation Plans are largely state driven and top-down in approach

One examines the developing country National Adaptation Programs of Action (NAPAs), their strong bias towards technology, infrastructure and state managed natural resources development clearly reveal the dominant influence of state agencies. Civil society organisations (CSOs) and communities have largely played a limited role in the formulation of these policies and strategies. While the active participation of enlightened and empowered citizens, communities and other stakeholders is recognised as necessary for successful implementation of the plans, hardly any thought has been given to establishing a framework to engage meaningfully with these stakeholders and incentivize their active involvement on an on-going basis. Nor have any significant resources been set aside for systematically raising awareness, building capacities and creating an enabling framework and environment for citizen engagement and policy change. This is a crucial drawback which may result in intended objectives not being fulfilled.

# 3. Technological interventions can only succeed if they are "owned", managed and become embedded in the social, economic and institutional fabric of the community.

Technology interventions designed to address specific aspects of climate change can only be effective and sustainable, if they are suited to the local context, meet the perceived needs of the community, and are within its management capacity. Unless a community has been involved in the choice, design and deployment of the technology, they will not feel a sense of ownership and the very purpose of the

intervention will be defeated. This is particularly so in the case of adaptive measures where some groups benefit and others lose out. For instance, raising and regenerating forests may require closure to grazers and gatherers of forest produce for a protracted period of time resulting in income losses and hardships. Their cooperation can only be secured if they are involved in designing the intervention, their losses are compensated and their interests protected.

## 4. Climate change is locally experienced and can only be effectively addressed by engaging local groups and institutions.

Enlisting the active cooperation of local groups, communities, local institutions and stakeholders, building up their capacities and empowering them as active participants in decision making processes are a foundational pre-condition for efficient and effective adaptation measures. This is because the effects of climate change are experienced locally by communities, local institutions and stakeholders and they are best suited to addressing them.

For developing countries, the "rapid growth strategy" - reducing poverty and increasing incomes- apart from the political and developmental imperatives, is seen as a major contributor to reducing vulnerability to climate change. Yet, some developmental interventions can actually increase the vulnerability of natural and social systems to climate change². A dam built in a biodiversity rich area creates irrigation and electricity generation potential; but it also results in displacement and disruption of the rhythm of life of the local communities, degradation of existing environmental services and irretrievable loss of valuable biotic and genetic resources some of which may actually hold the key to food and health security³ not to mention economic growth and technological advancement. In such situations engaging stakeholders, especially the most vulnerable, in a transparent and sensitive manner would help uncover the complex social and economic dynamics that engender poverty and vulnerability⁴, and help design interventions that lead to fair and acceptable outcomes for all stakeholders.

# 5. All adaptation is local and local agencies, especially civil society organisations (CSOs), being closest to the problem are best suited to creating adaptive capacities.

The adaptive capacity of a community depends upon the degree of understanding it has of the threat it is facing, the resources it has access to, and the depth of social capital it can draw upon. Social capital, in the form of local institutions, be they public, civic, private, formal or informal, play an important role in shaping the adaptive capacity of local communities. A particular sub-set of these, namely, civil

society organisation<sup>5</sup>, by their very nature and function can make a powerful and unique contribution to this task as they can draw upon a vast base of purpose and cause-driven local constituencies and stakeholders. Examples of CSOs include local self government bodies such as elected municipal councils, urban local bodies, village councils, intermediate governing bodies, various kinds of social and economic associations and NGOs. All adaptation is local and these bodies being closest to the sources of emissions and the impacts of climate change are best placed to do something about it<sup>6</sup>.

#### 6. How Civil Society Organisations (CSOs) can help communities adapt to climate change

6.1. CSOs articulate and represent local interests and constituencies and can mobilise and secure resources for them.

CSOs occupy the spaces between national government, specialised institutions, private actors and the public, by virtue of which they can play effective roles in preparing and helping communities undertake adaptive actions.

Being close to the people and their constituent stakeholders, CSOs can help determine the extent of impact of climate change on local communities as well as their response<sup>7</sup>. In rural areas, for instance, the effects of drought on some farm households can be mitigated where strong equitable water sharing arrangements exist. Similarly, social enclosure of spaces to be reforested or regulation of access to watershed services as an adaptive measure, can be best enforced and sustainably managed by representative local bodies. Furthermore, CSOs provide a unifying and learning forum for their members, are able to articulate and represent their driving concerns to government and other agencies and can serve as intermediary agencies channelling resources between these entities and their constituencies. Successful examples of these are the coordination networks that were set up following the Gujarat earthquake<sup>8</sup> in 2001 and the Indian Ocean Tsunami<sup>9</sup> in 2004 which enabled substantial amounts of resources to be channelled to deserving beneficiaries and ensured that the concerns and preferences of those affected were articulated and heard by the authorities and donors<sup>10</sup>.

6.2. Governance and Development CSOs serve as the link between national and local constituencies mobilise resources and undertake regulatory and planning functions.

CSOs that perform governance and developmental functions act as interlocutors between national level agencies and policy makers on the one hand and their regional and local constituencies on the other. While mediating and implementing national policies and regulations (and providing feedback on their effectiveness),

they also raise public awareness, undertake policy-making, regulatory, and planning functions in sec-tors that are key to adaptation (such as social inclusion and protection, disaster risk reduction, natural resource manage¬ment) as well as mobilise community and private resources. This is because they are entities that local people can identify with, can be more readily accessed and are easier for their constituencies to hold accountable than a "far-away" national entity¹¹. In the United States, despite the Kyoto Protocol not having been ratified, this local "accountability dynamic" has resulted in over a thousand cities undertaking commitments to meet the Kyoto Protocol targets under the Mayors' Climate Protection agreement¹². Such governance related CSOs, together with effective NGOs, can ensure that even where decisive and necessary action for the common good needs to be taken, it remains sensitive and accountable to those adversely affected by it. This provides a much needed pushback channel especially when the poor and voiceless are adversely affected.

6.3. CSOs, especially NGOs, can play an important role in raising awareness, mapping vulnerability and empowering local stakeholders and communities.

At the local level, CSOs and NGOs can play a catalytic role in building up community awareness of climate change and its likely impact on their lives, livelihoods and habitats. They can help build up their capacities to undertake the needed adaptive actions to reduce vulnerability, mitigate risks and build resilience. In rural areas, for instance, they can help communities map and identify their local biodiversity resources with a view to their conservation and sustainable management in order to meet food, medicinal and livelihood needs, especially during times of disasters and crises (droughts, crop failures, epidemics). They can also assist in the establishment of ownership rights over resources that have economic value and familiarise community members with the legal, regulatory and commercial regimes and systems that affect and determine the extent of their access and claims to these resources. In India, informing rural communities of their rights and entitlements under the Biological Diversity Act of 2002 and building up their capacities to capitalise on emerging opportunities through documenting their knowledge and use<sup>13</sup> would be an important adaptive and development measure, especially for indigenous communities, who are largely poor. Similarly, developing early warning systems and contingency plans, conducting drills, organising communities to mobilise resources during disasters and linking them up with local resource and service providers goes a long way towards mitigation risks and building resilience.

6.4. CSOs and NGOs can play a facilitating and advocacy role in securing an enabling regulatory framework in regard to nature based enterprises of the poor.

It is estimated that between 47% - 89% of the livelihood component of rural and forest-dwelling poor households in some large developing countries comes from forests and ecosystem services<sup>14</sup>. The livelihoods of the poor, particularly the rural poor are largely dependent upon nature based enterprises – small holder agriculture, fishing, and forest produce. If the poor are to optimise benefits from these enterprises, they need to have far greater access and secure entitlements to these resources, which in most developing countries is wanting. Despite the passing of the Forest Rights Act in India in 2006<sup>15</sup> which guarantees legal title to four hectares of land to traditional forest dweller households as well as unrestricted access to minor forest produce, progress to date has been slow with only 37% of claimants securing title deeds<sup>16</sup> and the program is being increasingly held hostage by red tape, departmental resistance and vested interests. Additionally, if nature based enterprises of the poor are to become viable, they must also be provided with an enabling regulatory framework as well as resources to support them. Currently, resource regulations, taxes and levies, harvesting quotas, licensing requirements, obligations to sell only to state owned enterprises, etc., largely disadvantage the poor by placing a heavy financial burden on them and restricting their market access<sup>17</sup>.

CSOs, and in particular NGOs, can play an important role in advocating changes in the resource regulatory framework and partnering with the authorities and communities in securing entitlements, resources and favourable access to markets. Such changes alone would significantly raise incomes, reduce poverty and lessen vulnerability to climate change.

6.5. CSOs and NGOs can help mobilise communities and resources for watershed and ecosystems development and sustainable management.

In rural areas, ecosystem services- forests, fisheries, pastures, farm lands – provide most of the wherewithal for livelihoods and sustenance. It is estimated that as much as 80% of a rural household's basket of consumption (food, fodder, fuel, fibre, bio fertilisers, timber, water) is drawn from the local environment they live in. Degradation or loss of the local ecosystem as a result of overexploitation, expropriation or the adverse impact of climate change results in a reduction in these resource streams, thus increasing vulnerability and poverty. Deforestation alone is putting at risk the livelihoods of nearly a billion people who depend on forests for a livelihood<sup>18</sup>. Studies have shown that adopting resource enhancing

practices at the local level can result in farm yield gains of 79% on average, while augmenting the supply of vital environmental services<sup>19</sup>.

CSOs can help protect watersheds and local ecosystems by organising and provisioning rural communities (financially, technically and managerially) to conserve and regenerate their watersheds (their "areas of survival"), guard against illegal access and capture by vested interests, incentivise down-stream users to contribute towards upstream maintenance through PES arrangements and assist authorities in developing resource conservation programs that also advance the interest of the poor. These efforts would not only help reduce poverty, but also advance the goals of nature conservation and climate smart adaptation.

6.6. Competent and experienced NGOs can also assist governments and public agencies in developing and deploying implementable climate smart responses and adaptive action.

While public agencies may be better placed in understanding the science of climate change and how it will likely impact people, competent and experienced NGOs are usually best placed in not only devising adoptable technical and social adaptive strategies but also coordinating and mediating best practices and promising technologies at the community level as well as providing feedback to related public agencies. Thus, an effective partnership between governance agencies, the scientific and technology establishment, public and private resource agencies (local, national and international) and NGOs can go a long way in preparing communities to face the challenges of climate change, facilitate large scale adoption of climate smart adaptive strategies, determine investments, technologies and institutional arrangements that can help reduce vulnerability and risks, build resilience and mitigate the impacts of disasters and extreme events.

One such example that seeks to develop effective rural based climate adaptive strategies and processes that can be easily up - scaled and widely replicated, is a project being piloted by the Watershed Organisation Trust (WOTR)<sup>20</sup>, an NGO, in partnership with public (NABARD)<sup>21</sup>, bilateral (SDC)<sup>22</sup> and private donors, the state government<sup>23</sup>, local governance bodies and 28 village communities (over 26,000 people in 204 sq.kms) in a drought prone region of Maharashtra, India. WOTR is organising these village communities to adopt a suite of integrated climate adaptive strategies. These include regenerating the watersheds, adopting sustainable agricultural and livestock practices, deploying conservation irrigation practices, undertaking water balance studies, devising water sharing arrangements, identifying "green livelihoods" and identifying and conserving local biodiversity.

The NGO is also developing application-oriented technologies to provide meteorology-based crop advisories for irrigation, pest, disease, land and nutrient management that optimise land and water productivity as well as a tool called CASTAAD<sup>24</sup> that evaluates the likely impact of measures in terms of their adaptive value. Such complementary partnerships shorten the learning curve and can help quickly mainstream successful approaches and best practices. In Andhra Pradesh, India, farmers have been taught to monitor their rain and groundwa¬ter and learn new farming and irrigation techniques; this has caused one million farmers to voluntarily reduce groundwater consumption to sustainable levels<sup>25</sup>.

### 7. Towards a multi-tier, multi-stakeholder institutional framework for adaptive action

The complexity and scale of the challenge that climate change poses calls for knowledge sharing, the pooled and coordinated efforts of all stakeholders, across sectors and across tiers beginning from the household and local community and extending to the national, regional and international levels, if we are to ensure effective adaption and disaster mitigation.

The synergistic potential catalysed by such multi-stakeholder and multi-tier collaborations and the need for a coordinated effort became evident during the earthquake and tsunami disasters in the Indian states of Gujarat and Tamil Nadu in 2001 and 2004 respectively. These natural disasters led, in turn, to Parliament setting up of the National Disaster Management Authority (NDMA)<sup>26</sup>. The NDMA has since developed an institutional framework and protocols that mandate and facilitate coordination and collaboration between all stakeholders at all levels and has specifically included a role for NGOs and local governance bodies (CSOs)<sup>27</sup>.

Such institutional frameworks for climate change adaptation should be developed in a consultative and participatory manner involving local communities, representative groups of the poor and vulnerable, CSOs including NGOs and various stakeholders - governance, resource and knowledge providers - from the public and private sectors. Such broad consultations would allow for and promote regional and international collaboration since climate change does not respect man-made administrative and political boundaries. In each country, a state agency with legislative backing, public credibility and convening power should be identified and tasked with coordinating and facilitating integration across levels, sectors and agencies. The various thrust areas and activities of the National Adaptation Programs of Action (NAPAs) will have to be harmonised and broken down into implementable packages at the lowest level. Inclusion of CSOs and NGOs in such arrangements can facilitate community level engagement and enhanced

ownership of measures to be undertaken. It can also promote accountability, ensure that the poor benefit and enable regular feedback that can help fine tune interventions and anticipate emergent events – all of which constitute the essential preconditions for successful implementation of the National Adaptation Programs of Action (NAPAs).

#### References

<sup>1</sup>The World Bank, World Development Report, 2010, Development and Climate Change, pg. 19

<sup>2</sup>Richard J.T. Klein, et al, , Portfolio screening to support the mainstreaming of adaptation to climate change into development assistance, Tyndall Centre for Climate Change Research Working Paper 102, February 2007, p.5.

<sup>3</sup>Such as genes having drought and disease resistance as well as tolerance to salinity; medicinal and industrial application compounds.

<sup>4</sup>Op. Cit, p.5

<sup>5</sup>Civil Society Organizations in this paper are understood as groups (be they representative, elective, associational, purpose or cause driven) that are basically non-profit in orientation, undertake specific functions, represent identified interests or causes and seek the common good, either of the wider public or of their constituent members.

<sup>6</sup>Alber, G.and K.Kern, "Governing Climate Change in Cities: Modes of Urban Climate Governance in Multi-Level Systems." Paper presented at the OECD Conference on Competitive Cities and Climate Change, Milan, October 9–10, 2008

<sup>7</sup>Arun Agrawal, Catherine McSweeney and Nicolas Perrin, "Social Development Notes, No. 113 / July 2008

<sup>8</sup>The network of NGOs was known as the Kutch Nav Nirman Abhiyan, popularly called "Abhiyan".

<sup>9</sup>In Tamil Nadu, more than 500 NGOs came together and formed the NGO Coordination and Resource Centre (NCRC).

<sup>10</sup>National Disaster Management Authority, National Disaster Management Guidelines, Role of NGOs in Disaster Management, September 2010, p.2.

<sup>11</sup>The World Bank,World Development Report, 2010, Development and Climate Change, pg. 20.

<sup>127</sup>Ibid, Box 7 on pg. 21.

<sup>13</sup>This is done through the formulation of locally ratified People's Biodiversity Registers (PBRs) which is a detailed and scientific record of the local biodiversity resources at the community level, their use as well as local knowledge systems.

<sup>14</sup>TEEB (2010), The Economics of Ecosystems and Biodiversity: Mainstreaming the Economics of Nature: A synthesis of the approach, conclusions and recommendations of TEEB,p. 15.

<sup>15</sup>The formal title of Act is "The Scheduled Tribes and Other Traditional Forest Dwellers (Recognition of Forest Rights) Act, 2006. https://tribal.nic.in/writereaddata/mainlinkFile/File1270.pdf,pg.35.

<sup>16</sup>https://tribal.nic.in/writereaddata/mainlinkFile/File1270.pdf,pg.35.

<sup>17</sup>John Talberth, Peter Hazlewood, Gregory Mock, Poverty Eradication and the Green Economy Pathway, WRI Discussion Paper, January 2011, p.17.

<sup>18</sup>FAO, Better Forestry, Less Poverty, 2006, p.1, ftp://ftp.fao.org/docrep/fao/009/a0645e/a0645e04.pdf

<sup>19</sup>Pretty, J., Nobel, A.D., Bossio, D., Dixon, J., Hine, R.E., Penning De Vries, F.W.T., Morison, J.I.L. Resource Conserving Agriculture Increases Yields in Developing Countries. Environmental Science and Technology, 40, (2006), p. 1114.

<sup>20</sup>www.wotr.org

<sup>21</sup>The National Bank for Agriculture and Rural Development (NABARD)

<sup>22</sup>The Swiss Development Cooperation Agency (SDC)

<sup>23</sup>The Government of Maharashtra

<sup>24</sup>Climate Adaptive Sustainable Development Assessment and Adjustment Tool (CASDAAT)

<sup>25</sup>The World Bank,World Development Report, 2010, Development and Climate Change, pg. 17.

<sup>26</sup>Set up under the Disaster Management Act of 2005.

<sup>27</sup>National Disaster Management Authority, Govt. of India, National Disaster Management Guidelines- Role of NGOs in Disaster Management, September 2010, Chapter 1, section 1.2.3, p. 3

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