

Adaptation in Retrospect

Perspectives from Successful Community-Based Adaptation Interventions



Photo: AIDMI.

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Advocating Disaster Resilience in South Asia since 2005



New CDKN Guide

*What does it take to mainstream disaster risk management in key sectors?**

Climate-related disasters are becoming more frequent and negatively impacting development progress across the world. People are already experiencing the impacts of climate change through slow onset changes, for example sea level rise and greater variability in the seasonality of rainfall, and through extreme weather events, particularly extremes of heat, rainfall and coastal storm surges. As the latest reports by the IPCC tell us, greenhouse gases that have already been emitted mean that the world will experience several decades of climate change, regardless of current efforts to reduce emissions.

Actions towards development must be compatible with a changing climate. This requires each country to have a plan to avoid the losses and damages associated with extreme weather and to make disaster resilience central to economic and social policies. Mainstreaming disaster risk management within the policies and programmes of different

sectors ensures that the effects of disasters are minimised. At the same time, it enables governments to ensure that these policies and programmes do not put people at risk.

This new CDKN Guide – by Aditya Bahadur and Amy Kirbyshire at Overseas Development Institute, Dina Khan of LEAD and Mihir Bhatt of the All India Disaster Mitigation Institute (AIDMI) – draws on the experience of CDKN's programmes on climate-related disaster risk management (DRM) within the context of climate compatible development. We explore why mainstreaming DRM into development policy has had widely varying results between countries. In doing so, we attempt to delve beneath the surface of mainstreaming and identify the ways forward for integrating short- and long-term considerations for disaster risk reduction in important development sectors.

We demonstrate that effective mainstreaming requires a supportive policy environment, leadership, knowledge of the relevant risks, risk management techniques that are appropriate to each context, consistent financing and innovation. We draw on empirical examples and relevant literature to suggest how to achieve these elements and presents a clear way forward for governments seeking to mainstream disaster risk across different sectors.

The key messages for governments are:

Focus on amending and altering institutional practices:

- Reduce compartmentalisation, initially through small-scale strategic coordination.

- Include mainstreaming in the remit of key officials.
- Organise training for staff charged with planning functions in ministries.
- Create incentives for action on mainstreaming.

Develop enhanced processes for understanding risk:

- Ensure that the planning of policy processes is open to diverse stakeholders.
- Mandate risk evaluation, including through legislation.
- Promote risk evaluation methods that are not data intensive.
- Work closely with people who will use the data emerging from risk assessments.
- Access and share risk assessment tools.
- If needed, look at the feasibility of establishing technical bodies for risk assessment.

Acknowledge that mainstreaming processes are highly political:

- Give the intended beneficiaries of mainstreaming processes a voice.
- Use the available tools to map political risks.
- Build political momentum by understanding the costs and benefits of mainstreaming.

Build effective partnerships:

- Explore vertical partnerships between higher and lower levels of government for conducting risk analysis.
- Shape business opportunities for private sector involvement in risk management.
- Enhance interactions between staff in sectors and organisations with experience in mainstreaming. ■

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ABOUT THIS ISSUE

Climate change has left communities and countries vulnerable to various kinds of hazards on an unprecedented scale. There is an urgent need to evolve community-based approaches, mechanisms and strategies that can safeguard the interests of communities against climate change.

This issue of Southasiadisasters.net focuses on the theme of community-based adaptation. It entails an overview of the successful community based adaptation interventions from the developing world. A must read for all interested in understanding the direction in which the global resilience to climate change is headed at the community level. ■

* Download the full report:

http://cdkn.org/wp-content/uploads/2014/03/KN_Guide_Mainstreaming_dr_management_final_rev_web-res.pdf

Women, Rural Livelihoods, Risks in India: Landesa Promotes Community Based Adaptation

We are going through a period of progressively worse climatic disasters, and climate change is going to induce an increase in the frequency, ferocity and unpredictability of these extreme weather events in the future. India is particularly susceptible to changes in weather patterns and extreme weather events because a large proportion of its rural population is dependent on a previously stable and recognizable weather pattern. In addition, the negative effects of climate change and extreme weather events are gender imbalanced; these are borne proportionally more by women than men. The reasons for such an imbalance in effects borne and lives lost are entrenched in Indian women's economic and social rights. Cultural norms hinder vital skills like swimming, while traditional attire can hinder swift and flexible movement during extreme weather events. Lack of women-friendly shelters tend to deter women from using them during storms and floods, putting them in additional danger.

Furthermore, women's access to loans and insurance are limited as land ownership is very low, despite the fact that the proportion of women taking part in agricultural labour is very high. As a result there is a lack of safety nets which makes it harder for women to adapt to climate change and its negative impacts. Acquiring land for women is more difficult because of roadblocks such as discrimination in access to land registration systems, especially for women who are poor and illiterate. Even the agricultural support received from the government agricultural department in terms of 'information, training and materials'



Women carry out a big proportion of agricultural labour but very few own land or have access to safety nets or the means to mitigate and/or adapt to climate change and extreme weather events.

have a gender bias. Awareness of the availability of government support is also gender biased, with a much smaller proportion of women being aware of government programmes.

Moreover, everyday tasks such as collecting water for household use is traditionally carried out by women, and change in rainfall patterns is going to exacerbate the already long and difficult task. Policies formulated to ameliorate the present and future of the most affected, need to consider the gender biased damages that occur as a result of climate change and resulting extreme weather events. Policymakers need to create gender segmented policies for the near

future, and help reduce the gender differences in the long run.

Landesa has been working on increasing land rights to women in Odisha and West Bengal. In addition, Landesa has developed materials for women's land literacy so that they can understand and access their rights to land. By increasing access and ownership of land, women can benefit in many ways and can decrease their vulnerability to the negative impacts of climate change. This has emerged as a potent community based adaptation strategy. ■

– Shantanu Gaikwad,
Landesa, New Delhi

What Makes CDKN Unique

The press coverage of the IPCC report on Impacts, Adaptation and Vulnerability has emphasised the Report's stark warning on the risks of climate change (Box 1), leavened by the Report's optimism about the potential of adaptation and of what it describes as 'climate-resilient' pathways. That is probably the media positioning the IPCC hoped for: it's OK to panic about climate change, provided you can channel your emotion into doing something about it!

At the same time, there are some important caveats. One caught my eye, which is the statement on Pg 19

of the Summary for Policy-Makers that 'for most economic sectors, the impacts of drivers such as changes in population, age structure, income, technology, relative prices, lifestyle, regulation, and governance are projected to be large relative to the impacts of climate change (*medium evidence, high agreement*).'

This statement needs to be qualified, of course. If you happen to be living in a place which finds itself threatened by imminent disappearance beneath the waves, then it is not much consolation to be told that climate change at global level is unlikely to

trump the impact of technology or population growth. The IPCC report makes it very clear that impacts of climate change vary by location. There will be some very little affected, some whose futures are decimated. The poor, and those living in marginal environments, are more likely to be in the latter group.

Nevertheless, it makes intuitive sense that the impact of climate change needs to be set alongside other forces which impact on ecosystems and livelihoods. We are looking forward 35 years to 2050 and 85 years to 2100. Think how much the world has changed in the past 35 years, never mind 85. India's population, to take just one example, has just about doubled in that time. The urban population has multiplied by three times. The economy has multiplied by six times, and per capita income about four times. Energy use has also gone up four times. And, of course, there were no personal computers in 1979, or mobile phones. Truly, as LP Hartley wrote in 1953, in his novel *The Go Between*: 'the past is a foreign country: they do things differently there'. The future is equally likely to be a foreign country: more people, on average richer, possibly older, more urban, more mobile globally, and with access to technologies not even dreamed of today.

Does that not provide a challenge to climate planning? At CDKN, we think it does, and our message is clear: don't start with climate, but start with development. What trajectory is the region, country, settlement, household likely to be on without climate



Box 1. Key risks identified by the IPCC Report on Impacts, Adaptation and Vulnerability

- Risk of death, injury, ill-health, or disrupted livelihoods in low-lying coastal zones and small island developing states and other small islands, due to storm surges, coastal flooding, and sea-level rise.
- Risk of severe ill-health and disrupted livelihoods for large urban populations due to inland flooding in some regions.
- Systemic risks due to extreme weather events leading to breakdown of infrastructure networks and critical services such as electricity, water supply, and health and emergency services.
- Risk of mortality and morbidity during periods of extreme heat, particularly for vulnerable urban populations and those working outdoors in urban or rural areas.
- Risk of food insecurity and the breakdown of food systems linked to warming, drought, flooding, and precipitation variability and extremes, particularly for poorer populations in urban and rural settings.
- Risk of loss of rural livelihoods and income due to insufficient access to drinking and irrigation water and reduced agricultural productivity, particularly for farmers and pastoralists with minimal capital in semi-arid regions.
- Risk of loss of marine and coastal ecosystems, biodiversity, and the ecosystem goods, functions, and services they provide for coastal livelihoods, especially for fishing communities in the tropics and the Arctic.
- Risk of loss of terrestrial and inland water ecosystems, biodiversity, and the ecosystem goods, functions, and services they provide for livelihoods.

Source: http://ipcc-wg2.gov/AR5/images/uploads/IPCC_WG2AR5_SPM_Approved.pdf

change? What is the likely perturbation in that trajectory that climate change will cause? And what actions should be taken, when, to modify the current or likely future trajectory?

We call this approach planning for 'climate compatible development'. It is necessarily dynamic, and causes us to think about the future in new ways. For example, we might be concerned with the impact of extreme weather events on a village, and can see that the village today is of a certain size, with a certain pattern of activity. But if we are thinking ahead, then the important information does not concern the characteristics the village has today, but rather those it will have in, say, 2050. Will the village have grown – or perhaps contracted, as people move to town? Will agriculture be the main activity, as it is today – or perhaps the village will have developed new industries or service sectors, perhaps linked to the nearest urban centre? Will tree cover and the integrity of water sources remain the same over decades? Maybe. Probably not.

Similar questions can be asked at the national level, which is why the starting point for climate compatible development is often the long-range strategic plan of a country. There are problems, however. The future may be different but it is uncertainly so. The changes we expect may or may not come to pass. We look through a glass darkly. Furthermore, the present should not be held hostage to the future. Countries and communities often have immediate need for better disaster prevention and preparedness.

So, what should we do? The IPCC Report proposes some principles to underpin adaptation planning, reproduced in Box 2. These emphasise the context-specific nature of adaptation planning, and the need work systematically at different levels

Box 2. Principles of adaptation from the IPCC Report on Impacts, Adaptation and Vulnerability

- Adaptation is place and context specific, with no single approach for reducing risks appropriate across all settings.
- Adaptation planning and implementation can be enhanced through complementary actions across levels, from individuals to governments
- A first step towards adaptation to future climate change is reducing vulnerability and exposure to present climate variability. Strategies include actions with co-benefits for other objectives.
- Adaptation planning and implementation at all levels of governance are contingent on societal values, objectives, and risk perceptions.
- Recognition of diverse interests, circumstances, social-cultural contexts, and expectations can benefit decision-making processes
- Decision support is most effective when it is sensitive to context and the diversity of decision types, decision processes, and constituencies.
- Existing and emerging economic instruments can foster adaptation by providing incentives for anticipating and reducing impacts.
- Constraints can interact to impede adaptation planning and implementation
- Poor planning, overemphasizing short-term outcomes, or failing to sufficiently anticipate consequences can result in maladaptation.
- Limited evidence indicates a gap between global adaptation needs and the funds available for adaptation.
- Significant co-benefits, synergies, and trade-offs exist between mitigation and adaptation and among different adaptation responses; interactions occur both within and across regions.

Source: http://ipcc-wg2.gov/AR5/images/uploads/IPCC_WG2AR5_SPM_Approved.pdf

and with different stakeholders. They also emphasise current needs. I would add five additional items to the IPCC's already long list:

1. Plan for the long-term, integrating present and future needs;
2. Integrate the principle of 'no regret' into adaptation planning, in the sense that current investments should facilitate and not impede long-term change;
3. Recognise future uncertainty and create multiple pathways to connect to diverse futures;
4. Adopt a just-in-time approach to investment, in order to maximise the amount of information available before large cheques are signed;
5. Build systematic learning and re-programming into all adaptation programmes.

These principles apply as much to mitigation planning and indeed to development planning as they do to adaptation. They reflect the idea of 'process planning' rather than 'blueprint planning', and build on ideas of complexity and non-linearity which have come to prominence in development thinking.

Perhaps the most important lesson is that adaptation planning is like driving a car. You have to watch the road for the potholes immediately in front, but also watch the road unrolling further ahead, and keep in mind your eventual destination. ■

– **Simon Maxwell,**

Executive Chair,
Climate and Development Knowledge
Network (CDKN)

Reducing Disaster Risks: Creating Community Risk Mitigation Champions

Aga Khan Planning and Building Service India (AKPBS-I), a non-profit which works in the built environment sector has implemented post-earthquake reconstruction programs in Kutch (2001) and Kashmir (2005) and post-Tsunami (2004) reconstruction in coastal Andhra Pradesh. The death and destruction caused by these disasters severely disrupted the lives of the people, causing enormous trauma and shook their confidence in prevalent construction technologies thereby severely affecting local construction activities. The need of the hour was to rebuild this confidence among the communities through education, demonstration, capacity building and training in improved and disaster-resilient construction practices using local resources. AKPBS, I helped the communities in construction, repairs & retrofitting of housing, public buildings and public infrastructure as well as restoration of fresh water sources and provision of sanitation facilities in the disaster affected areas, by training and deploying local craftsmen, masons and tradesmen.

The primary objective of the program was effective demonstration of safe construction practices to communities



Training of village masons on earthquake resistant construction techniques at Kashmir.

living in disaster-prone areas for improving their resilience to future disasters. It included mobilising community partnership for wider acceptance of simple and safe

construction practices and promotion of value-added local and vernacular building practices as appropriate technology.

Key Lessons Learned

- Reconstruction program strategies are dictated by the specific skills and capacities existing in local communities.
- Scientific construction technology adapted to local building practices and using local skills results in more sustainable acceptance.
- Good practices in construction demonstrated through real-life models receive community buy-in more readily - "Seeing is believing".
- Capacity building linked with livelihood generation provides better acceptability.
- Time required for mobilisation of communities Should be factored in the time required for construction/ reconstruction.
- Need to build post-program impact analysis after completion of project.

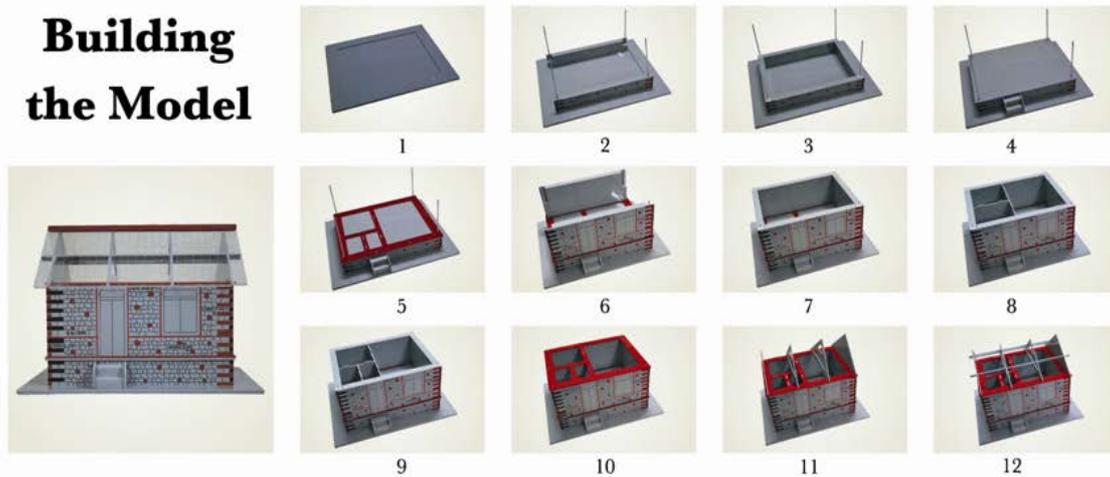
Reconstruction strategies were based on assessment of prevailing construction knowledge through baseline surveys and mapping of resources, namely masons, available in the community. Solutions were formulated with community's participation, based on their specific housing needs. These included field and classroom training and capacity building of local resource persons, demonstration of safe building technology using local materials and skills by creating one home per

village for the most severely affected and vulnerable family, formulating a policy for extending subsidy and assistance for promoting safe construction and finally, dissemination and documentation of safe building practices.

Results of the initial assessment showed large gaps in knowledge of safe construction practices among skilled craftsmen as well as laypersons. An inclusive action plan for reconstruction involving

communities was initiated to create awareness on the importance of safe construction. During and shortly after program implementation, the demand for safe construction methods grew exponentially through advocacy by the trained masons and opinion leaders who promoted the new technology using locally available materials. The sustainable impact of the program was thus the creation of disaster resilient communities. ■

Building the Model



This earthquake resistant house demonstration kit has been developed as a part of interventions of the Aga Khan Development Network, Jammu and Kashmir Earthquake Reconstruction Programme, under implementation in 17 earthquake affected villages of the Uri Block, District Baramulla. Programme activities include training and capacity building of village masons on earthquake resistant construction techniques, support to the communities for reconstructing their homes, rebuilding of select public infrastructure, restoring and enhancing livelihoods, and building community capacity for disaster response and preparedness.

The Aga Khan Foundation and the Aga Khan Planning and Building Service, India are agencies of the Aga Khan Development Network (AKDN), a group of development agencies with mandates ranging from health and education to architecture, culture, microfinance, rural development, disaster reduction, the promotion of private-sector enterprise and the revitalisation of historic cities. Working in over 30 countries, the Network's underlying impulse is the ethic of compassion for the vulnerable in society, and its agencies and institutions work for the common good of all citizens, regardless of origin, gender or religion.

For more details - www.akdn.org/india

Demonstration kit to promote seismic resistant reconstruction.

- Surekha Ghogale, CEO,
Aga Khan Planning and Building
Service, India

ActionAid Kenya: Ways in Engaging Communities in Humanitarian Crisis

In May 2011, Kenya declared the drought affecting the northern and eastern regions of Kenya a national disaster. By the end of August 2011, the number of food insecure people in rural Kenya was assessed to have increased to 3.75 million from 2.4 million at the beginning of the year (Government of Kenya, 2011a). Worst affected were the ASALs of north and north eastern Kenya, where rates of global acute malnutrition in some areas exceeded emergency thresholds.

Following the drought, AAIK launched a 3 year Comprehensive Drought and Resilience Plan (KDRP) in July 2011 in response to this crisis after an extensive consultative process between communities and partners. The response embraced a multi-faceted and multi-sectoral approach requiring diverse skill sets to address the needs of the affected communities. It employed both short and long-term interventions geared towards addressing the immediate needs and protection of rights while building resilience of affected communities to drought and crisis. In all the interventions, affected communities play a central role.

Information sharing: During the drought, Infoasaid and ActionAid launched an innovative communications project to support ActionAid's emergency programmes in Isiolo, Kenya by improving communication with drought affected populations. To overcome the numerous challenges in rapidly communicating with large numbers of people in a vast area with poor roads and security incidents, the project used several communication platforms to send and receive information. These platforms



RCs using Frontline SMS to receive information on food distribution dates, rations sizes, distribution points etc.

included two mobile phone technology solutions– Frontline SMS and Freedom Fone–and community bulletins. Underlying the project's design was ActionAid and infoasaid's shared belief that communication is an aid-deliverable in its own right.

Promoting accountability: The link between information and accountability to crisis-affected communities is at the heart of ActionAid's human rights-based approach. If information is not shared with communities how can an organization guarantee transparency? And if an organization does not listen to communities, engage with them in a dialogue and ensure that their feedback is acted upon, how can that organization claim to be accountable?

By providing communities with vital information, and enabling them to seek information in turn, submit feedback, and interact with humanitarian organizations,

communication can help communities become greater participants in their own recovery process. Communicating with crisis-affected communities is not synonymous with accountability but it does promote it.

ActionAid Kenya uses transparency boards to display share on budgets, project activities among others; complaints boxes and facilitate participatory reviews by communities.

Community participation: Women-led Relief committees (RCs) act as a link between ActionAid Kenya, the Field Officers and the community. Relief Committee members live in the community, are recipients of relief aid, and are elected by the community. The number of RCs varies according to the number of food aid recipients in an area and the distance between villages. Each RC has a head and a secretary, both of whom represent a given Food

Distribution Point. The RCs perform a number of roles, including:

- Participating in the selection of relief aid recipients;
- Preparing registers of community members who receive food aid;
- Providing the community with information on when food will be distributed;
- Checking the register and calling out names during distribution;
- Distributing food;
- Counting and checking the amount of food that has been delivered;
- Informing ActionAid about the welfare of the communities.



Women RCs distributing food.

Promoting DRR and climate change adaptation; building local capacities.

Participatory Vulnerability Analysis is the hallmark of AAK intervention on crisis with communities being facilitated to identify the causes of their vulnerabilities to drought and come up with practical actions to address them. Government representation is critical in these processes. The generated plans are used as advocacy materials for disaster risk reduction and climate change adaptation at community and county levels. Community disaster management committees have also been formed whose role is to enhance together with government institutions and other stakeholders drought preparedness at community level.

Policy Engagement; The citizens charter:

The government of Kenya has developed useful frameworks to address vulnerability to climate induced and other shocks in Kenya. The ASAL policy, the Irrigation Act and Strategy among other legislations constitutes some useful frameworks, implementation aside. The Environmental Management and Coordination Act (EMCA) further provide a base for negotiating ecological justice. ActionAid International Kenya initiates a Social Action Research to generate better understanding on key policy issues

and concerns from the peoples perspective in order to understand drought, its trend, extent and impact on smallholder farmers and pastoralists, particularly women; recommend actions for program and policy interventions on comprehensive resilience building.

On completion of the research and interaction with drought affected communities, the report is

disseminated, validated and adopted at national level with key stakeholders including civil society organizations, state actors, UN agencies and community representatives amongst others. The community voices together with the policy gaps pulled out leads to generation of the citizens' demands to government, civil society organizations and donors (citizens Charter). ■

- Elizabeth Righa Wakilo,
ActionAid, Kenya

Inputs in HFA2: Building the Resilience of Nations and Communities to Disasters

The All India Disaster Mitigation Institute (AIDMI) welcomes the recently circulated 'Asia-Pacific Input Document for HFA2: Building the Resilience of Nations and Communities to Disasters' and finds this work to be timely, grassroots' oriented and far reaching for the Asia Pacific region.

Greater focus can be given in this document to South-South Opportunities in Asia Pacific; small and marginal enterprises can be more highlighted in the definition of corporate and business entities; and minimum standards for local climate smart disaster risk management can be spelt out for all 7 Key Areas. This input is the last chance for Asia Pacific to find out what is being left behind in the HFA2 process in the region; how central sustainability – economic and ecological – is to HFA2 and is this draft good enough to generate green and clean transformative jobs and growth in Asia-Pacific?

AIDMI invites individuals and institutions to detail out the comments and revisions. For more information kindly contact Mr. Vishal Pathak at bestteam@aidmi.org as soon as possible. ■

To view the input document please follow the link below:
http://www.preventionweb.net/documents/posthfa/HFA_input_document_Asia_Pacific.pdf

Resilience to Climate Change and Disasters in Odisha

The Coastal Interventions on Community Based Adaptation

Promoting community participation and solutions to natural resource management and livelihoods security, the Regional Centre for Development Cooperation (RCDC), a Rights-based NGO has been working for the underprivileged people of Odisha for the past two decades. "To support and facilitate the struggle for rights of the poor and marginalised community over resources, opportunities, institutions and processes to improve their quality of life, economic status and ensure social uplift and environment sustainability", highlights the organization's mission.

Climate Justice – Resilience to climate change and disasters unit of RCDC has made certain pioneering interventions along with adequate advocacy and research initiatives in the last few years. In the coastal districts of Odisha, two key programmes on resilience to climate change and disaster risk reduction have been carried out which includes the Kendrapada-Jagatsinghpur belt (devastated by the 1999 Super Cyclone and the recent Phailin cyclonic storm), as well as the Puri district where natural as well as human-induced vulnerabilities have increased manifold the risk of disasters.

'Paribartan' a multi-country initiative involves the two countries- India and Bangladesh for "Increasing Resilience and Reducing Risk of Coastal Communities to Climate Change and Natural Hazards in the Bay of Bengal", supported by European Union and Concern Worldwide. The specific objective of this on-going five year project has been to build resilience of coastal communities



Pond Renovation and Water harvesting system.

along the Bay of Bengal by increasing their ability, along with that of authorities and organizations, to prepare for and adapt to the impacts of natural hazards and climate change.

The significant achievements made during the last two and half years of this project have been–

- *Increased capacity of state and non-state actors leading to the integration of appropriate Disaster Risk Reduction and climate change adaptation activities into relevant multi-sectoral development plans.* Implementation of appropriate Disaster Risk Reduction and Climate Change Adaptation strategies, in line with Bangladesh Climate Change Strategy and Action Plan (BCCSAP), the National Adaptation Programme of Action (NAPA) and India's National Action Plan on Climate Change (NAPCC).

- *Increased capacity of target communities to withstand, respond to and recover from the impact of hazards through a number of preparedness measures.*

Ten member Task Forces have been formed in 84 villages and trained on Early Warning, Search and Rescue, First Aid, Water and Sanitation and Shelter Management. Early warning kits have also been distributed along with many other such interventions.

- *Pilot projects implemented to demonstrate practical methods for climate change adaptation.*

The pilot options implemented include: Integrated Rice Fish Culture, Homestead Garden (Vermicomposting and Organic Practice), Rain Water Harvesting, Green Belt and Coastal Bio Shield and Fuel Efficient Stoves.

- *Lessons learnt are promoted and shared amongst practitioners and*

policy makers at state, national, regional, and international levels

The PRAYAS initiative which concentrates on 'Developing models and strategies for climate change adaptation and reducing vulnerabilities of communities to climate change and disaster risk through integrated water management in disaster prone Puri district of Odisha', was implemented by RCDC in partnership with Society for Women Action Development (SWAD) and funding support from UNDP and Australian Aid (AusAid). Three particular pilot livelihood initiatives among many others, for adaptation to climate risks, highlight the major impact of this project.

- *Developing the Khabar-Nala drainage system in the villages of Bambarada and Dokhandpur*

The renovation of this 12 km long drain has brought a respite to the persistent water-logging issues prevalent in the coastal area of Puri which witnesses regular floods and acute water logging situations. Higher agricultural yields which have more than tripled after the intervention have had a positive impact on the livelihoods of the people. Curbing migration and

reducing health hazards have been certain other achievements of this drain renovation.

- *Community intervention on pond renovation on CCA and DRR*
Restoration of the community pond which is the only source of fresh water in the village of Dokhandpur has provided the people with clean and safe drinking water. Storage of water which was not possible during the summer months has become a possibility after this intervention.
- *Concentration of rain water harvesting structure*
Provision of safe and hygienic drinking water has been achieved through this initiative. A water pump house has been installed connecting it to the pond, to provide clean drinking water to the locals in the village. Channelization of water was done with the help of pipes leading to water tanks placed at two different locations in the village providing easier access to them. This helped regulate the usage of water as it could be controlled by the taps.

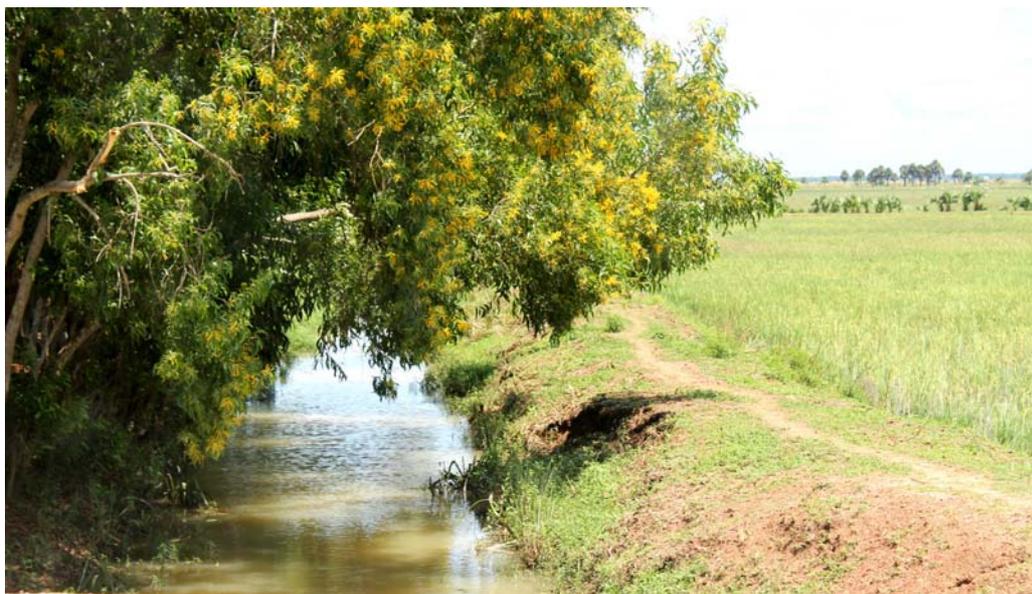
Progressing from the PRAYAS project a second phase in

collaboration with UNDP and implementing partners RCDC and SWAD has been initiated. The current programme focuses on (I) Developing coordination and larger programmatic inclusion between Water Resources, Rural Development, Urban Development and Agriculture Department of Odisha; (II) Participatory drainage renovation and water resource management; (III) Establishing climate change resilient livelihoods models and (IV) Initiating an advocacy campaign on mission mode for integrated water resource management.

Human resilience to climate change in the coastal areas can be strengthened through adaptive management of resources. The multiple challenges faced by the communities can be dealt with a focus on reducing risks and mitigation. RCDC's future plans are guided by these principles to provide a resilient environment to the vulnerable communities harbouring the shores of disaster prone coasts in Odisha. ■

- Basundhara Tripathy,

Programme Officer - Climate Change and Integrated Water Management, RCDC, Bhubaneswar, Odisha



Khabar-Nala Drain renovated (12 kms) in Dokhandpur Village.

CARE International's Framework for Community-Based Adaptation

Acknowledging the importance of community based adaptation strategies, Care International has come up with a framework that helps relevant stakeholders to identify adaptation strategies at different levels. This framework consists of certain enabling factors needed for effective community based adaptation to take place. These factors are meant to guide and inform the adaptive capacity building process of targeted communities. They include¹:

1. Promotion of climate-resilient livelihoods strategies;
2. Disaster risk reduction strategies to reduce the impact of hazards;
3. Capacity development for local civil society and governmental institutions; and
4. Advocacy, social mobilisation and empowerment to address the underlying causes of vulnerability

This framework is represented in the following format²:

CARE's Framework for Community-Based Adaptation				
	Climate-Resilient Livelihoods	Disaster Risk Reduction	Capacity Development	Addressing Underlying Causes of Vulnerability
National Level	<ul style="list-style-type: none"> • Government is monitoring, analyzing and disseminating current and future climate information related to livelihoods • Climate change is integrated into relevant sectoral policies • Climate change is integrated into poverty reduction strategy and/or other development policies 	<ul style="list-style-type: none"> • Government is monitoring, analyzing and disseminating disaster risk information • Government is engaged in planning and implementing disaster risk management (including prevention, preparedness, response and recovery) • Functional early warning systems in place • Government has capacity to respond to disasters 	<ul style="list-style-type: none"> • Government has capacity to monitor, analyze and disseminate information on current and future climate risks • Government has mandate to integrate climate change into policies • National policies are rolled out at regional and local levels • Resources are allocated for implementation of adaptation-related policies 	<ul style="list-style-type: none"> • Government recognizes specific vulnerability of women and other marginalized groups to climate change • Policy and implementation is focused on reducing these vulnerabilities • Civil society is involved in planning and implementation of adaptation activities
Local Government/Community Level	<ul style="list-style-type: none"> • Local institutions have access to climate information • Local plans or policies support climate-resilient livelihoods • Local government and NGO extension workers understand climate risks and are promoting adaptation strategies 	<ul style="list-style-type: none"> • Local institutions have access to disaster risk information • Local disaster risk management plans being implemented • Functional early warning systems in place • Local government has capacity to respond to disasters 	<ul style="list-style-type: none"> • Local institutions have capacity to monitor, analyze and disseminate information on current and future climate risks • Local institutions have capacity and resources to plan and implement adaptation activities 	<ul style="list-style-type: none"> • Local planning processes are participatory • Women and other marginalized groups have a voice in local planning processes • Local policies provide access to and control over critical livelihoods resources for all
Household/Individual Level	<ul style="list-style-type: none"> • People are generating and using climate information for planning • Households are employing climate-resilient agricultural practices • Households have diversified livelihoods, including non-agricultural strategies • People are managing risk by planning for and investing in the future 	<ul style="list-style-type: none"> • Households have protected reserves of food and agricultural inputs • Households have secure shelter • Key assets are protected • People have access to early warnings for climate hazards • People have mobility to escape danger in the event of climate hazards 	<ul style="list-style-type: none"> • Social and economic safety nets are available to households • Financial services are available to households • People have knowledge and skills to employ adaptation strategies • People have access to seasonal forecasts and other climate information 	<ul style="list-style-type: none"> • Men and women are working together to address challenges • Households have control over critical livelihoods resources • Women and other marginalized groups have equal access to information, skills and services • Women and other marginalized groups have equal rights and access to critical livelihoods resources

1 CARE Community Based Adaptation Toolkit, http://www.careclimatechange.org/files/toolkit/CARE_CBA_Toolkit.pdf

2 CARE Community Based Adaptation Toolkit, http://www.careclimatechange.org/files/toolkit/CARE_CBA_Framework.pdf

Risk Transfer as a Community Based Adaptation Mechanism

Experience in Odisha

New evidence points to the increasing culpability of climate change in exacerbating the severity and uncertainty of natural disasters. Thus, there is a need to address the overlap between climate change adaptation and disaster risk reduction. Poor coastal communities are particularly vulnerable to the adverse impacts of climate change. Therefore, there is an underlying need to evolve community based adaptation strategies for such communities.

Financial stability (or the lack of it) is one of the most debilitating factors that push and entrap vulnerable people into the vicious circle of poverty in the aftermath of an extreme event. This necessitates the evolution of financial community-based adaptation strategies to trump the vulnerabilities imposed by climate change on a community. One such community-based adaptation strategy is risk transfer through microinsurance. The All India Disaster Mitigation Institute (AIDMI) recognized the importance of risk transfer mechanisms as an effective community-based adaptation strategy and launched a project called *Risk Transfer in Odisha* in an iterative manner through 2012-2014. The entire process of championing this community based adaptation intervention is entailed below.

AIDMI got an opportunity to devise vulnerability reduction programmes for coastal communities in the Indian state of Odisha that were grappling from floods during the monsoon



Photo: AIDMI.

Ms. Nibedita Nayak, Head, State Social Welfare Board, Odisha presented the settlement cheques to the *Afat Vimo* policyholders.

season of 2011 (June to September 2011). AIDMI viewed this as a perfect opportunity to pilot a risk transfer mechanism with the affected coastal communities. However, piloting a risk transfer mechanism without gauging the understanding and acceptance level of such a mechanism would be an incomplete intervention, one that is doomed to be unsustainable.

Thus, to pursue the imperative of success and sustainability in this intervention, AIDMI along with other project partners like Concern Worldwide, India and Society for Women Action Development (SWAD) decided to first hold an assessment and scoping study to map out the needs of the affected communities and to identify the extent to which these communities are exposed to the adverse impacts of climate change. This assessment and

scoping study revealed the need of financial coping mechanisms among the affected communities. This implied that there would be a real potential of acceptance of a risk transfer mechanism meant to build the financial resilience of the affected communities.

The next logical step was to conduct a series of workshops with the affected communities to facilitate their understanding on the core concepts of disaster microinsurance. This was followed by evolving a tailor made community-based disaster microinsurance scheme to meet the specific needs of the affected communities in Odisha. This contextualisation led to the combination of life and non-life coverage into the insurance scheme to be piloted. Thus, after all these iterations to specifically address the needs of the affected communities,

1 The Impact of Climate Change on Natural Disasters, http://earthobservatory.nasa.gov/Features/RisingCost/rising_cost5.php

Afat Vimo (AIDMI's disaster microinsurance scheme) was piloted in Odisha in 2012 and was adopted by a total of 950 clients. The Life Insurance Corporation of India (LIC) and the United India Insurance Company (UIIC) were the collaborating insurance entities in this initiative.

The opportunity to test the efficacy of *Afat Vimo* as a community-based adaptation strategy presented itself in 2013, in the aftermath of Cyclone Phailin. Since, *Afat Vimo* covers more than 19 types of disasters including floods, earthquakes, cyclones, storms, hurricanes, tornadoes, fire, landslides, etc. therefore, the clients were liable to make claims after the losses suffered by them during Cyclone Phailin. This was the perfect opportunity to showcase the benefits

of tailor made disaster microinsurance scheme such as *Afat Vimo* on vulnerable communities. Since, these communities are also exposed to the adverse impacts of climate change; this risk transfer mechanism can also be viewed as a climate change adaptation measure².

A comparative analysis between the households that had access to disaster microinsurance and those that didn't has revealed some interesting facts. For instance, the households that had disaster microinsurance were able to get the damages sustained to their shelters in the cyclone repaired more easily as compared to those households that didn't have insurance. Similarly, many other benefits were observed by the clients over the non-clients. Furthermore, an assessment of the needs of present

non-clients of *Afat Vimo* revealed that they would want a disaster microinsurance scheme that should concentrate heavily on the compensation of damages suffered to livelihood, livestock, health and crop.

The above description of the process of piloting a risk transfer mechanism and a brief overview of its benefits serve to underscore the potency of a community-based adaptation approach in championing risk transfer measures. As the above evidence points out, a need based, easily comprehensible and contextualized insurance product is far more likely to be adopted and be met with success. This should be coupled with robust monitoring and evaluation exercises to identify any gaps at any stage of the project intervention. ■ – Kshitij Gupta

2 Orissa Climate Change Action Plan 2010-2015 http://www.odisha.gov.in/forest_environment/ActionPlan/CCAP%20ORISSA%20FINAL-1.pdf

SCHOOL SAFETY

Community-Based Adaptation Dimensions of 'Safer Schools Campaign'

A reality that has dawned upon recent generations is the way in which the enhanced frequency of disasters has led to drastic changes in all spheres of life. Between 2002 and 2011, there were 4130 disasters recorded, resulting from natural hazards around the world where 1,117,527 people perished and a minimum loss of US\$1,195 billion was recorded. In the year 2011 alone, 302 disasters claimed 29,782 lives; affected 206 million people and inflicted damages worth an estimated US\$366 billion¹. To minimise the losses incurred from these disasters, administrative and policy level interventions along with decentralized initiatives are necessitated.

India being a growing economy and a multi hazard prone country, has suffered severe damage and devastation in recent history, especially due to climate extreme events. The governments at national and state level have recognised the need for pro-active measures for reducing the probable impacts due to these hazards. To make this happen; a lot can be contributed by the school community. A 'School' as an institution is the ideal place to promote and demonstrate disaster risk reduction and climate change adaptation. This is because schools play an instrumental role in shaping the minds of the leaders of tomorrow, and it makes good sense to sensitize

these precocious minds to the imperative of disaster risk reduction and climate change adaptation.

The All India Disaster Mitigation Institute (AIDMI) with the school community in India and in neighbouring countries has strived to enhance the resilience of vulnerable schools to natural hazards and climate change, through its 'Safer Schools Campaign'. The safer schools campaign follows a community based approach to adaptation as this campaign was founded on the principle of addressing the underlying vulnerability to disaster risk and climate change through capacity development for local civil

1 Towards a Post-2015 Framework for Disaster Risk Reduction (2013), UNISDR http://www.preventionweb.net/files/25129_towardsapost2015frameworkfordisaste.pdf.

society and governmental institutions along with a robust advocacy initiative.

The stakeholders of AIDMI's 'Safer Schools Campaign' are now trying to implement SDMP² (School Disaster Management Plan). The following points were noted by AIDMI team members based on the experience with school community particularly from implementing school disaster management plan. These points can help in improving the quality of SDMP.

A. Minimum requirement of SDMP to be complete:

- I. All 5 sections with 3 annexure mentioned in the SDMP template must be dealt with necessary information of school and planning. Comprehensive and yet objective information makes it worth effective and integrative.
- II. SDMP clearly mentions that the committee and team members as suggested in the guideline note should present a good balance of gender as well as number of staff in the teams (not only students). Equality in representation considering the validity in involvement however, should be judged effectively.

School is also very important platform for mainstreaming gender in DRR and CCA. Women are often left out of formal mechanisms, therefore, specific focus and special actions need to be put in place to capture and address specific vulnerability of women (and girls) and to recognize and strengthen their capacities³.

- III. The SDMP addresses all the issues of section 2 (assessment)

in section 3, 4 and 5 (preparedness, response and mitigation). While formulating the sections a broader reflection of the assessment should be portrayed. A technical assessment of climate change impact on schools also can be included in the section 2.

- IV. The section 3 (preparedness) should address the capacity building efforts of the school community and should not be limited it to students only. It must consider age-group of students. The calendar forms an important aspect where not only planning but actual integration of disaster risk reduction in schools' regular affairs takes a role. It must be realistic and should be considered with equal importance at par with the academic calendar.
- V. The SDMP should suggest simple and realistic monitoring and evaluation framework that focuses on constructive way ahead. This component should be handled by chairperson or/and senior management member. This framework can provide constructive feedback that links DRR with CCA in schools. For example, section 4 and 5 (response and mitigation) should also be linked with climate extreme events such as heat waves, flash floods in urban areas.
- VI. The best way to treat the SDMP is to look at it as a guidebook that helps different segment of school stakeholders to foster development of school. The decisions and data in the SDMP must be considered with validity while taking decisions on schools' regular framework.

B. The following points can further improve the quality of SDMP guideline: These points should be decided by policy makers for improving the quality of the SDMP.

- I. Steps of updating plan must be in two ways - process/steps for update and plan of action towards improvement of SDMP and relevant actions in schools and with school community.
- II. Ideal PTR (Pupil-Teacher Ratio) with space and Students Classroom Ratio (SCR) need to suggest with some comparison with space of class room and numbers of students in school. This is important in urban areas to manage crowd in the school.
- III. Guideline note should suggest minimum timeframe of updates of SDMP; ratio of team members in different teams with total number of students.
- IV. The guideline can be more objective if it advocates for creating formal and written understanding between different ESFs and school for effective emergency response. The role of different stakeholders should be clearly mentioned as guidance note so as to enable schools to conceptualise response procedures.

These SDMPs are useful tools for empowering schools to independently cope with, and respond to, natural disasters. Filling a gap in the communication and education sectors by combining climate change adaptation is become very important for DRR actors that are working directly with the school community. ■

- Vishal Pathak and Anand Prokash Kanoo

2 The SDMP guideline note used that developed by NDMA (National Disaster Management Authority) under Nssp (National School Safety Programme). http://www.ndma.gov.in/images/pdf/school_safety/ModelSchoolDMplantemplateenglish.pdf.

3 Towards Post-2015 Agenda for DRR (HFA2): Women as a Force in Resilience Building, Gender Equality in DRR Report of the Consultations in Asia Pacific (Feb. 2014), Duryog Nivaran, <http://www.gdonline.org/resources/HFA2%20Key%20Area%204%20paper-%20Women%20and%20Gender%20equality%20in%20DRR.pdf>.

QUESTIONER

Survey about Southasiadisasters.net

Dear Reader,

We hope that you liked our 110th issue!

It is now almost nine years and over 400 contributors from 37 countries that we are publishing this newsletter and this was only possible thanks to our readers!

In order to improve the quality of our publication even more and make it more appealing to you as well as more relevant in the area of Disaster Risk Reduction we are reviewing it by using a survey form.

As your opinion is of great value for us we would highly appreciate it if you could take five minutes to fill out our ten questions survey.

In order to fill in the survey form please go to our website www.aidmi.org from there to the "WHAT'S NEW" section on the upper left corner of the page. Please fill in the short form.

Thank you very much and we look forward to your feedback!

With best wishes from AIDMI to you.



First issue of southasiadisasters.net on 'Why southasiadisasters.net' published in May 26, 2005.

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