



**Community
Based
Adaptation:
Mainstreaming CBA into
national and local planning**

**7th International Conference
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Dhaka, Bangladesh**

Conference proceedings

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Background to the Conference Series

Community-based adaptation (CBA) recognizes that environmental knowledge, vulnerability and resilience to climate impacts are embedded in societies and cultures. This means the focus is on empowering communities to take action based on their own decision-making processes.

Increased resilience to climate stresses can be achieved by enabling communities to enhance their capacity to cope with climate extremes and surprises, such as hurricanes, floods or droughts. Although CBA is an emerging area, efforts are being made to develop participatory methodologies, raise awareness of climate change and foster adaptive capacity. This is particularly important across Asia, and Bangladesh in particular, which is especially vulnerable to climate change impacts.

Sharing experience and knowledge from pilot activities amongst practitioners, policymakers, researchers, funders and the communities at risk is essential. In view of this, the Second International Workshop on CBA was held in Dhaka, Bangladesh, in February 2007. Two years later, the Third International Conference on CBA was held in Bangladesh from 18 to 24 February 2009. Here, participants agreed to make the conference an annual event to be held in a number of vulnerable countries, and not Bangladesh alone.

The Fourth International Conference on Community-Based Adaptation to Climate Change was thus held in Dar es Salaam, Tanzania in February 2010 in recognition of the vulnerability of African nations to climate change impacts. Nearly 200 people from 38 countries attended, and a two-day field trip preceded three days of time spent in the hotel sharing information (through presentations, posters, publication dissemination and evening CBA video sessions), debating, working in small groups and networking.

The fifth CBA conference returned to Bangladesh in 2010, and focused on “Scaling Up: Beyond Pilots.” This was jointly organized by the Bangladesh Centre for Advanced Studies (BCAS) and the International Institute for Environment and Development (IIED). During the conference, primary focus was on moving away from the stand-alone project and ensuring that best practices were accurately and systematically communicated both horizontally across communities and vertically across levels of governance and action. A total of 388 registered participants from 62 different countries attended the conference representing national and international development organizations working on climate change around the world.

The 6th CBA conference was held in Vietnam in April 2012. Over 320 people from 61 different countries attended, and many more attended the opening and closing sessions. Over 30 co-sponsors and other contributing organizations provided support. The theme of CBA6—communicating CBA—was addressed in dedicated communication-related sessions on blogging, working with the media, digital photo storytelling, using games to communicate risk and methods and tools for working with children. Conference outreach was also dramatically improved compared to previous years. Live interviews were broadcast online each day and more than 50 interviews uploaded to YouTube. Delegates wrote nearly 30 blog posts and produced nearly 2000 tweets, using the Twitter hashtag #CBA6. The conference was also able to support several developing country journalists, which resulted in a number of published media articles throughout the world. The conference poster competition received over 30 submissions, and an evening film session showed a number of short films on CBA.

Three days of visits to eight communities across Vietnam that are already adapting to climatic changes preceded the hotel-based plenary and parallel sessions. Conference delegates evaluated the different adaptation projects they visited and awarded a special “Solidarity Prize” of

US\$5000 to the best one. This was a Save the Children project in the North of Vietnam in which children play a key role in disaster preparedness.

The seventh and most recent international CBA conference returned to Dhaka, Bangladesh in April 2013. The theme was 'Mainstreaming CBA into National and Local Planning' and the cohort of government participants that attended CBA6 reported back.

Aims of the Seventh International Conference on Community-Based Adaptation to Climate Change

The primary aim of CBA7 was to share and consolidate the latest developments in CBA planning and practices in different sectors and countries in South East Asia and globally, and disseminate this knowledge more broadly. Specific objectives were:

- Bring together different stakeholders and practitioners to share and discuss knowledge of CBA planning and practices;
- Capture the latest experiences and learning from CBA planning and practices;
- Enhance the capacity of practitioners to help those most vulnerable to climate change to improve their livelihoods;
- Share lessons learnt thus facilitating the integration of climate change into national and international development programmes; and,
- Disseminate lessons learnt at the conference through published proceedings, through wide media and online coverage through blogs, tweets, video streaming and recorded interviews, and through a special issue of the journal 'Climate and Development' with articles on mainstreaming from the conference.

A two-day field visit to CBA projects in different ecosystems across Bangladesh was originally planned, but due to the security situation in Bangladesh at the time, these were not possible. The three days of interactive hotel-based discussions went ahead as planned, however. These utilized a variety of different formats such as plenary sessions, parallel sessions, poster sessions, high level panels and interactive "out of the box sessions."

The conference was attended by a wide range of policymakers, non-government organizations, research and policy institutes, those funding CBA initiatives, academics, government officials involved in adaptation and practitioners with grassroots experience of adaptation projects. Limited funding was available to bring a few selected participants from developing countries who could not otherwise afford to attend. In total, nearly 300 people attended with many more taking part virtually through a live blog which featured live web streamed video, comments and social media.

Daily online communication-related outputs helped virtual participants follow the conference via the IIED CBA7 website, which was the hub for all CBA7 related activities, live blogs, tweets, recorded interviews and online live video streams. Overall the CBA7 webpages (including CBA-related blogs and press releases) had 4,367 unique page views from 21-29 April, and more than 200 people logging in and actively participating in discussions over the same period. The webcast was viewed 3808 times, and received 926 unique views. Media coverage was also significant, with various media outlets in April mentioning the CBA7 conference at least 52 times in at least 12 countries (Bangladesh, France, Ghana, India, Kenya, Namibia, Nigeria, Singapore, South Africa, Switzerland, United Kingdom and the United States).

The Bangladesh Centre for Advanced Studies (BCAS) and the International Institute for Environment and Development (IIED) managed the conference with the support of many of those attending.

Programme Summary

Day two: 22 nd April	
9.00am	Inaugural Plenary session 1: Conference opening and welcome speeches Chairs: Saleemul Huq (IIED and ICCCAD) and Atiq Rahman (BCAS)
11.30am	Plenary session 2: Main-stream-lining climate change into national development planning Facilitator: Simon Anderson (IIED)
2.00pm	Parallel session 3: Disaster Risk Reduction Facilitators: Puji Pujiono (Comprehensive Disaster Management Project, Bangladesh) and Ainun Nishat (BRAC University and Lead Climate Negotiator, Bangladesh Delegation)
	Parallel session 4: Inclusive Approaches: mainstreaming children, gender and indigenous voices in CBA Facilitator: Paul Mitchell (Save the Children)
	Parallel 'out-of-the-box' session 5: How to talk to journalists Facilitator: Daniel Nelson (OneWorld)
4.00pm	Plenary session 6: Agriculture Facilitator: Sonja Vermeulen (CCAFS)
Day three: 23 rd April	
9.00am	Plenary session 7: CBA in urban areas Facilitator: Diane Archer (IIED)
11.00am - 2.00pm	Parallel 'out-of-the-box' session 8: Mainstreaming into local government planning Facilitator: Fiona Percy and Agnes Otzelberger (CARE) and Tracy Kajumba, Medhin Fissaha and Saide Anlaue (ACCRA)
	Parallel session 9: Tools for evaluating and mainstreaming CBA into development planning Facilitator: Daniela Tarizzo (UNDP/UNV)
	Parallel 'out-of-the-box' session 10: Google Earth, participatory resilience assessments Facilitator: Ced Hesse (IIED)
	Parallel session 11: Ecosystem-based approaches to adaptation Facilitator: Hannah Reid (IIED)
	Parallel session 12: Water Facilitators: Michele Leone (IDRC) and Paul Isabirye (Ministry of Water and Environment, Uganda)
4.00pm	Parallel 'out-of-the-box' session 13: Serious game playing for change Facilitators: Saskia Daggett, Tracy Kajumba, Saide Anlaue and Medhin Fissaha, the African Climate Change Resilience Alliance (ACCRA)
	Plenary 'out-of-the-box' session 14: Games for a New Climate: learning risk management through serious, fun participatory activities Facilitator: Pablo Suarez (Red Cross/Red Crescent)

Day four: 24th April	
9.00am	Plenary session 15: Poster market place – your chance to ask questions and make comments Facilitator: Hannah Reid (IIED)
11.00am	Parallel 'out-of-the-box' session 16: Monitoring and Evaluation of CBA – sharing results of the International Centre on Climate Change and Development (ICCCAD) short course Facilitators: Terry Cannon (IDS), Lucy Faulkner and Sarder Alam (BCAS)
	Parallel session 17: Climate resilient drylands development Facilitator: Victor Orindi (National Drought Management Authority, Kenya)
	Parallel 'out-of-the-box' session 18: Population dynamics and climate change Facilitators: A. Tianna Scozzaro and Clive Mutunga (Population Action International USA) Shamim Hayder Talukder (Eminence Associates for Social Development), Hasan Mehedi (HumanityWatch) and Masud Nurul Alam (Participatory Research Action Network, Bangladesh)
2.00pm	Parallel session 19: Human rights, equity and the legal aspects of climate change adaptation Facilitators: Mary Faherty (Mary Robinson Foundation Climate Justice) Heather McGray (WRI)
	Parallel session 20: Mainstreaming CBA into local development planning Facilitator: Dhruvad Choudhury (ICIMOD)
	Parallel 'out-of-the-box' session 21: CBA films: an interactive session on how to influence people Facilitator: Corinne Schoch (IIED, Save the Children)
4.00pm	Plenary session 22: Poster market place – your chance to ask questions and make comments Facilitator: Hannah Reid (IIED)
Day five: 25th April	
9.00am	Plenary session 23: Finance and other emerging challenges for Mainstreaming CBA Facilitator: Saleemul Huq (IIED and ICCCAD)
11.30am	Plenary session 24: Conference closing session Chair: Atiq Rahman (BCAS)

Session Summaries

Inaugural Plenary session 1: Conference opening and welcome speeches

The conference inaugural session was chaired by Md. Shafiqur Rahman Patwari, Secretary, Ministry of Environment and Forests (MOEF), Government of the People's Republic of Bangladesh. The session opened with a recitation from the Holy Koran. This was followed by the following high-level speakers:

- Dr Atiq Rahman, Executive Director, Bangladesh Centre for Advanced Studies (BCAS)
- Dr Saleemul Huq, Senior Fellow, International Institute for Environment and Development (IIED), and Director, International Centre for Climate Change and Development (ICCCAD)
- Youssef Nassef, United Nations Framework Convention on Climate Change (UNFCCC)
- Shafiqur Rahman Patwari, Secretary, Ministry of Environment and Forests (MOEF), Government of the People's Republic of Bangladesh
- Dr Hassan Mahmud, Honourable Minister, MOEF, Government of the People's Republic of Bangladesh
- Address by the Chief Guest: Sheikh Hasina, Honourable Prime Minister, Government of The People's Republic of Bangladesh

Plenary session 2: Main-stream-lining climate change into national development planning

The first plenary session of the conference was facilitated by Simon Anderson from IIED and focused on “main-streamlining” climate change into development planning. Bimal Raj Regmi from Flinders University acted as the discussant, and the keynote address was delivered by Mousumi Pervin, Ministry of Planning, Bangladesh. Following the keynote address, Government officials from Cambodia, Kenya, Bangladesh, The Gambia, Mozambique, Zanzibar and Ethiopia then presented their country’s plans for climate main-streamlining:

- Shahana Sultana, Deputy Director of Implementation and M&E, Ministry of Planning, Bangladesh
- AM Phirum, General Directorate of Agriculture, Cambodia
- Berhanu Solomon Genet, Director of Finance, Support Programme Directorate, Environmental Protection Authority of Ethiopia
- Vincent Mutie Nzau, District Development Officer, Ministry of Planning and Devolution, Kenya
- Maria de Nadia Adrião, Planning Officer and Focal Point for Environment and Climate Change, Gender and Food, Mozambique
- Isatou Camara, Ministry of Finance and Economic Affairs, The Gambia
- Fauzia M. Haji, Director of the Policy, Planning and Research Department, second Vice President’s Office, Zanzibar, Tanzania.

Main-streamlining is an approach to integrating climate resilience into national and local development planning. Mousumi Pervin, Ministry of Planning, Bangladesh, presented a framework paper developed by government planners to assess and plan main-streamlining climate into development, which provides an overview of some early lessons on mainstreamlining climate into development. In order to assess and plan climate main-streamlining, a framework of key building blocks has been developed, and includes: the enabling environment (political will and information), policy and planning (policy, institutional

and budgetary instruments) and resources for programmes/projects (local, sectoral and national). Emerging good practices include: political will (Bangladesh), information services (Kenya), policy framework (Gambia), institutional agreements (Kenya and Bangladesh) and financial frameworks (Rwanda, Cambodia, Bangladesh and Laos).

Following the keynote speech, the panellists shared their country's experiences with climate main-streamlining. The panellists are members of a network of policy makers/planners from developing countries throughout Asia and Africa who have been exchanging knowledge about best practices for mainstreaming climate change into national development plans.

In Kenya three challenges to mainstreaming climate change have been identified. These include the financial framework, monitoring and evaluation and the legislative framework. Of these, finance presents the greatest challenge as the strategy and action plans are ambitious in terms of financial requirements. Kenya is in need of US\$12 billion and a financial mobilization strategy to actualize the plan. To address these challenges, an adaptation authority has been established to help access resources for adaptation plans. In addition, a monitoring and evaluation system is being developed and proposed legislation has been drafted and will hopefully be approved by the new parliament.

The representative from The Gambia, Ms Isatou, discussed her country's efforts to integrate climate change into both medium and long term plans through the 2020 development plan as well as a millennium development plan to be implemented from 2015. The next step is to develop a monitoring and evaluation framework. There is a plan underway to develop a climate change strategy, but more resources must be mobilized in order fund the climate action plan.

Cambodia has established a national climate change committee with representatives from all line ministries—both at the policy and political levels—chaired by the Prime Minister. The government is in the process of establishing a strategy and action plan on climate change, which is currently being reviewed by stakeholders. It is hoped that the plan will be approved soon. In addition, a specific action plan to incorporate the impacts of climate change on the agricultural sector is being developed, which will be revealed in the summer.

The Government of Bangladesh has undertaken several initiatives to mainstream climate change into national development plans. In addition to this, the number of projects funded by the Bangladesh Climate Change Trust Fund will be increased to ensure more results on the ground. The Implementing, Monitoring and Evaluation Division of the Ministry of Planning has the mandate to monitor and evaluate all projects of Bangladesh but at present there is no constitutional framework for monitoring and evaluating projects with respect to climate change issues. The General Economics Division of the Planning Commission is preparing a draft framework to address this gap and when this is finalised it will be used by the monitoring cell and other agencies to monitor whether climate issues are included in the process or not.

In Zanzibar, the need for climate proofing has been incorporated into the implementation plan (guiding plan). The government is sharing the plan as well as its guidelines for mainstreaming with a wide range of stakeholders. The next step for Zanzibar is the development of a climate change strategy and a training manual on climate change, as well as a cabinet paper which is being prepared on how to access climate change finance.

Ethiopia has also undertaken a number of initiatives to mainstream climate change into development planning, including the development of policy instruments to achieve sustainable development. A Climate Resilient Green Economy Strategy is also being developed to look at climate resilient development, aiming towards the goal of zero net emissions by 2025. At national budget level, 2 per cent of the budget has been allocated for the mainstreaming of

climate change. The government is also working with civil society and others at the local level on mainstreaming activities.

In Mozambique, the master strategy on climate change was approved in 2012 and has defined institutional arrangements and a finance mechanism. There is support for implementing the strategy at the community level. The next step is to develop a mechanism for monitoring and evaluation as well as a knowledge centre for climate change. Access to funding remains a major challenge.

Following the panellists' presentations, Bimal Raj Regmi as discussant provided feedback on the paper and in particular identified the important points as regards to mainstreaming CBA into planning. He said that it is encouraging to see the kind of thinking where national ownership can be created to deal with climate change issues and it is important to learn from these efforts. It has to be efficient, applicable to local context and based on the knowledge and capacity of the existing planning system. Governments own willingness and capacity need to be capitalized. Emerging trends have been put forward for discussion, which illustrate that things are happening slowly but they are happening strategically. Lessons from gender mainstreaming indicate that these kinds of changes are challenging to foster.

In the discussion period that followed, questions and comments focused on how national governments are working with local governments and learning from what communities are already doing on adaptation. Other questions related to whether or not lessons were being learned from the Disaster Risk Reduction (DRR) community and to what extent ministries of health are mainstreaming climate change. The panellist from Bangladesh responded that DRR has been heavily factored into Bangladesh's development plans, including the Bangladesh Climate Change Strategy and Action Plan (BCCSAP).

A final question focused on how research is feeding into planning processes to which each panellist provided an overview of the research being undertaken to inform the mainstreaming process. Mozambique, The Gambia and Ethiopia highlighted the important role of agricultural research. Nepal noted that a number of research institutes had tested the modalities and informed National Adaptation Programme for Action (NAPA), while Kenya highlighted the use of the Threshold 21 Model, which analysed how climate affects various sectors of economy.

At the end of the session, the network coordinator made an open invitation to any government staff working on integrating climate change into national planning to join this network.

Parallel session 3: Disaster Risk Reduction

This session was facilitated by Puji Pujiono, Comprehensive Disaster Management Programme (CDMP), Bangladesh and Ainun Nishat, BRAC University and Lead Climate Change Negotiator, Bangladesh Delegation. The keynote presentation was given by Mohammad Abdul Qayyum, CDMP, Bangladesh. The following panellists delivered presentations:

- Negussie Kefeni, Early Warning and Response Directorate, Disaster Risk Management and Food Security Sector, Ministry of Agriculture, Ethiopia.
- Robert Juhkam, Deputy Country Director, UNDP Bangladesh
- Minimuthu Pathiranan Nilantha Kumara, Practical Action, Sri Lanka
- Ronilda Co, World Vision International, Thailand
- S. Singh, UNICEF, India

Keynote Presentation: Mohammad Abdul Qayyum, CDMP, Bangladesh

The central role of resilience was the main message to emerge from the keynote speech of the disaster risk reduction (DRR) session. Through the use of case study examples, the vulnerability of Bangladesh to the impacts associated with climate change was highlighted, and the main message from this keynote speech was the need to integrate climate change adaptation (CCA) and DRR.

This speech set the tone for the presentations that followed. DRR is characterized by a mixture of top-down and bottom-up interventions, and to the extent possible these have been implemented via development activities. Therefore, in the DRR community at least, mainstreaming climate change adaptation into development activities is well underway.

Nevertheless, within the Bangladesh experience, emphasis was on the differences between conventional development planning practices, on the one hand, and the aims of CCA and DRR, on the other. The main differences pertain to the ultimate purpose of each school of thought: conventional development sees macro economic growth, implemented in a top-down fashion as the ultimate goal; in contrast to this, the focus in CCA and DRR approaches is on local contexts of vulnerability, addressed through bottom-up processes towards the end of reducing risks.

Mohammad Abdul Qayyum stressed three main issues that hinder the integration of CCA/DRR into conventional development planning, including: gaps in relation to inter-sectoral coordination, the bifurcation of CCA/DRR and the power dynamics that exist at the sub-national and local levels.

Drawing on extensive experience of the CDMP, especially within the context of CCA/DRR, mainstreaming has been built in and piloted in this programme. At the national level, CDMP integrates CCA/DRR into medium and long-term development plans, and the translation of such frameworks into implementation of large-scale interventions has been achieved at the local level.

The Local Disaster Risk Reduction Fund (LDRRF) was instituted as an innovative mechanism to finance CCA/DRR interventions and projects at community level, putting a premium on bottom-up approaches. The LDRRF requires community participation, and utilizes both scientific and local knowledge in assessing vulnerability using the Community Risk Assessment/Fast Track Risk Assessment method to develop Risk Reduction Action Plans (RRAPs) at local level. Most priorities in the RRAPs are to be addressed through local development programmes. Some community level risk reduction schemes that have an innovative component are to be submitted for funding to LDRRF to be implemented by local Disaster Management Committees or, in some exceptional cases where sophisticated inputs are required, through NGO implementing partners.

Despite successes of mainstreaming DRR and CCA into development planning in the Bangladesh context, significant challenges remain, from the national level down to the local level. At the national level the main challenges include the need to advocate DRR and CCA to become prominent development priorities and the lack of a readily available index to provide the evidence basis for allocation of the development budget. At the sectoral level the challenges are that DRR and CCA are often perceived as marginal and additional tasks. At the local level, a key question asked concerned how to ensure that the interventions are effective and sustainable. With respect to this latter point, CDMP continues to build good practices, providing robust evidence for mainstreaming.

Negussie Kefeni, Early Warning and Response Directorate, Disaster Risk Management and Food Security Sector, Ministry of Agriculture, Ethiopia

Historically Ethiopia has a national policy on disaster prevention and management, with the Hyogo Framework for Action guiding the institutional structure of programmes by the government.

Since the business process reengineering undertaken in the ministry during 2007-2008, there has been a gradual but paradigmatic shift of focus of the government from relief and response towards risk reduction. As such, considerable resources have been invested in risk assessments, mitigation measures and preparedness. However, with the increasing frequency of disasters, response measures have simultaneously continued unabated, putting pressure on available resources. This presentation also highlighted the fact that budget scarcity is often seen to affect DRR plans and activities.

Robert Juhkam, Deputy Country Director, UNDP, Bangladesh

Robert Juhkam emphasized three key points in relation to Bangladesh: resilience, finance (at both local and national levels) and convergence of CCA and DRR at the funding level. He applauded the consistent and sustained pursuit of both CCA and DRR agendas within Bangladesh, which has demonstrated commitment by deploying a substantial portion of its national budget for these purposes and has supported the translation of these policies into development programmes. Robert also emphasized the need to avoid a bifurcation of the two approaches when considering mainstreaming.

This presentation also re-emphasized the concept of resilience; that it is one of several interconnected issues at local and national levels and that to build resilience countries need to anticipate and absorb the effects of disasters. The point here is that resilience is crucial as identified by the UNDP draft plan 2014-2020, which identifies resilience as a key policy/programme to follow. The discussion also touched on community and country resilience, and highlighted the fact that the poverty, climate change and environmental degradation nexus needs to be better integrated.

Before concluding, vertical financial linkages were discussed. It has been emphasized that these are better than horizontal linkages as the former approach produces two notable win-wins: benefits to finance and benefits to local communities. In this case, local plans are linked to national development plans, in effect mainstreaming.

Minimuthu Pathirana Kumara, Practical Action, Sri Lanka

Mainstreaming DRR into local government planning will make development more resilient to frequent climate-related disasters. Community based institutions and small-scale adaptation are not enough to face major natural calamities due to a lack of resources and knowledge within the community.

Decentralized disaster management will help to alleviate vulnerability in the context of climate change. By implementing the “resilient city programme” in five selected local government agencies of Sri Lanka, Practical Action are attempting to achieve the above objectives with the support of all key government agencies.

Crucial in reducing risk exposure is appropriate technology and mainstreaming DRR into local government planning. However, a set of crucial components is missing, causing a hindrance to the community. These include a lack of resources, which is caused by a knowledge gap within the community.

Ronilda Co, World Vision (WV) International, Thailand

This presentation highlighted a joint initiative that commenced with the assessment of two urban WV Area Development Programs (ADPs) in Dhaka, Kamalapur and East Dhaka. The project used a framework that WV commissioned covering four priority actions: Hyogo Framework for Action (HFA), Climate and Disaster Resilience Index (CDRI) for city governments, Action Orientated Resilience Assessment (AoRA) for community/households and School Disaster Resilience Assessment (SDRA) for school officials.

Three key lessons identified through WV's experience of mainstreaming DRR into development activities included:

- NGOs are responsible for innovation (there hasn't been much buy-in yet from the private sector)
- Government intervention requires sustained and intentional partnerships with government on mainstreaming DRR in development as they are compelled to better understand
- Development donors have constructed schools which are seen as safe development

S. Singh, UNICEF, India

This presentation highlighted that increased disaster risks implies that it is essential to change regional funding arrangements to move from humanitarian assistance towards investment in and building of more resilient communities. Mainstreaming DRR will contribute to preventing disasters and mitigating their impacts but also to addressing other areas of concern, including equity, programme convergence and sustainability.

UNICEF have identified that children are at the heart of DRR. In South Asia alone there are 614 million children under 18 years of age, with 50-60 per cent of those children affected by disasters. This is why DRR centred on children is so crucial; it aims to shift the narrative from children as helpless disaster victims to children as empowered individuals.

To achieve this, risk assessments are carried out, particularly for older children, and the focus of these is on natural and anthropogenic hazards. Some countries are already leading this programmatic shift; in South Asia alone Nepal and India are two such countries that have implemented children-centred DRR. In high-risk areas there is the possibility of building sub-national community based DRR alongside school planning where children can actively participate in the process.

Discussion

Before the discussion session was opened up to the floor, Terry Cannon made a valuable comment on the concept of resilience; he stressed that it is being incorrectly used and is a mask for the real issue, which is vulnerability. What is needed is a sea change in how DRR operates; it needs to shift focus from resilience to vulnerability so that the causes are treated and not the outcomes.

A provocative discussion then followed where these initial remarks were further explored. Such questions included: "What are the key dimensions of resilience that are identified and can be measured?" "What indicators exist for DRR and adaptation experience of combining DRR/CCA, did they find that their initial indicators changed?" "Do M&E tools need to be reviewed?"

Delegates in some cases were conflating the concepts of CCA and DRR and wanted further clarification of these terms. In this regard there needs to be further convergence as not all disasters are climate induced. As has been discussed in some literature, climate change may be seen as a slow burner as some of its impacts will be manifest over the long term.

The concept of funding re-emerged and an interesting debate ensued regarding the merits and drawbacks of combining and separating relief and response funds from climate change adaptation funds, and how each option has far reaching ramifications on the sustainability of the entire process.

A brief summary of the session was then provided by Puji Pujiono. He stressed that being sporadic and often counterintuitive to conventional development planning, CBA alone will not take mainstreaming far enough given the predominance of top-down approaches. He stressed the need to advocate mainstreaming measures at national, sectoral and local levels while, at the same time, promoting the harmonization—if not full integration—of CCA and DRR. Local level financing has been useful but it shouldn't be seen as a panacea. Lastly, he finished his summary with a very poignant reflection and timely reminder: "It took an entire generation to understand what development is, so be not afraid to venture to unpack the concept of resilience." Furthermore, it is apparent that CBA within the context of DRR still has a long way to go.

Before closing, Ainum Nishat in his final remarks pointed out that conscious differentiation must be maintained as not all disasters are related to climate change, and that the discipline of measuring the effects of climate change is still in its infancy in comparison to disaster management. In effect, we need to build the future based on accumulated experience from DRR. Nevertheless, he also emphasized the role that CBA must play in invoking this paradigm shift. Ultimately, the community needs to be more involved.

Parallel session 4: Inclusive Approaches: mainstreaming children, gender and indigenous voices in CBA

This session was chaired by Paul Mitchell, Senior Climate Change Advisor, Save the Children, Vietnam. The session began with the keynote presentation from Harjeet Singh, International Coordinator for Disaster Risk Reduction and Climate Adaptation, ActionAid, India, followed by “short burst” five-minute presentations on key issues from the following panellists:

- Caroline Borchard, Disaster Risk Reduction and Climate Change Adaptation Program Manager, Plan International, Thailand
- Christine Hunter, Country Representative, UN Women, Bangladesh
- Gabriel Kulwaum, Climate Change Officer, The Nature Conservancy, Papua New Guinea
- Maria Rebecca Campos, Affiliate Professor, University of the Philippines and Executive Committee Member, International Institute of Fisheries Economics and Trade, Philippines

The panel then prompted session participants to discuss four key questions amongst themselves and subsequently present to the group. Questions focused on the potential benefits of engaging with children, women, and indigenous people in the design and implementation of CBA; the extent to which inclusive approaches increase the sustainability of CBA and challenges of using inclusive approaches. Key points from the discussion highlighted the central importance of supporting marginalized groups to understand climate change on their own terms, through their own worldviews, and to base CBA on effective coping and adaptive practices that may already exist at the local level as a way of increasing local take-up and sustainability of planned interventions. The group also highlighted a tension between not portraying marginalized groups as victims, but rather focusing on their strengths and capacities

to achieve change, on the one hand, while recognizing and addressing head-on the structural constraints on individual capacities, particularly for marginalized groups. Key points also emerged around the importance of exploring intra-group differentiation; for example, not all women or members of the same indigenous community face the same barriers and challenges, but rather various additional layers of differentiation exist across individuals in the same group. The group also acknowledged the challenges of implementing truly inclusive approaches able to address various dimensions of inequality, including resource and time constraints, as well as the political challenge of taking on unequal power structures. Related to this, panellists noted in closing that if you are not encountering resistance in the confrontation of these unequal power structures, you may be reinforcing the status quo, despite best intentions.

Harjeet Singh, ActionAid, India

Harjeet highlighted the fact that climate change affects different people in different ways. Poor and excluded people experience disproportionately high vulnerability to shocks and stresses, including climate change. Central to this approach is the recognition that climate change represents an obstacle to the realization of full human rights, entrenching impoverishment through the reinforcement of existing inequalities. Enhancing the resilience of poor and marginalized communities therefore requires addressing the underlying drivers of vulnerability. The vulnerability of marginalized groups is caused primarily by three inter-related and mutually reinforcing factors: (1) social exclusion: an outcome of multiple human rights violations a group faces on the basis of identity, including gender, class, ethnicity, religion, race, caste, age and sexual orientation, that limits a group's participation in economic, social and political life. Within these communities, children, women, displaced individuals, persons with disabilities, elderly individuals, and HIV & AIDS affected persons are further marginalized. (2) Lack of assets and economic opportunities. (3) Lack of access to and control over natural resources. These factors arise from unequal and unjust power relations, which are perpetuated through societal institutions ranging from family to corporations to international organizations.

Caroline Borchard, Plan International, Thailand

Caroline shared lessons and posed questions to the group emerging from these streams of research, Caroline discussed the *WHY* and *HOW* of focusing on children. Why focus on children: Caroline highlighted the fact that children are already being affected by climate change through impacts on their rights, such as the rights to survival, protection and development. Furthermore, the children of today will inherit a world in which the most severe impacts of climate change will unfold, and therefore need to start learning skills for adaptation today. Caroline also highlighted the role a focus on children can play in helping communities consider long-term climate vulnerabilities and adaptation strategies. In terms of the *HOW* of focusing on children, Caroline highlighted the importance of understanding impacts on the sectors that are important for children (e.g. education, economic empowerment, health, nutrition) and the role of including the voices of children at the community level. However, achieving children's participation implies overcoming various barriers, for instance how to reach marginalized children, such as disabled children and those not attending school, as well as the challenge of explaining climate science.

Christine Hunter, UN Women, Bangladesh

Christine proposed a shift in thinking away from the current debate on gender and climate change, in which the focus is largely on women as victims, whose deficits must be 'fixed' in order to benefit families and communities. The current focus within this paradigm is on ensuring women have a place at the decision-making table, in order to incorporate their needs and to unleash the specialized knowledge they have accumulated in undertaking the gender-specific roles they play in the household and community. Christine proposed to the group a new

approach that departs from the perspective of equality and rights. This approach differs by recognizing that women—as well as men, girls and boys—are rights holders with legitimate claims on governments and the international community, as primary duty bearers. In reality, lower status groups, including women, experience more barriers to realizing their rights than do more dominant groups. In particular, women's access to rights is constrained by a range of factors, including, for example, a lack of recognition of the roles they play, and inequitable access to resources. It is the failure of these rights that increase vulnerability to shocks and stresses. From this perspective, CBA must start with the question of how to protect and promote rights in a context of climate change, in which people's access to resources and livelihoods are changing. From this perspective, Christine posed questions to the group about how to change the debate so that women are seen as citizens with the capacity and right to participate in processes and shape decisions that affect their lives, and inequality is seen as the cause of vulnerability.

Gabriel Kulwaum, The Nature Conservancy, Papua New Guinea

Gabriel presented on approaches to incorporating indigenous voices into national and development planning processes—including CBA—in Papua New Guinea (PNG). He highlighted the barriers to inclusive approaches posed by the colonial legacy in PNG, in particular the inheritance of a centralized system of government and national planning, and the obstacles this has created to the inclusion of indigenous perspectives. An alternative to this top down approach is found in the Building the Resilience of Communities and their Ecosystems to the Impacts of Climate Change Project, operating in Manus, on Ahus Island. Gabriel shared experiences of successful bottom up planning through engagement of local tribes and clans in this project, in which community members were supported to undertake their own climate change research and planning. Three tools were used in this approach: (1) Household surveys, carried out by community members; (2) participatory video, in which community members shot videos documenting the impacts of climate change in their local area as well as activities undertaken by community members to respond to these impacts, and; (3) participatory three dimension modelling, including participation from community members. Gabriel closed by urging the group to consider the extent to which climate change practitioners are giving value and importance to indigenous culture as a strategy for CBA, and how this can be done more effectively in climate change affected communities.

Maria Rebecca Campos, Affiliate Professor, University of the Philippines

Maria presented findings from her study on the influence of traditional literary arts and beliefs on adaptation to climate change among indigenous communities in the uplands regions of the Philippines. She focused specifically on strategies implemented by the Ifugaos community to protect their livelihoods from the impacts of extreme weather conditions being intensified by climate change. For example, the Ifugaos have adjusted their farming systems to adapt to the effects of constrained water resources. Maria highlighted the central role of spiritual beliefs, ecological wisdom, kinship orientation, sense of tribal awareness and artistic temperament in the approach to adaptation implemented among the Ifugaos. The study concludes that human and cultural adaptation involves a range of factors, in addition to biophysical/environmental impacts, including those relating to ideology, techno-economy and social organization. Drawing lessons for the design of CBA by local government and NGOs, Maria concluded that planned interventions should be based on the practices that work that are already being implemented by indigenous communities like the Ifugaos.

Parallel ‘out-of-the-box’ session 5: How to talk to journalists

This session was chaired by Daniel Nelson from OneWorld. The session opened with the assertion that there is no such thing as the “media:” there are, among other outlets, newspapers, magazines, radio stations, TV programmes and websites; even these categories are diverse. Similarly, the term “journalist” covers a range of people and jobs, including reporters, feature writers, columnists, specialist writers, subeditors, photographers, interviewers and news anchors. They cannot all be lumped together.

In order to communicate points or a “message” via mass media, it must be tailored to match the style of the given publication, station or website. The language and approach used needs to fit the specific requirements of the particular media outlet.¹

It is important to emphasize that once a message or idea has been expressed, or a reporter has been briefed or an interview given, control will no longer be maintained over how the media outlet presents the story. The reporter and/or the sub-editor may add or ignore information, or focus on a part of the information or dialogue that had not been intended. Sometimes you will be happy with the result, sometimes not: you win some, you lose some. This is the risk of dealing with the media.

The good news is that despite the diversity of the media and the people who work for it, there is a factor that makes it easier: all journalists, whatever their particular job, have one priority: they want a “story.” If you give them a story—that is, an idea or information that is instantly translatable into a news report, a feature article, a radio or TV programme or perhaps a blog—that is job done, they will take it and run with it. The bad news is that the mass media in general (with a few exceptions, such as documentary films) are not good at covering issues (e.g. why 20,000 babies die every day from easily and cheaply preventable causes) but rather are good at covering events.

You have to work with the print, electronic and online outlets that are available: some outlets may be hostile to your cause, or simply not interested. You won’t be able to change their attitude in the short-term, though by offering them a “story” (on their terms) you may get coverage. Don’t think only in terms of the front page or the lead item on the news. Consider making use of all pages and programmes: use phone-ins, write a letter to the editor (which other journalists will read), get a profile on the women’s page, try to get a story on the sports pages (recent research on migration was ignored by all the media in one country until the organization responsible for the research got the sports editor interested by pointing out that almost all the country’s top soccer teams had migrants playing for them).

But for the medium- and long-term, a strategy can be developed to make the papers, magazines and radio stations more sympathetic by holding briefings, building up friendly contacts, taking reporters on field trips, holding sessions (e.g. on adaptation and other climate activities) for schools of journalism: they are always looking for outside speakers. Such sessions also offer experience dealing with journalists in a relatively “safe” media environment.

19 tips for getting coverage

In the final section of the presentation, Daniel Nelson gave his “19 top tips” for getting a story (that is, your project, research, activities, announcements and so forth) into a publication, or onto the radio, TV or web. These tips included use of key journalistic words such as newest and

¹ The terms “media” and “communication” are not synonymous, but there are overlaps, most importantly in terms of the need for clarity.

first, and their almost-as-power counterparts ground-breaking, pioneering and initiative; careful use of controversy and criticism, on which all media thrive; topical “news pegs” such as World Polio Day and other “days;” and alliterative phrases such as Drop the Debt, Dirty Dozen (pesticides) and Million Man March; and offering illustrations.

Plenary session 6: Agriculture

This session was facilitated by Sonja Vermeulen, Climate Change, Agriculture and Food Security (CCAFS) and M. Asaduzzaman, formerly of the Bangladesh Institute for Development Studies. Panellists for this session included:

- Gernot Laganda, International Fund for Agricultural Development (IFAD)
- Pawar Janardhan Rakhama, Watershed Organization Trust (WOTR) of the Sanjeevani Institute for Empowerment and Development (SIED), Pakistan
- ML Jat, International Maize and Wheat Improvement Centre (CIMMYT), India
- Edidah Ampaire Lubega, International Institute of Tropical Agriculture (IITA), Uganda

The session covered IFAD’s programme, one of the most ambitious large-scale programmes currently on-going, as well as looking at three local programmes, particularly efforts to scale up into broader programmes. Sonja Vermeulen, Head of Research at CCAFS, introduced the session by reminding the audience that agriculture provides not just food but incomes and livelihoods for millions of people around the world. Local community-based adaptation initiatives have the advantages of local ownership and suiting local contexts. Large-scale programmes reach a high number of people but may not be as responsive to local needs and therefore sustainable over the longer term.

Gernot Laganda spoke about IFAD’s large-scale Adaptation for Smallholder Agriculture Programme (ASAP) programme, which integrates climate risk resilience into large-scale agricultural investment. ASAP intends to catalyse the change of IFAD into a climate-smart institution and builds on existing processes by including risk and vulnerability at the beginning of the project cycle. The target impact of ASAP is at least 8 million farmers, including 4 million women and girls, with a side benefit of reducing 18 million tonnes of GHG emissions. Key questions arising included: “How to integrate something that is inherently long-term into investment programmes that generally have short-term perspective of increasing agricultural productivity?” “How to build from village interventions to large programmes?” “Can the business-as-usual narrative be changed?” “Can financial institutions like IFAD catalyse that change?” Mr Laganda reminded the audience that agriculture is on the one hand a victim and on the other hand a perpetrator of climate change. At present, food and climate systems are not in the ‘safe operating space,’ in which populations can be fed without undermining the capability of natural systems. IFAD has invested US\$ 14 billion in loans and grants—about US\$ 1 billion per year. If we manage to integrate climate risk, it could be a great avenue for scaling up. Mr Laganda explored incentives for engaging in community-based adaptation, including protecting against negative climate effects on development, as well as opportunities in certain parts of world. For instance in Nepal, crops are being grown in places they were not before and can improve the diets of poor farmers.

Mr Laganda also asked the audience: “Is this just old wine in new bottles?” The answer was partly; some comprises agricultural investment to increase resilience, some is new investment programmes to do more of what works and some is new investments to tackle growing climate risks. Some projects create ‘buffer capacity,’ e.g. rainwater harvesting or grain banks. Other activities include strengthening efficient resource use or diversifying livelihoods. In Burkina Faso, agroforestry diversifies livelihoods, prevents erosion and conserves biodiversity (multiple

wins). Value chain projects connecting smallholders to markets sometimes underestimate the climate impacts on market access. Planners need to think about where to locate their critical infrastructure. Mr Laganda argued there is a need to think critically about how to sustain groundwater pumping in certain locations. Risk management options include early warning systems, social safety nets, climate services, resilient crops and diversified systems. Projects must be reviewed to assess long-term impact. In ASAP, emphasis is on social and institutional learning, as the programme's best exit strategy is to strengthen local institutions. On monitoring, metrics of the strategic benefit of investing in smallholder agriculture are needed.

Pawar Janardhan Rakhama from the Watershed Organization Trust (WOTR) of the Sanjeevani Institute for Empowerment and Development (SIED) spoke about 60 villages in India where a local advisory for weather data is being introduced. The emphasis here is on trying to get the right information to farmers and then trying to influence how government provides this information. Forecasts are shared with the community group by SMS so they can use it for agricultural planning. The challenges are that weather stations are distant and information is not reliable. Water budgeting is also being carried out so the community knows how much water is available and how they can use it. Finally, WOTR works on adaptive sustainable agriculture e.g. systematic crop intensification, including low cost inputs. Farmers sit and discuss in farmer field schools. WOTR advises government schemes, such as water conservation initiatives.

Next, ML Jat from the International Maize and Wheat Improvement Centre (CIMMYT) spoke about participatory research with farmers on conservation agriculture as an approach for adaptation, at the CCAFS site in Haryana, Northwest India. ML Jat argued it is important to adapt technologies to the local situation in a participatory way rather than simply transplanting the technologies to the farmers. CIMMYT has worked with young farmers' cooperatives; since young farmers are moving away from agriculture, it is argued that until the youth return to agriculture, there will be little introduction of new technologies. Involving youth in the cooperatives also provides them with employment and they are particularly enthusiastic about scaling out new technologies. Local universities and research institutes are partners; students who work with farmers are both learning and helping. Government and state departments have been responsive to the innovations of the young farmers' cooperatives, providing a subsidy and including technologies into their policy.

On the case of Uganda, Edidah Ampaire Lubega from the International Institute of Tropical Agriculture (IITA) spoke about how climate risk and vulnerability were assessed from the bottom up in their CBA initiatives. Coping strategies and long-term adaptation opportunities have been explored to identify options farmers can take on. Farmers gave feedback in a participatory process and selected adaptable and sustainable options. Successes were in activities farmers were already adopting—such as water and soil conservation. Partnerships must be emphasized—government cannot do it alone. Furthermore, it was noted that when vulnerability assessment is done, it is important local people participate so local priorities are taken on and the activities are accountable to them. It is also important that different sub-groups are heard so they can report back on what works for them. Previously, some NGOs took a survey and decided what do next. IITA does look at quantitative data, but also captures people's views in order to be more certain that what will be done will work in the local context. Farmers balance food security and economics—so solutions must show results for this mix of concerns. Ms Ampaire argued it is important to address over-dependence on national and local institutions right from the beginning, rather than add them in afterwards. At the start, it is important to try to capture who is doing what and map out their roles. On challenges, Ms Ampaire noted the need to make institutions work effectively. The right policy instruments are needed, and when these are in place they need to be functioning. There is a need to integrate vertically—local to national, and horizontally, between ministries. This requires communication, effective feedback and coordination: working together, reducing duplication of

resources and effort. Also there is a need to deal with political interference, as conflict of interests can occur. Overall, Ms Ampaire argued that it becomes clear in carrying out participatory risk assessment that people know what will work and what will not in a given setting.

The discussion that followed emphasized the tensions between short-term economic objectives and sustainability of natural systems. Mr Laganda noted there is an opportunity cost for poor farmers to adapt and that incentives are stacked against long-term thinking. Resilience investments could be provided purely as a grant to enable farmers to engage in risky ventures, for example experiment with different crop varieties. Climate finance acts as a safety net to buffer that space. Another barrier to resilience is subsidies outside the country, meaning that produce is not competitive. Resilience needs to consider both climatic and economic factors. Storage means farmers can sell produce later, and not have to sell it all at once which pushes down the price. An audience member asked how regularly weather information is transmitted to farmers and how it is packaged, how illiteracy is dealt with, and how many farmers can access mobile phones. Mr Pawar from WOTR responded that daily weather forecasts are sent to the agricultural advisory, which provides advice on likely disease attacks; this information is also transmitted to farmers by SMS. Every household has a mobile phone and records are taken of which crops they grow. Advice is also displayed in a local common space and one person is trained to explain it to those who cannot read. Data must be translated to the local context. CCAFS found that 15-20 per cent of the local population are using such information. Sonja Vermeulen added that in East Africa there has also been a gender element to mobile phone access.

The discussion also focused on the role of agricultural extension and advisory services, and whether there are efforts to increase their capacity as they continuously interface with farmers. Ms Ampaire from IITA said they work with the service providers, whether government or NGO, to build their capacity in specific areas. Mr Pawar from WOTR mentioned that tools and training models have been developed to build the capacity of local advisors. Other members of the audience questioned what sort of model for sustainable agriculture is being promoted, and whether these are sustainable from a financial and environmental standpoint, or whether they imply high external inputs. Mr Laganda explained they focus on 'sustainable intensification'—for instance practices such as low till agriculture, rotation grazing or crop rotation. ML Jat argued the important role of land as a resource, providing the example of conservation agriculture in South America, which has been successful in improving long-term productivity and lowering costs of production. Discussants questioned whether low inputs necessarily lead to low outputs, and the need for balance was recognized, particularly as nutrients are being stripped from the soil. Other audience members pointed towards the need to recognize traditional knowledge and local varieties, but also consider the generation of markets for products, including markets in off-seasons or for varieties grown with an efficient system like drip irrigation. ML Jat argued the benefits of using a whole-systems perspective, for example a short-duration rice variety may have less production but farmers can produce one crop after another.

Reflecting on the session, M. Asaduzzaman noted that there has been no consensus on agriculture in climate change talks or in the WTO, even though agriculture is key to food security. The basic message is that the community must work hand in hand with national and local institutions otherwise progress will be stalled. Community adaptation means not only the local community alone but also the broader national community. The intertwining of adaptation and mitigation has been controversial at the UNFCCC, but agriculture must address both: adaptation must be mitigation-friendly and mitigation must be adaptation-friendly. While science must provide the guidance to achieving that end, there is no singular solution but rather multiple options exist. The food price instability in 2008 might occur again in the future. The

community approach has an important role to play, not least through using local observations and information to facilitate better integration of macro and micro-level activities.

Plenary session 7: CBA in urban areas

This session was facilitated by Diane Archer, IIED, and addressed issues around how to integrate community-based approaches with top down efforts to mainstream climate change into urban development and planning at the city, regional, and national levels. Debra Roberts, Environmental Planning and Climate Protection Department, eThekweni Municipality, Durban, South Africa, gave the keynote presentation. Following this, four panellists shared their experiences of working in urban adaptation, representing the perspectives of local government, researchers and development practitioners. Each shared valuable lessons, highlighting both successes and challenges in mainstreaming community-based adaptation in cities across Africa, Asia and Latin America:

- Florencia Almansi, IIED, Argentina
- Denia Aulia Syam, Mercy Corps, Indonesia
- Divya Sharma, The Energy and Resources Institute (TERI), India
- Michael DiGregorio, consultant for Institute for Social and Economic Transition (ISET), Vietnam

The main questions for discussion following presentations from the panellists included: “What legislative and policy frameworks exist?” “What other mechanisms exist that will ensure CBA is better integrated into city planning?” Delegates also expressed great interest in M&E frameworks for climate change adaptation in urban settings. With reference to the Indonesian experience, Denia suggested basing M&E on vulnerability assessments, subsequently using community research to fill in any other possible gaps that may exist. Ways forward utilising this approach included performing more in-depth sectoral research along with increased collaboration with universities and CSOs.

Considerable discussion also revolved around how to best develop frameworks for resilience, with an emphasis on the involvement and role of local communities. Mr DiGregorio discussed at length how indicators were developed in the context of Vietnam. His main message here was that “adaptation is not something that is done to become a resilient city, it is something that is done to achieve other city development goals.” From this perspective, there is a need to think of resilience indicators within the context of developing aspiration. The beauty of this paradigm shift is that when aspirational goals are proposed, a previously one-dimensional lens focusing on certain issues are then seen in a multi-dimensional lens. In Vietnam, such a shift in thinking coined the term “making room for rivers.”

Towards the latter stages of the discussion session, delegates highlighted the need for considerable improvement in situation management within cities, posing the question to panellists of how such improvements can be made. In the Latin American context, it appears that situation management had failed because the tools used to assist the decision making process were far too complex.

This session demonstrated that while there is a great deal of important work being undertaken on the ground across developing countries, numerous challenges remain within the wider context of achieving resilience to climate change and sustainable development. The discussions demonstrated early successes of CBA within the urban ecosystem, as well as failures. A clear lesson that emerged from many of the presentations is that if the community is empowered, they can often provide the most useful and innovative solutions, whether in reducing the impact

of disasters or in transitioning into a nascent green economy. Nevertheless what was also apparent was the lack of technical capacity within and amongst NGOs as well as local governments. These areas, as well as support for building social cohesion at the community level, must be addressed to further CBA in urban contexts.

Debra Roberts, eThekweni Municipality, Durban, South Africa

The keynote presentation by Debra Roberts provided an overview of the Community Based Adaptation work stream of the Municipal Climate Protection Programme (MCP) in Durban. In a rapidly growing city and biodiversity hotspot, such as Durban, climate change is one among a “wicked mix” of problems planners must contend with. CBA in this context involves a mix of interventions occurring between ranges of actors. Related to this, a major lesson from the Durban experience is that there is no standard, “recipe book” approach. Rather a mix of strategies is used, in which CBA comprises one approach aimed at empowering local communities to use their resources to tackle the impacts of climate change on the city. Some of the main challenges highlighted by MCP include confusion over how to define the “community,” and whether communities connect CBA actions to climate change; the need to engage non-poor groups to avoid maladaptation; a lack of suitably skilled and informed local government institutions, and, ultimately; a lack of clarity as to whether CBA offers a real and sustainable alternative to the prevailing development path in South Africa. Additionally, CBA in the African context cannot be considered in isolation from Ecosystem Based Adaptation (EBA), however there are high costs associated with uniting these two approaches in an urban setting. Additional challenges include the wider context in which CBA is pursued, which in Durban is characterized by high-risk tolerance due to exposure to various non-climate challenges, such as crime. These issues raise questions around whether community based adaptation should be a priority in the early phases of urban climate protection work.

Florencia Almansi, IIED, Argentina

Florencia presented on how local governments in Argentina and Uruguay have engaged with adaptation planning in urban settings, and how these approaches may be strengthened by integrating community-based perspectives. As part of the project, multi-criteria risk analysis was undertaken at the municipal levels, and validated at the community level through use of participatory methods to explore local perceptions of risk and to assess local adaptation practices. Some of the constraints faced by city and municipal governments in developing and implementing adaptation plans include local government’s capacity to understand risks and plan accordingly; its ability to work together with different stakeholders, including those most at risk; the persistence of an emergency response approach within local government rather than risk management; and the institutional architecture, which in some cases supports local action, but in other cases presents barriers to it.

Denia Aulia Syam, Mercy Corps, Indonesia

Denia provided an overview of Mercy Corps experience as an ACCCRN implementing partner in Indonesia, drawing lessons for how to more effectively translate the National Action Plan on Climate Change Adaptation in Indonesia (RAN-API) into measures that are locally appropriate in different regions. In particular, active engagement with local stakeholders proved to be a central element of successfully integrating the Climate Resilience Strategy (CRS) into city planning. At the stage of replicating the strategy across cities, Mercy Corps prioritizes aligning ACCCRN and country objectives, and mainstreaming Urban Climate Change Resilience (UCCR) into Indonesian policies and planning through working closely with key central government actors. Some of the challenges to this process include political decentralization and capacity gaps, which present barriers to standardizing this methodological approach at the national level.

Divya Sharma, TERI, India

As National Partners to ACCCRN, TERI have conducted a detailed policy synthesis review Indian cities, and are now reviewing Acts, Regulations, By-laws and Policies at city and state levels in Gorakhpur and Guwahati, towards the end of mainstreaming resilience into urban development planning in. This included a city-level hydrological study, institutional analysis at state and national levels and consultation with local stakeholders. The outcome has been the provision of detailed recommendations on how to effectively mainstream resilience into state and city planning process, and lessons regarding associated challenges. Key issues include: the lack of a coherent policy framework through which to implement adaptation in cities; the need for greater capacity at the city level for generating locally-relevant plans; competing demands for infrastructure and housing; and lack of access to basic services that is characteristic of urban settings in developing countries.

Michael DiGregorio, ISET, Vietnam

This presentation focused on a two-year project undertaken by ISET and Binh Province's Climate Change Coordination Office aimed at modifying current urbanization and planning practices for Quy Nhon City. The project used a combination of grassroots level interviews, hydrological modelling, and spatial analysis, towards the ultimate goal of directing urban development away from flood prone areas while also designing a climate resilient future for all city residents. Some of the main lessons from the project include the central role of local people, whose observations add detail to available datasets, often providing insight into the causes of severity of impact from extreme events. Similarly, hydrologic models can be used to confirm, dispel and quantify local observations. Methodologically, video provides a persuasive means of integrating community observations and technical research.

Parallel 'out-of-the-box' session 8: Mainstreaming into local government planning

This out-of-the box session was facilitated by Fiona Percy and Agnes Otzelberger from CARE, and Tracy Kajumba, Medhin Fissaha and Saide Anlaue from African Climate Change Resilience Alliance (ACCRA).

Small groups - sharing experiences on mainstreaming CBA

This session asked four questions through which participants shared their experiences and collectively generated lessons on the theme. The first question asked participants to describe successful CBA mainstreaming practices or experiences in relation to local government planning. Participants discussed their experiences from across Africa, Oceania, South Asia and South-East Asia. A number of success factors arose during discussions. Institutional accountability processes must be in place (both upward and downward) along with monitoring and measurement frameworks. Existing government planning processes should be used when possible. Money and resources must be allocated from national to community levels. Inclusivity of the most vulnerable groups in practice must be ensured. Success is helped by working through existing community-based organizations that represent the interests of the poor/vulnerable (local capacity building needed). Local vulnerability assessments can be used to guide programme design and ensure inclusion of the most vulnerable.

It was agreed that mainstreaming of CBA into local government is essential but will take time and investment to achieve long-term results. A challenge is convincing donors to work over a long timeframe.

The second question was: “What barriers do local governments face to effectively mainstream CBA and why?” The majority of responses related to governance issues such as lack of capacity, political will or “buy in” and the exclusion of women and other vulnerable groups. It was highlighted that excessive departmentalization complicates decision-making and coordination of decisions. Moreover, some countries already have strong legislation and local planning processes (e.g. Nepal), in others it is very weak or non-existent. Additionally, local government plans are mostly directed by central government giving little control over decision making at the local level. Other issues raised include a lack of resources such as money, locally relevant and usable information and the understanding on what can be achieved with limited resources. It was also noted that the power dynamics of communities need to be better addressed (in terms of ownership and accountability). Community knowledge is often trumped by scientific information. While it was agreed that information gathered by communities it is not always complete and could be misleading, their local knowledge is vitally important for developing location specific adaptation plans.

The third question was: “What is needed for effective mainstreaming of CBA by local governments?” The majority of responses related to the barriers already mentioned and discussion was centred on local government—typically the need for capacity building (e.g. skills, knowledge), financing and effective and equitable resource allocation. The requirement of good information and knowledge of longer-term benefits and consequences of community-based adaptation was also raised. The majority of issues raised were related to governance—for instance, inclusive governance that facilitates the empowerment and meaningful participation of vulnerable groups; allowing a space for meaningful discussion, sharing and learning at all levels and across sectors. Upward and downward accountability are both required. CBA mainstreaming into local government planning also requires working with and through existing government processes. However, this would require political will at national through to local levels and institutional accountability to guide mainstreaming. To monitor progress, a monitoring and evaluation process is required with indicators of both adaptation and mainstreaming to provide evidence. From the perspective of the community, it was highlighted that savings groups can be used as a community mobilizing mechanism. These groups can be represented by umbrella organizations and be used as a mechanism for both financial resource mobilization and voice of community vis-à-vis governments.

The fourth question asked: “How is mainstreaming CBA in government planning different from business as usual government planning?” To begin, it was highlighted that climate change is a cross cutting issue that will need to be mainstreamed across multiple sectors and stakeholders. A defining feature would be that government planning at all levels would need to incorporate the ideas generated through CBA processes. It will also act as a new filter or criteria on priorities in government planning and would require a longer time horizon when making plans. This would necessitate planning activities to embrace iterative processes of dialectic mutual learning between government members and communities. It would need to incorporate various forms of climate-relevant knowledge and information, ranging from climate science to indigenous knowledge to academic research. An example of CBA mainstreamed into government planning would be the incorporation of community situated and executed vulnerability assessments and/or meteorological forecasts. In a similar vein, local development plans would be based on local level climate change scenarios and projections but would still incorporate local knowledge and experiences. Technical systems would be adapted to the needs and capacities of affected local people (e.g. information systems, early warning systems).

Open space - relating our insights to adaptive capacity

Following the group discussions participants carried their main conclusions forward on idea cards, into an open space where cards were clustered around one of the five elements of the Local Adaptive Capacity (LAC) framework: forward and flexible decision-making, knowledge

and information, institutions and entitlements, innovation and assets. A relatively large number of issues were related to “flexible and forward-looking decision-making.” An example of a barrier identified here was the lack of community representation in decision-making, while some needs included community empowerment and political will. Under “knowledge and information,” participants noted for example the lack of knowledge on climate change issues and the need for better evidence on CBA mainstreaming. With regard to “institutions and entitlements,” issues raised included the importance of accountability and transparency. For the characteristic of innovation, participants pointed out that CBA requires a more iterative planning process than business-as-usual development. Finally, with regard to assets, participants highlighted issues such as limited finance and resources. Participants were able to relate all cards to at least one aspect of adaptive capacity—reinforcing the notion that strengthening adaptive capacity is essential to effective CBA planning.

To conclude the session, Agnes Otzelberger provided observations of some of the key issues that came up across the open space exercise. A missing threshold of minimum assets for adaptation was a recurring theme, as was the need for better systems for monitoring and evaluating progress. Furthermore, many people pointed out the need for strengthening basic principles of good governance at the local level, including transparency, accountability and inclusion. Specifically for mainstreaming CBA there is a strong need to focus on working across sectors and integrating various types of relevant knowledge and experience from different stakeholders in a more iterative, on-going process of understanding vulnerabilities and adaptation priorities. At the end of the session, participants voiced appreciation for the interactive nature of the session and the opportunity to hear from a diversity of perspectives. One participant also pointed out that while a lack of resources or political will was a common theme in the discussion, good CBA planning and processes can be very helpful in overcoming these barriers.

Parallel session 9: Tools for evaluating and mainstreaming CBA into development planning

This session was facilitated by Daniela Tarizzo, United Nations Development Programme (UNDP)/United Nations Volunteers (UNV), who began by introducing some key terms. In particular, ‘tools’ are the instruments and systems that have been identified to improve the results of activities, and ‘evaluation’ is necessary to see how effectively work is being undertaken and to what extent activities need to be re-addressed or adapted. The ‘community’ is both an essential operational framework and an instrumental evaluation component to ensure the objective of assessment and eventual re-addressing of activities according to their needs.

Next, Soumyadeep Banerjee spoke about the qualitative and quantitative tools the International Centre for Integrated Mountain Development (ICIMOD) has developed to explore mountain-specific livelihood vulnerability and adaptive capacity in the Hindu Kush Himalayas. ICIMOD’s objectives are to examine vulnerability determinants, document people’s perceptions of climate variability and assess existing coping and adaptive practices. The Hindu Kush region includes ten major river systems and is one of the poorest areas in the world. The mountain is a challenging living space and people have been experiencing rapid changes, however there is a lack of cohesive information on the nature of vulnerability and adaptive capacity. There is a need for a system to identify determinants of mountain poverty and vulnerability and contribute data to a regional database. Where data is available, sometimes it is not comparable between countries.

Mr Banerjee from ICIMOD reported that the tools can be used to identify who is poor and vulnerable, how poor and vulnerable the population is and which factors contribute to poverty.

The mountain-specific livelihood vulnerability framework was first posited by Han et al (2009) and included mountain specific elements like accessibility and niche resource products. Within this framework, around 1400 households were sampled from across the countries. The poverty index is made up of multidimensional poverty measures, which complement official poverty and vulnerability measures and enable identification of poor and vulnerable groups and districts. Vulnerability is defined as a combination of adaptive capacity, sensitivity and exposure. ICIMOD are using this in collaboration with IFAD to target their beneficiaries for the next 5 years. Daniela reminded the participants that a huge number of people are affected and there is an important lack of data regarding baseline information to use as a reference.

Next, Somya Bhatt from Deutsche Gesellschaft für Internationale Zusammenarbeit (GIZ) spoke about recent work on climate adaptation in rural areas of India. The project worked with the Indian Ministry of Environment and Forests in four partner states on activities such as disaster preparedness, livelihood diversification and salt-tolerant varieties of rice. A tool known as 'systematization' was used to systematically document the project in order to use the results as a learning tool. The team defined a question and spent between four and eight days in the field to explore the question, for example to find out what was the situation before the intervention, what is the system now and how did this project lead to the change. This is arguably different from a conventional M&E system because it is more participatory and allowed more time for internal reflection. Local government officials agreed in principle to replicate the approach through government schemes that generate employment. In the Madhya Pradesh project, there were successes and failures, for instance the need to include landless people in the project was a lesson that emerged. The overall assessment of this tool was that the model has high potential for up-scaling. Furthermore the team realized the importance of traditional knowledge for up-scaling. Systematization created a common understanding of the project and its link to adaptation. Daniela concluded by saying that this underlines the importance of conceiving of and including monitoring processes in project design and development, as well as integrating M&E practices into project planning—this includes traditional knowledge as a central component.

The presentation that followed explained the integrative model of community-based adaptation developed at Vanderbilt University. Mark Abkowitz and John Nay explained their use of a multidisciplinary team involving a nexus of social and technical planning, working with rice farmers in Sri Lanka on the issue of migration in Bangladesh. Agent-Based Modelling (ABM) was used, in which agents are considered to have static or dynamic attributes (e.g. gender would be considered a static attribute). The speakers argued that community based approaches are the only ones likely to be successful because climate change is a localized phenomenon. In the integrative economic model, exogenous changes enter the model, such as rainfall, floods, cyclones and sea level rise, and the social exogenous system also enters with elements like rent-seeking, land-grabbing and external aid. Protective adaptation figures in before the impact, and adaptive coping after the impact. The case study used was Polder 32 in Bangladesh, which is subject to a variety of chronic stressors such as flooding, drought, salinization and cyclones. This was argued to be a tool for understanding how emergent patterns arise from decisions of individuals and communities. ABM and its Risk Heat Map were presented as tools for conceiving of and planning hypothetical future scenarios and enhancing preparedness, and as a thinking stimulus for looking into future needs—and in this sense they can be seen as a tool to understand reality. The model captures key multi-level patterns, for example between shrimping and rice production. The speakers felt that political influence is difficult to model but were aiming to achieve that. Generally the speakers felt that the focus is often on short-term problems, but that if long-term issues are not properly addressed, they quickly become urgent. Overall, people by and large do not understand how climate change affects their daily lives. Compounding this issue, uncertainty remains in terms of how climate change will unfold at the local level. The speakers argued this is why we need to start down the path of 'no regrets' strategies to tackle poverty, which aim to address vulnerability.

Following this speech, Simon Anderson introduced IIED's work on assessing the CBA community of practice. This work identified the attributes of the CBA community of practice and assessed its impact. Looking over the last six conferences, it was found that the structure of participants at the CBA conferences has changed over time. A realist evaluation approach is used in order to ask questions about why people come to the conferences and how the process of being part of this hypothetical community helps to better deal with what is being learned. In this interactive session, a member of the audience from Zimbabwe argued that the approach helps illustrate how things can be catalysed from the bottom up, and how this approach can inform policy processes. Other members of the audience argued that there is a sense in which there is a sharing of intention, common goals and ways in which we might do things, while another participant argued that these conversations had shaped how they implemented a project that became a NAPA pilot, and also fed into government processes. Members of the audience were requested to put their hands up in response to questions, and it emerged that a larger proportion of the audience was attending their first CBA conference than had attended previous ones.

In the discussion that followed, panellists from Vanderbilt University responded to questions from the audience about their model, and argued that adaptive coping lowers the marginal effect of productivity shocks, after the change occurs. The general equilibrium effect is different as it leads to a passive market effect like a change in price. A member of the audience responded to the presentation by ICIMOD by proposing that it is not really data that is needed, but rather understanding and interpreting data—i.e. the need to examine the causes, including causation and power relationships, that act as barriers to change. This includes, for instance, land tenure, caste, gender and ethnicity, the effects of which are central in terms of understanding different capacities to adapt to climate change. However, the speaker from ICIMOD argued that more data is needed because of income compatibility and because for many dimensions, data is missing. The member of the audience argued the agent-based concept excludes the ability to analyse social class and land tenure. Another approach would have been to use the sustainable livelihoods approach, which has been in use for 20 years, and in which power relationships are crucial. The speakers from Vanderbilt University argued that the sustainable livelihoods approach is completely compatible with this model.

Another participant from the audience suggested that there is too much emphasis on tools and that models are too complex, given that development work is often undertaken with illiterate, rural communities. In this sense, they provide data for us: they are only the 'providers' of the data and then decisions are taken elsewhere. The participant also asked the speakers to what extent they had considered gender in analysing the data. Respondents from Vanderbilt University argued that those issues were being brought into a framework to quantify the problem so that decision-makers can plan in a coherent way. The idea was not for models to dominate but to help explain cause and effect relationships. In this way, an evidence base for the return on investment is provided, which is needed in order to direct resources towards adaptation. Overall, the idea is to present the model in a way that makes sense to the community and then validate it with community members, changing the model depending on that dialogue in order to arrive at a shared understanding. In response to the objection that tools are useless as we work with remote, rural, often illiterate communities, Daniela Tarizzo introduced a tool from Small Grants Programme (SGP) Guatemala which was conceived at the community level, showing that it is possible to design instruments that respond to local needs, and that tools and models do not necessarily need to be top-down or academic. Another participant asked to what extent the history of the study site at Polder 32 was accounted for in terms of contributing to non-climate vulnerability. They also enquired how non-climate and climate vulnerability had been differentiated. Vanderbilt University argued that it is important to understand what is happening irrespective of the climate so they are considering local politics around shrimp farming, external aid dependency and land grabbing activities.

Finally, an audience member commented that at community level there is no homogeneity, and some groups are more vulnerable than others. How effective are these tools at reaching the most vulnerable among the community? The panel member from GIZ responded that their tool was designed for that purpose, as they realized they failed to include the landless people in the project activities so were now adjusting for that. Audience members discussed the need to demonstrate value for money to donors, which requires baseline data and a monitoring process. Through this process, the value of investing in CBA activities could be demonstrated.

Parallel ‘out-of-the-box’ session 10: Google Earth, participatory resilience assessments

Overview

This session was chaired by Ced Hesse, IIED. The session drew on recent mapping work undertaken in dryland areas of East Africa and was structured as an interactive workshop, with participants actively contributing to the experience.

The chair of the discussion began by emphasizing that for resilience to be built, one crucial element to consider is which actors are making decisions, and the role local knowledge plays in determining this. This is of particular importance in the drylands given that from the perspective of some government planners and even NGOs who lack sufficient understanding of how local livelihoods and economies operate, these areas appear as empty, barren landscapes often prompting externally driven interventions to ‘improve’ conditions. Enabling communities to articulate the complexity of their livelihoods and the importance of local resources to sustaining their lives is thus critical. Before the session began the following key point was emphasized: “How is it possible to foster a good understanding of community knowledge amongst government planners?” The use of community-produced maps that are subsequently transformed into digitized maps is one way to achieve this.

The exercise

Session participants were asked to take on the role of risk assessors in participating in a flood risk exercise for Dhaka. This was used to demonstrate the power of Information and Communication Technologies (ICTs), in particular Google maps and open source Geographic Information System (GIS) software for creating maps, to democratize the decision making process and to include the views of locals as well as planners.

The exercise identified two main types of resources that are paramount in a disaster risk scoping study—logistics and humanitarian needs. Participants were placed in groups and given a map overlay of either north or south Dhaka, and then proceeded to identify sources of shelter, potential hazards and resources. Four of the participants had in-depth local knowledge. What these participants demonstrated was that uncertainty can be managed by utilizing local knowledge. Indeed the concept of local knowledge was a recurrent feature in the discussion.

Knowledge awareness

The team presenting the out-of-the-box session drew on their own experiences in working in arid and semi-arid lands, and emphasized that in their experience mobility and knowledge are key assets.

An important question raised during the session was related to why maps are being made. Simply stated, climate change cannot be reversed, and maps allow actors to preserve adaptive capacity and protect key resources, but most importantly they help close the communication gap between planners and constituents. This point about planners and constituents was the most powerful message to emerge during the session. Put plainly, in Kenya, where this example was drawn from, it is difficult to manage rangelands as planners do not know what the barren landscape supports. Utilizing constituents' local knowledge and the power of ICTs and maps allows the production of extremely detailed digitized maps.

An interesting point to emerge, again drawing on case study work in Isiolo, Kenya, is that by using open source software, planners and constituents can create a living map. This approach, when applied to halting rangeland encroachment, is participatory and thus local uptake is quick.

Questions

A brief period of time was devoted to questions and answers some of which included: "Is there any point in using perception maps and how would one use them?" "Which organizations are using these mapping tools and what constraints are imposed by them?" "Is there a choice between perception maps and digital maps, and how can they be related to climate change?"

Final thoughts

The session demonstrated how a community centred approach to mapping can be inclusive. When government officials take this approach into consideration resilience can be built; utilizing local knowledge is critical, which in turn makes barren maps and places come alive.

Parallel session 11: Ecosystem-based approaches to adaptation

This session was facilitated by Hannah Reid, IIED. The session panellists included:

- Axel Weiser, Pastoral Livelihood Initiative, Save the Children, Ethiopia
- Gabriel Kulwaum, The Nature Conservancy, Papua New Guinea
- Debra Roberts, eThekweni Municipality, Durban, South Africa
- Kimberley Marchant, WWF, US
- Ainun Nishat, Vice Chancellor, BRAC University, Bangladesh
- Ishtiaq Ahmed, Head of IUCN in Bangladesh

Hannah Reid began by presenting her work with UNEP on the links between Ecosystem Based Approaches (EBA) and CBA. EBA was defined by the convention on biological diversity as the uses of biodiversity and ecosystem services to help people adapt to the adverse effects of climate change as part of an overall adaptation strategy. CBA is defined as a community-led process, based on communities' priorities, needs, knowledge and capacities, which should empower people to plan for and cope with the impacts of climate change. A framework by the 'Ecosystems and Livelihood Adaptation Network' was presented that distinguishes the differences between EBA and CBA. It was shown that there is a lot of relabeling of both EBA and CBA activities. Nine key issues and challenges were examined that resulted from a study by UNEP, CARE, BirdLife and IIED (due to be completed in 2014). The study investigated how to take forward an integrated planning/programming framework for CBA-EBA approaches and what key issues this involves. It was highlighted that many of the theoretical distinctions (e.g. different values, histories, institutions and donors) between EBA and CBA are arbitrary and semantic at field level. Increasingly, donors, practitioners and policy makers are realizing the need to integrate EBA and CBA and acknowledging that seeing them as two separate fields is not

a constructive way forward. The case for local approaches is only strengthened if a strategy that integrates EBA and CBA is adopted.

Key issues and considerations for designing and implementing integrated EBA-CBA approaches

1. The end result is about helping people cope with climate change, and not ecosystems.
2. EBA/CBA is as much about process as outcomes, and as such, how it is done is important.
3. Co-benefits of this integrated approach can lead to carbon sequestration, livelihood sustenance and disaster risk reduction. The evidence base needs to be much more robust in order to quantify these.
4. There are trade-offs at different spatial scales: for example, watershed versus administrative units. There are also short-term as well as long-term trade-off issues in relation to adaptation planning.
5. Poor people are often the most vulnerable and most likely to suffer due to climate change. Community participation must be genuine, and closer to self-mobilization than passive consultation.
6. EBA and CBA are bottom-up approaches, but problems exist as to how to scale these up and mainstream them effectively. Scaling up should not exclude larger spatial scales such as the ecosystem.
7. Current tools and frameworks for monitoring and evaluation are inadequate for addressing ecosystem related issues.
8. The UNEP's EBA Decision Support Framework was presented which contains four components: setting the adaptive context, selecting appropriate options for adaptation, designing the change and adaptive implementation. This can be adapted for CBA/EBA planning and implementation by strengthening community development elements.
9. The evidence base so far is strongly anecdotal and not sufficiently robust or scientific. Other pitfalls include the lack of economic analysis and insufficient knowledge about tipping points and thresholds.
10. Effective scaling up is required. Lessons can be learned by exploring examples from the application of community based natural resource management in Africa or the Local Adaptation Plans of Action (LAPA) approach in Nepal.

The second half of the session involved both a panel session and a short Q&A session. Gabriel Kulwaum, in explaining why EBA should be mainstreamed into CBA, argued that climate change should be seen as a development issue. He highlighted that in his case it is the people who control the natural resources not the government. Consequently the people are investing in their futures, for instance by planting mangroves and curtailing overfishing. Livelihoods and ecosystems thus cannot be seen as separate. Accepting ownership by communities is vital, they must be accountable and processes should be sustained.

Ainun Nishat described the role EBA can play in disaster risk reduction. He commented that new climate regimes are emerging; normal seasonal weather patterns, such as Nor'westers, cyclone activity and flooding in Bangladesh are changing. Communities already use ecosystems to protect their property, for example planting bamboo at the northwest corner of the homestead to protect against Nor'westers. However, these actions will need to be adapted as climate and ecosystems change. An interesting point was made on the link between food security and EBA: there is a need to both identify ecosystems that may experience food insecurity and select crops based on how ecosystems are changing.

Debra Roberts discussed the benefits from EBA-CBA related activities in relation to building a green economy at the lower municipality level in Durban. She was quick to point out that rural and urban contexts differ in significant ways; for example many urban ecosystems are highly degraded. Co-benefits can be realized under the green economy and the green economy can lead to the creation of green jobs. Debra did, however, issue a caveat that this might be traditional development labelled green.

Axel Weiser was asked, “What are the key success factors for achieving community adaptation outcomes and mainstreaming participatory natural resource management (NRM) processes into local level planning?” He highlighted that participatory NRM is theoretically very similar to CBA; key factors relate to power relations, institutions and institution building. Thinking in terms of systems was the critical success factor. Ecosystems must be central, as actors must work in and with them. Government has a key role to play in implementing rights-based approaches. An interesting point raised related to how to move beyond viewing ecosystems as just providing services.

Kimberly Marchant was asked, “What has WWF been doing to mainstream adaptation into its climate change activities?” She stressed that WWF is a conservation organization, but their mission is not only about conserving nature, it is also about supporting the people who depend on nature. An example of this is conservation agriculture. EBA is a people centred approach that is in line with their mission. It was also highlighted that climate change is a trans boundary issue, which is in line with EBA thinking.

Ishtiaq Ahmed provided a summary highlighting the interdependent relationships between EBA and CBA. The importance of defining ownership was stressed in relation to defining the types of partnership one aims to create. Co-management is likely to lead to people’s participation, meaning everyone should be included in the process. The point was raised that like in other countries, Bangladesh is rich in natural resources but its people are poor.

Ainun Nishat ended the session with a sombre comment that what may be needed is ecosystem engineering. Fifty years from now the temperature might be +3°C warmer. The Sundarban 50 years ago was a freshwater ecosystem, now it is overwhelmingly brackish; 50 years from now it could change again. We should therefore start asking questions about what ecosystems could survive in a +3°C world and start planning accordingly.

Parallel session 12: Water

This session was facilitated by Michele Leone, International Development Research Centre (IDRC) and Paul Isabirye, Ministry of Water and Environment, Uganda. Ajaya Dixit, Institute for Social and Environmental Transition-Nepal (ISET-N) gave the keynote address and presentations were provided by the following panellists:

- Khairul Islam, WaterAid
- Shuvechha Khadka, Institute for Social and Environmental Transition (ISET-N), Nepal
- Mohammad Kamruzzaman, Centre for Water Management and Reuse, School of Natural and Built Environments, University of South Australia
- Rezaur Rahman’s, Institute of Water and Flood Management, Bangladesh University of Engineering and Technology (BUET), Bangladesh
- S.M.A. Rashid, NGO Forum, Bangladesh

The session aimed to answer four key questions:

- 1) How has research been successful in proposing innovative solutions for adaptation to climate change impacts in the water sector and what are the challenges ahead?
- 2) What issues are institutions facing in defining effective water management plans that work across scales? What are the opportunities to define those plans in a way that can enhance CBA?
- 3) How can one increase focus on knowledge transfer and capacity building for adaptation related to water resources across sectors? Are there good examples, lessons that can be learned?
- 4) What is CBA's contribution to increasing understanding of the systemic interactions between climate change and those components of the livelihood system that are centred around water resources?

Key themes emerging from the water session were issues of uncertainty, inter-disciplinary thinking and the role of knowledge. Discussants considered whether autonomous responses to climate change are actually 'adaptation,' or rather if they comprise coping mechanisms that are unjust. Finally, the session touched on the role of the private sector. Michele Leone (IDRC) introduced the session by explaining that water is centrally important for livelihoods but is often overlooked. Water management occurs across sectors, and touches on issues of security, equity and justice, as well as conflict. A common question relates to the role of innovation in water resources management and how to best integrate this into the National Adaptation Plans. Mr Leone argued there is a need to encourage collaboration between users of water resources to encourage shared governance. Paul Isabirye from the Ministry of Water and Environment of Uganda added that water is crucial for life and is often equated to food security, economic growth and ecosystem health, so it is clearly a resource that must be managed in the face of climate change. He noted that there are many challenges for water in community-based adaptation, whether at the catchment or basin level.

The keynote speaker, Ajaya Dixit from ISET Nepal, spoke on the topic of 'Climate change and water—building resilience and adaptive capacity.' Mr Dixit argued that water does require provocative and outside the box thinking, because water is at the foundation of many issues. Climate change is a challenge for existing knowledge systems but water management is often compartmentalized and has weak implementation. On-going political transitions are also challenging. Major infrastructure has often been built based on an assumption of predictability of climate events and water discharge, but climate change adds a new risk. Modelling processes and hydrological data are limited, so it is not always possible to provide reliable information. Conventional approaches to designing and managing water structures are under question in light of climate change. This brings conceptual and methodological challenges.

Mr Dixit highlighted some key questions for discussion: "How to plan in a future that is becoming more uncertain?" "How to generate knowledge in such an environment?" "How would innovation occur and where are the innovators?" "Who decides how change happens?" "Does climate change offer an opportunity to do things differently and how can uncertainty be managed?" For instance in South Asia, climate-related disasters have been becoming more frequent, posing fundamental challenges for the livelihoods and food security of millions of people. Floods renew soil fertility and recharge aquifers, but are also destructive. The basic guiding approach is that of control. While embankments brought initial benefits, they have long term negative effects through breach, waterlogging and drainage issues. In Pakistan, recent flooding was caused by a wet monsoon but the disaster was worsened by structures and land use change. Overall, Mr Dixit argued that working with the natural system might be more practical than aiming for total control. Information has to be two-way and transparent in a

shared learning process where scientists work together with farmers, women and others to understand the problem and identify adaptive measures. Ajaya Dixit concluded by highlighting the need to develop resilient systems, and ensure justice, equity and capacity at the individual and household levels to shift strategies as the climate changes. Accessing benefits relates directly to reforming governance and political systems. Yet, all the efforts will fail ultimately if mitigation is forgotten.

Md Khairul Islam, from WaterAid in Bangladesh, followed by stating there are few studies on certain issues, such as salinity. Aneire Khan's article in *Lancet* showed that morbidity during childbirth was affected by salinity. How are institutions able to respond to this? In the absence of state responses and collective development responses, relying on autonomous responses is insufficient to resolve the problem. Khairul Islam posited that adaptation is not taking place in Bangladesh; what is taking place is coping and crisis management. After cyclone Aila, the embankment was broken and then repaired, but still people are collecting water from sources up to two or three km away, rather than from 500 metres, so is this adaptation? People and children are consuming less water, and the ultimate coping mechanism is internal migration. Khairul Islam also noted there has been privatization of water in response to salinity. Khairul Islam asked whether this is a good initiative or actually the deprivation of human rights? When discussing community based adaptation, it must be remembered that basic human rights are being challenged because we are asking the community to respond, which is not equitable. Another issue to consider is the lifetime cost of initiatives, because it has been found that over ten years the capital cost of a tube well is only 20 per cent: the community covers 80 per cent for on-going maintenance. Ultimately low cost technologies are needed, and local government has a fundamental role to play in terms of providing support to stimulate autonomous responses.

Shuvechha Khadka from ISET added that Nepal has developed a process through which administrative units were ranked using vulnerability tools, through a shared learning dialogue, using the conceptual framework of systems, institutions and agents. Looking at the least vulnerable location, ISET found there were institutions in place and a main highway, making it more accessible to the market. In the most vulnerable district, local women were not educated and could not maintain the rainwater harvesting systems. Climate change was only one of many drivers affecting the village. The shared learning dialogue brought together people like policy makers, farmers and teachers to draft a local resilience plan. Moreover, in every society there are social norms or rules of the game, which can either limit communities' adaptation capacity or enhance it.

Next, Mohammad Kamruzzaman from the Centre for Water Management and Reuse at the University of South Australia spoke about sustainable water resource management. Mr Kamruzzaman explained that according to the statistics, only 25 per cent of the rainfall in South Australia is usable as 75 per cent is consumed by evapotranspiration. This region of Australia has been facing drought and research is on going to understand the climate phenomenon in this region. The aim is to understand the climate drivers, and convert the General Circulation Models (GCMs) to the local scale through downscaling techniques to produce knowledge at a fine scale.

In the discussions that followed, there was a question from the audience regarding Nepal, in which the discussant noted that village level committees are often unaware of the local and national adaptation plans of action. The speaker from WaterAid pointed out that it is important knowledge is shared, for example the thinking from the Intergovernmental Panel on Climate Change (IPCC), or for local experiences to reach decision makers on how people are actually adapting. Questions also came up about water supplies under pressure from urbanization. The speaker from WaterAid noted that in cities like Dhaka or Khulna City, areas where the urban poor reside are not a top priority for water or electricity services, which instead are offered through an informal sector. Thus, poor people in urban areas are paying more than the middle

class to access water. These areas are also built on swampy land, so are affected by waterlogging and water-borne diseases. The coping mechanism places a burden on the primary healthcare system. In conclusion, autonomous responses based on equity and justice are needed. Ajaya Dixit agreed and explained that in Kathmandu there is a high concentration of people using fossil water resources that are struggling to meet the supply needs. Demand goes up and results in massive abstraction, which is clear maladaptation. Low-income slum areas are still deprived, having to spend a large portion of their income to buy water. Overall, this is a dynamic terrain and there is a need to capture the nuances to see how to respond to this complexity.

A member of the audience also posed questions about the role of the private sector in water supply, suggesting that the private sector needs to be more involved in the discussion on community-based adaptation as they have resources and technology, and could bring resources to the community at a lower cost than government. Khairul Islam responded that private actors usually extract underground water, but when unregulated water abstraction takes place, there are serious concerns. In Bangladesh, the Water Act has been tabled in the parliament to address this. Mr Dixit also added that this is a very wicked problem and the challenge is to move beyond disciplinary boundaries, and our own comfort zones, as focusing on engineering solutions will not solve the problem. Audience members also highlighted the extraction of water resources by the brick industry in Bangladesh, as well as serious sand-mining issues. In summing up the session, Ajaya Dixit argued that the situation is complex—and perhaps confusion is a sign of knowledge because this is a ‘wicked’ problem. Mr Dixit urged the audience to think of adaptation as a process rather than an end product, and this process needs to be deliberative, transparent and create capacity. Mr Dixit also urged the audience to remember in discussions about knowledge, it is not that local communities do not know; they often know what they want in terms of jobs, education for their children and good health. Local communities do strategize to achieve their needs and goals and are not just passive recipients of knowledge.

Parallel ‘out-of-the-box’ session 13: Serious game playing for change

This out-of-the-box session was facilitated by Saskia Daggett, Tracy Kajumba, Saide Anlaue and Medhin Fissaha, the African Climate Change Resilience Alliance (ACCRA). The ACCRA game was designed to support policymakers to better understand how to mainstream climate change adaptation and resilience through the use of “flexible and forward-looking decision-making,” one of the five pillars of ACCRA’s Local Adaptive Capacity (LAC) Framework. Session participants were encouraged to take on the role of district level planners, with a set amount of resources and facing a range of potential risks and shocks as they go about making decisions about which policies to implement in their district over an eight year period of time. Under this scenario, players begin to understand first-hand ways to frame policymaking decisions and planning towards the end of encouraging local adaptive capacity. Energy and emotions ran high in the session as players began to compete to be the most adaptive district planners by the end of the game. Feedback from the session was mainly positive, with participants highlighting the potential of the game to foster coordination and integration among local government planners. While in early stages, initial research findings on the impact of the game where it has been implemented with local government planners in ACCRA countries are positive. In particular, evidence suggests the game does influence players to shift their approach to decision-making, and provides a light-hearted context for bringing together planners from various different sectors, many of whom may have previously had little or no contact with one another. For these planners, the game encourages an atmosphere of mutual understanding and working together towards the end of mainstreaming adaptation, rather than one in which they may argue over limited resources. Follow up research is planned to assess the level of impact on decision-making in real-world scenarios.

Plenary ‘out-of-the-box’ session 14: Games for a New Climate: learning risk management through serious, fun participatory activities

In an innovative and highly interactive session, the session facilitator, Pablo Suarez (Red Cross/Red Crescent), engaged about 200 participants in a game designed to illustrate the many issues and trade-offs around planning and preparing for disasters and climate change. Conference participants were invited to populate numerous tables, each representing a “community,” with between five and eight people. Simulating the real-world challenges that communities face in trying to understand the new and confusing reality of climate change, Suarez first introduced a set of simple rules that created the emergent system complexity associated with climate risk management, and then gave the group only a few minutes to digest them and plan strategy before the game began. He explained that just like in real life, the game would present players with information, require them to make decisions on the basis of that information and lead to consequences that produce both winners and losers.

The game started with each community having a limited number of beans, which were used to represent community “resources.” Facing the threat of a major flooding disaster, individuals and communities could choose to spend these beans on several activities, including developing an early warning system, preparing for a possible flood through early action or paying for disaster relief after a flood had already occurred. As in real life, these activities had different costs and benefits: taking early action to prepare for floods required spending one bean before knowing whether or not a flood would occur, while dealing with disaster relief when a community had not invested in preparedness cost four beans. Adopting an early warning system required a high initial cost but improved decision-making throughout the rest of the game.

In addition to the game players representing individual community members, a few players took on other roles. Four government officials each had the responsibility of overseeing an entire “province,” or about four to five tables. Using their own small fund of beans, government officials could support communities by providing “disaster aid” as needed in emergencies. In addition, at the start of the game, government officials collected beans from all communities in their province in order to bid for an early warning system, which was provided to the two provinces that bid the highest number of beans. The last group of players was the “doctors,” who had the responsibility of collecting bean payments from communities during disasters and determining when a “humanitarian crisis” had occurred.

Amid much discussion and excitement, the game got underway. It was played in ten rounds, each representing one year. Every community had two dice, one green (representing probabilities of regional climate conditions) and another white (representing local climate conditions). If the sum of the two dice was ten or more in a given round, a flood disaster would strike that community. At the start of each round, every table first rolled the green die inside a cup, which was turned face down on the table so it could not be seen. But those communities with an “early warning system” had the advantage of a transparent cup, giving them additional information about the likelihood of a future disaster. Before rolling the second die, the community as a whole had to make a key decision: whether to invest one bean in early action or to instead forgo preparation and take the risk of dealing with a disaster after the fact. In addition to investing one bean, at least five members of the community had to stand up to signal their early preparation. Communities had only a few moments to discuss the situation and make their decisions.

After then rolling the second die, communities could quickly determine whether they were struck by a flood. If flooded communities had taken early action to prepare, they were safe from further impacts. However, if communities had not prepared but were unlucky enough to suffer from a flood, they would have to pay four beans for disaster relief. If the community did not

have enough beans to pay for relief and could not get support from its government representative, then a humanitarian crisis would occur, represented by a red stone placed by the doctors.

As the game continued, players grappled with how to balance the trade-offs of their decisions. Internal differences often emerged within communities. They debated whether to use their limited bean supply on preparedness or to wait and hope that a disaster would not occur. They made the best use of their limited information and jockeyed for the attention and support of their government representatives. About halfway through the game, the impact of climate change was simulated with the introduction of a new die that made the occurrence of a flood more likely. As time went by, some communities ran out of beans and a few suffered humanitarian crises.

After ten rounds, the game ended, prizes were awarded to the winners, and the group reflected on the results. Five communities had suffered from a humanitarian crisis due to a lack of beans when a flood hit. The winning community had not experienced any crisis and still had seven beans to spare. Interestingly, the community was not one that had been equipped with an early warning system. When asked what could explain their victory, the table indicated that corruption might have had something to do with it (they asked for more government support than was needed—and received it). An award was also given to the best performing government representative, whose province had experienced no crises and still had a total of 21 beans.

Mr Suarez used the results of the game to highlight some key insights. He noted that in similar game sessions, winners can include either those who bend the rules or those who decide to take a lot of risks and are lucky enough not to experience disasters. He warned that these people whose risky strategies seem to pay off tend to get a lot of attention and flaunt their successful risk taking, but if everyone in a country acted as they did, many more humanitarian crises would occur. When you look across a region or country, it is often those that are moderate and smart in their risk taking who have the best results. Games like this one help to reveal real-life trade-offs, such as whether or not to invest in costly early warning systems in order to enjoy future benefits. These decisions must be made within a specific context; the right decision for one community may be the wrong option for another. The game also illustrated how climate change will increase the probabilities of disaster events and could lead to more crises for those who are not prepared.

As a final note, Mr Suarez pointed out the value of games in helping people to understand complex issues around climate risks. The players in the game felt real emotions: joy when a disaster had been avoided and dismay when they suffered a crisis. Games like this one help to get everyone actively engaged and drill home some of the key insights. In addition, games are a good way to motivate people to understand the issues more thoroughly and take more action. One of the prizes was the book “Games for a New Climate,” available online for free in pdf format at: <http://www.bu.edu/pardee/publications-library/2012-archive-2/games-climate-task-force/>.

Plenary session 15: Poster market place

This session was facilitated by Hannah Reid, IIED, and Lubna Seal, BCAS. The keynote address was given by Michael S.Z. Nkalubo, Ministry of Water and Environment, Uganda.

The presentation, on translating weather forecasts into local languages and difference this makes in rural farmers' decision-making, shared lessons from a pilot initiative on translating

weather forecasts into local languages and timely dissemination to rural farmers. Although weather and climate information and accurate forecasting are becoming increasingly essential for planning and decision making, especially for rural farmers, practices vary. Evidence shows that for decades rural farmers have not benefited from information provided by the National Meteorology Department. This is for various reasons including but not limited to, untimely information dissemination, information not reaching people at all or the complexity of terminology used. The Meteorology Department, with support from ACCRA Uganda, is using successful testimonies from rural farmers to scale up the initiative.

Poster presentations were then held to share case study oriented material in a more visual and interactive way than in previous years. Participants who brought posters gave short presentations to try to persuade conference participants to visit their poster, discuss their work and ask questions later.

Poster Presentations

Participant	Organisation	Poster Titles
Axel Weiser	Save the Children	"Participatory Natural Resource Management: pastoralists in partnership with local government in Ethiopia"
Carolien Pronk	VSO- Bangladesh	"VSO Bangladesh: climate change community adaptation"
Daniela Tarizzo	UNDP/UNV	"Vulnerability Reduction Assessment" "CBA" "Tamalola Village Community Meeting" "CBA" "Community Based Adaptation to Climate Change - Global Program"
Divya Sharma	TERI	"Climate Resilience Strategy: Guwahati"
Erin Roberts	ICCCAD	"Loss and Damage in Vulnerable Countries Initiative: Bangladesh"
Hannah K Lee	PhD Researcher	"Community Based Adaptation in Settlement Development Planning among the Urban Poor: a case study of Metro Manila, the Philippines"
Hannah Reid	IIED	"Community-based adaptation (CBA) and ecosystem-based approaches to adaptation (EbA): a false dichotomy?"
Paul Mitchell	Save the Children	"CBA6 solidarity prize"
Peter Ravenscroft	UNICEF	"Action Research: Creating Fresh Water Bubbles in Brackish Aquifer"
Popular Gentle	Charles Sturt University	"Enabling vulnerable communities to adapt to climate change: reflection on the role of local institutions"
Saskia Dagget	ACCRA/Oxfam	"Communities Adapting to Climate Change - Uganda"
Somya Bhatt	GIZ	"Climate Change Adaptation in Rural Areas of India - CCA RAI"
Wouter Dieleman	ECOREM	"Blue Energy: energy production and storage in natural and artificial atoll environments" "REDD+: community-based forest management and climate change mitigation" "Waste-To-Energy: the urban public environmental health sector development project in Bangladesh" "Clean Coal Technologies: application in power plants and brick industry"

Parallel 'out-of-the-box' session 16: Monitoring and Evaluation of CBA – sharing results of the International Centre on Climate Change and Development (ICCCAD) short course

This session was facilitated by Lucy Faulkner, ICCCAD; Terry Cannon, Institute of Development Studies (IDS); and Sarder Shafiqul Islam, BCAS/ICCCAD. Presentations were given by participants of the ICCCAD short course on Monitoring and Evaluation (M&E) for Community-Based Adaptation.

The session on monitoring and evaluating (M&E) of CBA provided the participants of the monitoring and evaluation short course (hosted by ICCCAD prior to and during CBA7) an opportunity to apply the tools they had gained in the short course by analysing conference sessions in relation to M&E. The session also served as a platform for further discussion on M&E of CBA.

The participants of the short course were divided into three groups. Each one evaluated one session of the conference to assess what indicators might be used to undertake monitoring and evaluation in those areas. The first session chosen was mainstreaming climate change into local and national government planning. The presentation stressed the need for mainstreaming activities to set quantitative goals, for example to improve the adaptive capacity of a specified number of people in a certain time frame. In addition, it is important to have a common CBA framework and plan of action that benefits poor and vulnerable households. Mainstreaming CBA should also promote the harmonisation of financial resources across government, donors, NGOs, private institutions and other organizations by establishing national and local climate change adaptation climate funds. Finally, an enabling environment in the form of institutional structure, human capacity and sufficient resources and equipment to enhance local government capacity is necessary in order to support mainstreaming of CBA.

The group tasked with evaluating the session on disaster risk reduction (DRR) emphasized the need to avoid a gap between end of relief phase and longer-term climate change adaptation without falling into poverty traps in between. The difficulty of assessing the effectiveness of DRR, and of distinguishing between output activities and outcomes, was also highlighted. Five areas of focus for evaluating DRR were identified, including: institutional framework, resource allocation, collaboration and coordination between stakeholders, information dissemination and capacity building of actors in different communities. An example of a possible indicator under each category was given. For example, an indicator for collaboration could be increased collaboration and knowledge sharing between those working on DRR and climate change adaptation. The group concluded that the business as usual approach to M&E is not adequate for evaluating CBA and thus new methodologies will have to be utilised and developed.

The third group focused on evaluating the session on CBA in urban settings. They stressed the complexities of CBA in urban contexts, including a lack of clarity around how to define the "community" in an urban setting, how CBA relates to the systems of governance in place and what is needed in order to increase resilience to climate change in an urban context.

The group presentations were followed by a presentation by co-facilitator Terry Cannon, which stressed the importance of being clear on what it is that CBA intervention is aimed to change. It is also important to understand how climate change affects what is going on already, especially the links between people and ownership and control over resources and how different groups have different perspectives. Given how many people are without land it is integral to understand adaptation options for the landless. Experimentation to find the right M&E tools to assess adaptation is necessary, but this is difficult to pitch to donors. The audience was asked to

consider several questions including who should be undertaking M&E, the time frames for different adaptation activities given that climate change impacts are increasing and whether or not adaptation needs to be differentiated from development.

Following the conceptual framing provided by Terry Cannon, co-facilitator Lucy Faulkner provided an overview of an emerging M&E system being applied to CBA interventions across Bangladesh and Africa. Emerging tensions around adaptation M&E were presented first, including the question of what constitutes successful CBA, what is needed to measure success and how to measure it, and lastly, who should define what is meant by success. It is clear that a 'one-size fits all' approach does not work and that multi-track M&E systems that deliver the information needs of multiple stakeholders engaged in CBA activities across scales should be used. One such participatory approach, which supports stakeholder understanding in what is needed to move CBA outcomes beyond development and adaptation to climate variability towards longer term adaptation to uncertain climate change impacts, is the multi-track Theory of Change based approach being used by Action Research for Community Adaptation in Bangladesh (ARCAB).

The session concluded with a discussion, including input from practitioners, researchers and donors. A significant focus of the discussion was the differentiation between adaptation and development and the importance of adaptation as an "additionality" to development. One discussant maintained that if development work is not taking into account the additional risks that come with climate change then it is not adaptive development. Another commented that the distinction is best made using a theory of change, which should be based around creating a theory that links an understanding of underlying drivers of vulnerability to specific interventions. A third discussant argued that the distinction has already been made and continuing to focus on it diverts attention from the important issue of addressing vulnerability.

Several session participants raised issues around implementing M&E frameworks. One discussant maintained that the underlying drivers of vulnerability have not been addressed by either the DRR or CCA communities and to this end empowerment should be seen both as a means and as an outcome. In response, another discussant commented that his organization is working to identify tangible deprivations and implement solutions that help address wider issues of empowerment. It was also argued that M&E should examine internal relationship changes in the context of climate change as stakeholder relationships shift over the time period in which climate change impacts evolve.

Following the discussion Terry Cannon left the audience with some parting thoughts. He maintained that the landscape for funding will change with some funds dedicated to development; others to adaptation and adaptation practitioners are caught in the middle. As the funding landscape changes M&E will become more important and there will be increased pressure to prove that on-going activities are effective. He closed by stressing the need to develop more alliances between research institutions and researchers in order to provide evidence that CBA strategies are working.

Parallel session 17: Climate resilient drylands development

This session was facilitated by Victor Orindi, National Drought Management Authority, Kenya. The keynote speech was given by Ced Hesse, IIED. The session examined the global narratives that drive national and international policies for drylands. It highlighted that such narratives are misinformed and hence must be scrutinised in order to address dryland policies. A review of strategy and policy documents from global donors, global research institutions and global financial institutions showed that drylands are persistently portrayed as problems with little to offer, rather than as opportunities. They are commonly depicted as degraded and desertified,

whilst their valuable, resilient and productive attributes are not well documented. As such they are understood to pose constraints for economic and social development. As inhabitants of such lands, there is a sense that pastoralists operate in areas where resources are scarce and where there is little opportunity for economic growth. Use of terms such as 'scarcity' and 'resources' must be questioned, since conceptions of what they mean are context dependent and have different meanings for farmers and pastoralists.

It was pointed out that these negative legacies are over a hundred years old. Climate change debates see them gaining new currency and reaching multi-scalar policy. As such, inaccurate ecological arguments are used to justify the displacement of pastoralists from areas where farming is occurring. Drylands become areas that are ripe for external appropriation. The reality is that pastoralists have been coping with variability for hundreds of years. The practices of dryland communities display the most efficient use of arid and semi-arid (ASAL) lands. In this context, variable ecological dynamics are an asset to livelihoods and to food production, rather than a hindrance, and this can provide important lessons in an increasingly climate constrained world.

Contrarily, research and development organizations document global climate change as a constraint that will undermine productivity, particularly among mobile groups. Such concepts and beliefs, seeking to standardise and control, hold much significance, particularly for the global food security debate. Part of this food security approach employs large-scale farming through technological inputs in an attempt to eliminate the threat of variability and unpredictability. However, it was stressed that we are not hearing the voices of pastoralists, but of technocrats, specialists and hydrologists. From these latter perspectives, variability is seen as a constraint and pastoralists are viewed as undertaking little more than coping. The speakers in this session called for an increased recognition of the pastoralists' adaptation to climate change.

The session examined three country studies: Kenya, China and India. In Kenya, misconstrued narratives are being addressed in order to change the policy *mindset*. Drylands are becoming recognized as an integral part of national development, human rights and democracy discussions. Since 2002, the government is increasingly incorporating drylands areas into national development planning; there have also been important reforms in government, development and policy related to drylands. Furthermore, as of 2008, government ministries have provided a mechanism for the itemisation of drylands to ensure that policy responds to drylands issues. However, despite these achievements, it was highlighted that much leverage for change relates to political power and voice, and it was noted that dryland communities must be heard at the national level in order to influence dryland policy.

In examining China, it was emphasized that climate change is a new area of national policy. However, it was noted that climate variability has been part of pastoralist systems for a long time and that dynamic and variable systems are an asset of pastoralist livelihood strategies. The characteristics of pastoralist areas and adaptive capacity to climate change were discussed. It was stressed that such characteristics are based on rich traditional ecological knowledge and that it is important to maintain a flexible, institutional regimen to cope with variability. Three national policies were shown to undermine these characteristics. These include the Grassland System of 1990's, the Herder Settlement Policy of 2001-2013 and the Grazing Rest and Grazing Ban Policy of 2003-2013. Each of these policies destabilises pastoralist livelihood strategies and prohibits their integral role in dryland ecosystems thereby increasing ecological degradation. Lack of clear understanding of ecosystems results in decision makers replacing traditional practices with intensive or modernised systems. It was suggested that the adaptive capacity of communities can provide important lessons for global policy, particularly in the face of climate change.

In India, the variability and diversity characteristic of drylands are of central relevance to the implementation of policies around food security and technology. Increasing dependence on technological inputs degrades drylands and negatively affects dryland communities. It was explained that the cyclical system of rain-fed areas is distinct to agricultural systems. Common land is important to these complex systems. Hence these interactions must be understood at an aggregate level. It was emphasized that participation and knowledge is relevant to the local context. The potential of dryland areas, their variability and productivity must be recognized in order to address global crises of food, fuel, climate change and financial crises.

Final discussions revolved around the role of pastoralists themselves in mobilizing political change. In Kenya, narratives persist because other people speak on behalf of pastoralists. Hence this is a question of governance and voice. Policy persists despite government access to research; therefore pastoralists must fight their own corner, yet they are removed from centres of power. It was explained that collaborations between organizations can increase pastoralist capacity by linking them with science and policy. Existing national pastoralist associations in east African countries must be strengthened in order to create leverage. Given that policy is in part an apparatus for promotional opportunity for government parties, the relatively small size of pastoralist groups only adds to this problem. Larger groups of citizens have leverage over smaller groups such as pastoralists; hence human rights and citizenship issues are integral to this debate. It was urged that networking among pastoralists can ensure pro-pastoralism and influence policy level decisions.

The variability across pastoralist practices was also recognized. As such it was stated that a uniform policy that adequately addresses variation is needed. Whilst making comparisons is the wrong angle to take, pastoralist history and ability for coping with climate change must be recognized. It was advised that more scientific evidence highlighting the productivity of ASALs and pastoralists is needed. When tackling climate change, inputs must come from within the system. Additionally, social capital must be built on to find a two-way approach between traditional and scientific knowledge. Currently, there is a constant struggle between what is and what is not appropriate. There is a large debate and gap between efficiency and equity; when efficiency becomes powerfully overbearing, equity is lost.

Finally, it was stressed that change must be implemented through the shifting of mind-sets that are built on inaccurate narratives. It was highlighted that narratives are very seductive as they present a highly simplified, and at times distorted, version of reality, with what appear to be logical and clear solutions. The alternative argument of using climate change as a narrative can be equally compelling. Pastoralism offers huge opportunities for food production in the face of increased variability both within and outside pastoralist areas. Encouraging and allowing pastoralists to fight their corner is a huge issue that requires resolution. NGOs must link government, institutions and ordinary citizens to achieve a critical mass and secure legitimacy.

Parallel 'out-of-the-box' session 18: Population dynamics and climate change

Overview

This session was facilitated by A. Tianna Scozzaro and Clive Mutunga, Population Action International, USA. Presentations were provided by Shamim Hayder Talukder, Eminence Associates for Social Development, Hasan Mehedi, HumanityWatch, and Masud Nurul Alam, Participatory Research Action Network, Bangladesh. The session was interactive and aimed to raise awareness amongst participants about the effects—both direct and indirect—of climate change on population dynamics and reproductive health. Whilst the impacts of climate change can certainly be felt on the scale of national economies or the biosphere, CBA7 participants also recognize the profound impact of climate change on vulnerable populations. Through linking

population dynamics, gender and reproductive health with climate change adaptation, session participants learned about integration at the policy and program levels. Overall this was a powerful and provocative session enabling participant dialogue on a topic that is integral to mainstreaming CBA yet is often under addressed.

Group exercise: connecting the dots

Participants were asked to sit in small groups of no more than four people. The game consisted of two coloured types of cards that had different words associated with the two key themes of the session: population dynamics/reproductive health and climate change. Population dynamics were listed on a blue card, whilst climate concepts were listed on a yellow card. Participants then had to connect the dots between climate change and population dynamics. An example of such is: “shifting rainfall patterns (1 climate dot) are likely to lead to agricultural decline (1 climate dot), which is linked to migration (1 population dot), which can have an effect on gender (1 population dot) if it is men migrating and women staying behind.” A key outcome of this game was to encourage participants to think holistically about the concepts printed on the cards, but also and more importantly to adopt a systems approach when creating linkages between concepts and issues. In some cases groups managed to link all of the concepts from the global level all the way down to the household level. Through the exercise participants saw that linkages are not often as clear-cut as one might think, and that links are not just linear but interwoven.

Discussion

Two presentations followed the game. The idea was to build on the basic principles of population dynamics and reproductive health that had been established during the group exercise to introduce the case study experience.

Shamim Hayder Talukder, Eminence Associates for Social Development

The first presentation was from Eminence Associates for Social Development. They enriched the session by showing how climate change impacts affect population growth, reproductive health and can contribute to mother and child malnourishment. This presentation clearly demonstrated how sectoral policies are taking these considerations into account, but also within macro scale development plans, demonstrating a capacity to mainstream these two inter-related issues within the overall development agenda. Consequently participants were naturally curious as to “how these (policies such as the NAPA, Bangladesh Climate Change Strategy Action Plan, and Sixth Five Year Plan) affect climate change on the one hand and health and reproductive issues on the other?”

Concluding the first presentation it became apparent that there are two ways forward based on Eminence's work: during times of disaster women in particular loose immediate access to local health care services, and this needs to be addressed; additionally, the climate change and reproductive health communities need to meet. At present these two communities do not engage enough in communication.

Hasan Mehedi, Humanity Watch, and Masud Nurul Alam, Participatory Research Action Network (PRAN), Bangladesh

The second presentation was delivered by PRAN in conjunction with Humanity Watch. From their experience of project work in Bangladesh they discovered that approaches are typically top-down and that there is a general lack of community ownership. Yet it is the community that is the most powerful advocate if given sufficient information and facilitation. A key message

from their presentation was that further capacity building was required to address the lack of coherence between local government institutions, political leaders and the media.

This session demonstrated the importance of addressing population dynamics within the context of climate change adaptation, taking into consideration cultural and institutional sensitivities around these issues. Furthermore, at the individual and household levels, reproductive health and access to family planning can be powerful adaptation tools in the face of increasing food insecurity, extreme weather and poverty. Moreover, the presentations and games communicated that mainstreaming climate change considerations into population dynamics and reproductive health concerns is important and requires advocacy.

Parallel session 19: Human rights, equity and the legal aspects of climate change adaptation

This session was facilitated by Heather McGray, World Resources Institute (WRI). The keynote speaker, Mary Robinson, started the session by introducing the ‘Climate Justice Dialogue,’ a new joint initiative of the Mary Robinson Foundation-Climate Justice (MRFCJ) and the World Resources Institute (WRI) that aims to mobilize political will and creative thinking to shape an equitable international climate agreement in 2015. A climate justice narrative that prioritises the voices of the most vulnerable can help to change the conversation on climate change. By focusing on issues of fairness and justice, this narrative can serve as a pressure point on the road to an international climate agreement in 2015 as well as the post-2015 development agenda. Adaptation policy makers and practitioners represent an important constituency that can be influential in informing and mobilizing demand for climate action. One important area, for example, while the current focus of discussions on equity and justice in climate negotiations is predominantly on mitigation, an equitable international climate change agreement will need to give equal emphasis to adaptation and mitigation. The new agreement will need to recognize action by countries on adaptation as well as mitigation in addition to providing the support needed to protect vulnerable communities and support the building of adaptive capacity.

Mary Robinson summarized key messages from a recent meeting held in Latin America. The meeting had concluded that climate justice is not about refraining from action because others are dragging their heels. Leading on the transition to a low-carbon, climate-resilient society makes sense for many middle income countries. Equity is not only about sharing effort or burden: it is also about opportunity and the transition to a better future. Action by all—both developed and developing nations—is required, as is a shared legal framework that holds countries accountable to one other. A new narrative on climate justice is needed to win hearts and minds and build the political will for action on climate change.

Mary Robinson also shared the key messages from an EU Presidency event held in Dublin on April 15 2013, which was co-hosted by MRFCJ and the Irish Government. Some of the key messages from the conference were that local knowledge must form the foundation on which research and solutions are built; platforms need to be established for real dialogue between all stakeholders to enable local priorities and solutions to be communicated and scaled up. Laws, policies and international frameworks are not sufficient—they need to be translated into action, through resources and awareness raising. Another key message was that women have an important role to play but care must be taken to ensure that interventions do not just add to women’s workload. Difficult issues must be addressed—including land ownership, power struggles, inequalities, the rule of law and the need to uphold human rights; the private sector must be engaged more proactively and resources are needed to deliver change at the local level. There was a recognition that the urgency felt locally needs to be felt internationally and trigger action.

The adaptation community has an important role to play in being vocal on the impacts climate change is having on human rights and equity. Equity and justice are central to understanding and framing the risks posed by climate change on vulnerable communities and many adaptation practitioners are adopting rights based approaches in their work. It is also imperative to get the message out to the adaptation community that an international climate change agreement is needed, especially considering that there is a certain point beyond which some people will no longer be able to adapt.

Jakob Rheiner and Cosmin Corendea from the United Nations University's Institute for Environment and Human Security then discussed legal frameworks and hybrid law. Jakob Rheiner introduced recent research that found that contextual factors like local legal frameworks influence decisions people make on adaptation. Cosmin Corendea then spoke on the topic of international hybrid law for adaptive legal strategies to climate adaptation. This linkage is needed because international agreements on climate change are not established yet, therefore different areas of law can be used to explore different dimensions of adaptation. For instance, environmental law can be used to examine causes of climate change, human rights law can be used to analyse the effects and finally, refugee or migration law to explore the subsidiary effect. Every climate change scenario affects human rights—right to property, right to life, right to work, right to development, right to culture or right to self-determination. Firstly, communities adapt or flee (migrate), which relates to refugee law. This led to the discussion of whether migration represents an adaptation or rather, a failure of adaptation.

Cosmin Corendea argued that the principle of environmental law does have a stronger resonance in international law compared to the right to a clean environment in human rights law. However, the 1951 Convention does not recognize climate refugees but rather defines refugees as individuals who have been persecuted for social and/or political causes. Moreover, the International Organization for Migration (IOM)'s definition of environmental migrants is 'soft law' and is not binding. This is all based on a progressive interpretation of law, which sees law as a tool for helping people. Heather McGray added to this discussion by stating that people should be asserting their rights rather than waiting for the international community to create new rights.

Koko Warner from United Nations University introduced the recent research 'Where the Rain Falls,' which investigates the circumstances under which households use migration as a risk management strategy, asking whether migration is a good thing or a bad thing? The research concluded that it depends on the circumstances of the household. For instance, resilient households sometimes migrate or send their children away for a job or education so they can send remittances home, yet others who are land scarce or landless cannot migrate—and have low or no education. The most vulnerable individuals are unable to migrate because they are trapped. Mobility should be a choice and not matter of force.

Kevin Henry from CARE followed by presenting on the issue of social exclusion. In Bangladesh, it was found that 97 per cent of the out-migrants from one village were male, which had important gender implications at the household level. Women were left with an increased workload when male household members were away. In addition, younger women were subjected to harassment, as no one was there to protect them. Some of the issues that emerged as important in the study were access to land and water resources. In particular, competition over water resources and pollution of water were becoming big issues due to 30 new coal-fired power plants being built in the local area. Landlessness was found to be a major driver of vulnerability as well as the extent to which migration was undertaken. Thirty one per cent of those in study were landless and another 26 per cent were classified as land-scarce. There has been increasingly more consolidation of land ownership and a decreasing demand for agricultural labour due to mechanisation, so the households in this village were caught in a bind.

In India, it was found that whole families move often for four to six months at a time, often disrupting children's' education. Only two per cent of migration was undertaken for reasons related to education, with most people migrating to survive and get by to the next season. National and social safety net programmes were in place but we found often the most vulnerable were unable to access to those entitlements and instead relied on local families that were better off.

Interactive Discussion

Following the panel discussion, session participants had thirty minutes for group discussion. Each table discussed the role of rights and equity in CBA through four discussion questions. Each table's answers to the questions were summarized in one page by a rapporteur, who shared highlights in plenary at the end of the session. Key points are summarized below:

1. What are the key equity/fairness dimensions of community-based adaptation?

Climate change exacerbates many existing inequities, and these are often played out in CBA. Access to resources, gender inequality, power relations, class, favouritism and geographical location were identified as key equity dimensions of CBA. The skewed bias towards the economic pillar of sustainable development is driving further inequities, with economic vulnerability often prioritised over social vulnerability. Discussants also argued that women already shoulder the burden of gender inequity and climate change adds another dimension. Patron-client relationships often exist and there is a need to understand power dynamics within CBA in order to address the needs of the most vulnerable.

2. What could be done to address existing inequities?

There is a need to shift the entrenched underlying causes of vulnerability. Empowerment, participation, access to information and capacity building are important tools that can be used to address existing inequities. Discussants suggested that empowerment of community organizations can tackle exclusion, and that there is a need for transparency and accountability in processes, as well as a need to raise awareness and share information about existing rights. Meso-level governance structures are important arenas for such processes of change, but have not often played a role in CBA activities. However, adopting a multi-stakeholder approach and utilising networks are recognized as important strategies; working with local government, civil society organizations and the private sector can help to ensure CBA initiatives create a space for differing definitions of equity and fairness to be shared and addressed. Such exchange is central for successfully addressing inequities. Groups discussed addressing gender equality through this kind of engagement, as well as the issue of land titles. It was agreed that strengthening local institutions can ensure an equitable distribution of resources. Discussants also suggested giving precedence to local forms of adaptation. Other groups mentioned the need to move away from technocratic definitions of vulnerability, towards a focus on exposure and underlying socio-economic factors driving vulnerability. For wider impact, groups suggested addressing power issues through advocacy in order to address root causes of inequity. It is also important that CBA is incorporated within a broader strategy and is not viewed as a stand-alone issue. When money simply goes into short-term CBA projects, it is unlikely to solve the systemic injustices that are at the root of the problem.

3. What experience do you have of rights-based approaches to community-based adaptation?

Discussants argued that rights are not 'possessed;' they are 'exerted.' Empowerment was presented as a process of raising concerns and demanding duty bearers to recognize the entitlements of rights-holders. Discussant examples included experience with local

governments, such as with neighbourhood assemblies and committees, as well as with local byelaws. In particular, land tenure was noted as a crucial issue by many groups, as well property rights for women. Discussants shared experiences of supporting communities in exercising their rights to food, water and education. Through governance that is accountable downward, communities can demand their rights in collaboration with local government. However, some discussants argued that government was not always receptive to a 'rights-based approach. A rights-based approach will have a lasting impact but this approach takes time to implement.

4. How have legal frameworks helped in community-based adaptation?

Legal frameworks can help to address underlying drivers of vulnerability by ensuring a framework for rights includes land rights, property rights and women's rights. Some discussants expressed the view that the UNFCCC framework is helping by making more funding available, though others questioned the extent to which this financing would reach the local level. Social safety nets and social protection policies were given as examples of how legal frameworks can help communities. Legislative support and organised community mobilization could also play a role, as well as advocacy work. Some highlighted a massive vacuum between global-level legal frameworks and local-level implementation. Trade law was raised as a key issue in the session—as Oxfam work on trade policy in Bangladesh along value chains, ensuring equity issues such as fair market access for local products. Other frameworks that were mentioned included the right to apply existing traditional approaches to coping with climate change. Challenges were also raised, for instance legal frameworks may in some cases conflict with one another, especially in a weak framework. Some expressed the view that existing policies allow space for community-based resource management approaches. Enforcing existing legal frameworks and constitutions can protect and promote communities.

Parallel session 20: Mainstreaming CBA into local development planning

This session was facilitated by Dhruvad Choudhury, ICIMOD, and Q. K. Ahmad, Palli Karma Shayak Foundation, and followed a different approach to addressing mainstreaming CBA into local planning. Dhruvad Choudhury listed five key questions around which the panel was asked to base their presentations. What followed was an overview of success stories and key lessons drawn from CBA mainstreaming projects across two continents.

Kevan Christensen began by discussing work in Bangladesh; his experience was mainly in relation to the first question posed by Dhruvad. A number of key points emerged from this talk, and Kevan shared the experiences of ActionAid Bangladesh, which has undertaken work to strengthen the process for community based adaptation planning. ActionAid's experience illustrates that building the capacity of local communities to plan for climate change is a long-term process, is extremely iterative and requires merging local and traditional knowledge of climate patterns with scientific and technical knowledge of future climate impacts. ActionAid's approach to building local capacity followed a human rights-based approach and improved the ability of community groups to access local government institutions and participate in democratic planning and budgeting processes. Other NGOs in Bangladesh are pursuing similar efforts to strengthen capacity and resources for climate change and disaster planning at the local level.

These experiences have demonstrated the importance of working closely with local government institutions to improve capacity and good governance. Furthermore, local communities should be empowered to play a central role in planning and decision-making around climate change

adaptation. Going forward, these efforts must be scaled up, and in Bangladesh local government institutions, in particular Union Parishads (local governing councils), should play a key role.

Vietnam

According to the second presentation, for adaptation to be implemented effectively, the whole community needs to be involved in the process. Community in this regard is thrown way outside of the box and comprises the people affected by climate change, including the NGO as well as the local government institution; these all form part of the community.

What was noted in the Vietnam experience was the need to merge approaches across all key actors, and in this way foster institutional learning, as each actor becomes informed of the other's vulnerability and issues.

Ultimately using a risk assessment approach to adaptation allowed all concerned actors to share experiences, and importantly the approach employed has helped to address concerns related to loss and damage.

Uganda

A main lesson emerging from the development of the NAPA in Uganda, and pilot projects in four districts, is that district development plans do not reflect local climate related challenges—as noted in capacity building, planning and budgeting.

Paul presented four key questions in which he stressed how lessons learned in Uganda can be transferred to other ecosystems:

- 1) What value has been added?
Two noticeable outcomes have been identified. Firstly, monitoring and evaluation has improved accountability and ownership. Secondly, the NAPA plan has led to exchange visits to other countries by the central government.
- 2) What has changed?
There have been two noticeable outcomes: community empowerment; what this translates to is twofold, ownership and accountability, and also there has been improved distinct planning and integration.
- 3) Success stories:
In relation to south-south learning.
- 4) Challenges and ways forward?
Initial approaches to NAPA funding are short-term, there is weak revenue at local government level and there is a lack of clear performance indicators for adaptation.

These areas were highlighted as centrally important and in need of development. Ultimately, this will translate into more readily available funding for scaling up NAPA plans.

Himalayas

ICIMOD's experience in the Himalaya reveals that communities are already noticing shifts in climate variability and increases in extreme weather. These changes are having two knock on effects. Firstly, as local societies are overwhelmingly agrarian, livelihoods are being severely affected. Secondly, traditional coping mechanisms, largely defined by traditional knowledge and approaches, do not provide communities with sufficiently effective options for addressing the livelihood effects of increasingly erratic weather and the resultant uncertainty. Though communities respond in the best way they can, they still require a strong support system that can be provided by local governments, particularly in extension services, risk management and

access to credit. This support, however, is not forthcoming mainly due to the lack of an effective information flow mechanism and an extremely weak service delivery system.

Thus there exists a gap between what communities need and assistance offered by local government planners. As such, to address this gap ICIMOD, together with local development partners in project areas in India and Nepal developed the adaptation highway. The adaptation learning highways is a strategic process that fosters information and knowledge exchange between communities, scientists and policy makers to better inform the decision making process and make it more inclusive. Ultimately however, this approach can be used for adaptation and more broadly in development, thus this approach is a clear win-win, and a good example of fostering mainstreaming.

Discussion section

Without sufficient funding it is exceptionally challenging for mainstreaming to occur, as was the case in Uganda where it was difficult to implement the NAPA due to insufficient funding. This was highlighted immediately by Paul, however, a key theme to emerge here was that what is crucial to effective implementation is resources: how to sustain them but also how to mainstream effectively.

Thus Paul elaborated and asked the audience the following thought provoking question, “how do you sustain good practices that have started, how do you ensure sustainability?” Again what is worth pointing out is that money is not infinite; it runs out at some point. Therefore it is about identifying projects that have the potential to be self-sustaining once financial support ceases. Such an example from the Ugandan experience is that of tree nurseries. These can be designed specifically for the needs of the local community. Moreover, an interesting point was made about good projects in that national investment plans that target climate change issues have to raise their own funding sources, but most importantly, they cannot rely on external sources of funding, as these are not guaranteed in the long run.

However, Dhruvad, drawing from ICIMOD’s work in the Himalayas, commented that there needs to be a distinction between adaptation and development planning, and both need to be better integrated. Adaptation is basically doing ‘the usual business’ but in a more effective manner and in the process taking effective measures that reduce risks (and hence, vulnerabilities). Thus, better and more effective management of resources is a first step towards enhancing adaptation; if this approach were institutionalised, it would form a first step in mainstreaming adaptation. One way that this can be operationalized is by incentivising better use of resources and the presentation by Paul on the NAPA process in Uganda provides a good example.

An interesting question from the audience concerned, “how is it possible to link CBA projects to district level planning?” Drawing on experience from Bangladesh, Action Aid built a relationship between the community and local government. As the Union Parishad is the closest local government institution to the communities, it made sense to use this as a vehicle. Interestingly, Action Aid are assisting the communities in which their projects operate and increasing their awareness of what local government institutions can offer them in terms of assistance, financial and technological for instance. However, Kevan highlighted that this is a slow moving process.

Yet experience from Vietnam illustrated that in similar situations, Local Government Institutions (LGIs) tend to favour top-down processes for planning; disaster risk reduction, on the other hand, is framed around the needs of the community and is a bottom-up process.

Other questions asked by the audience were centred on how best to link development planning and CBA projects. Fortunately at the community level there already exist community adaptation

plans, and as such LGIs are already starting to think about how to better integrate development planning and broader scale planning.

However, concern was raised that mainstreaming could cause confusion and conflation of normal development planning with reframed climate change adaptation plans. This is an interesting point given that the central focus of the conference is to identify ways in which local development and adaptation planning could be integrated, hence mainstreaming.

Before concluding the session, Terry Canon from IDS commented that the “significance of the role of government, everything else has to be driven from the grassroots. Local and INGOs will only be implementing CBA at the local level. Thus the challenge for NGOs is that they will never reach all of the population. Naturally this sparked an interesting question, “what will they do about the rest of the population that their programmes never reach?” Therefore NGOs are able to provide the evidence base to central government and beyond via their small-scale CBA projects. Ultimately though it is the responsibility of the national government to then scale-up the findings from these smaller projects.”

Therefore there are two key outcomes from this process. Firstly, that capacity building of local institutions is crucial for planning and implementation of adaptation plans. Secondly, the need for long-term financing, although it should be pointed out that this is unsustainable. This is where local planners and national governments have to be sensitised that mainstreaming adaptation is not an ‘additional activity’ but it is ‘the usual business done in a more effective manner, ensuring the reduction of risks and resultant vulnerabilities.’ Again, this relates to the comments made from Paul and the experience in Uganda. Ultimately it is an issue of resources at the local level and using available funds if present. This latter point is crucial. By having access to funds at the local level it means that communities do not have to wait for external funds to arrive.

Nevertheless the only way to secure resources and funding is by having sufficient advocacy in place; “advocacy for advocacy.” Advocacy in this regard provides the evidence base, which is desperately needed; ARCAD and ICIMOD are two such actors contributing to this evidence base through sharing their experiences, ultimately leading to evidence based advocacy.

Parallel ‘out-of-the-box’ session 21: CBA films: an interactive session on how to influence people

This session was facilitated by Corinne Schoch, IIED/Save the Children, and focused on different approaches to communicating information about climate change through video. Two sets of videos were shown to the group, the first including three videos from Youtube that were targeted at the general population; people who may not know much about climate change. The second set included various project videos made by practitioner organizations working on CBA. This second set was targeted at the climate change community of practice, often skipping background information explaining what climate change is, instead jumping ahead to focus on adaptation technologies being undertaken in different parts of the world to address the impacts of climate change. The aim of the session was to prompt a discussion about the target audience for these different kinds of films. Highlighting the fact that climate change researchers and practitioners have generally done a poor job of communicating their work to a wider, non-climate change audience, session participants were urged to think about whether CBA videos should be aiming to engage the general public. “Is it our responsibility to engage a wider audience?” “Is this the responsibility of the media?” “Is it OK to make CBA videos in a way that speaks mainly to other climate change practitioners only, given that climate change is a global issue that affects us all?” Some of the main points of discussion highlighted the effectiveness of

videos that use less climate change jargon, and are not based on specialized knowledge relating to a specific industry or sector at engaging a wider audience, even though the climate science may not be represented entirely accurately—as in some of the Youtube videos. Another point that emerged was that the most popular videos on Youtube are also often the lowest budget videos, indicating that resource constraints on NGOs involved in climate change adaptation work need not present a barrier to making films that speak to a wider audience. However, session participants also highlighted a number of other challenges around making climate change films that both meet the requirements of communicating project achievements to donor agencies *and* engage the general public.

Plenary session 22: Poster market place – your chance to ask questions and make comments

This session was chaired by Hannah Reid, IIED, and Lubna Seal, BCAS. The keynote presentation was given by Fathimath Ghina, GEF Small Grants Programme, UNDP. It addressed the issue of how CBA activities can contribute to national level strategies for managing climate change impacts. Fathimath described the need to start thinking of the ‘transformative and large scale potentials of CBA projects within a living and changing landscape to transform livelihoods and to provide policy directions for planners and decision makers.’ She explained how this could be done in real time, describing challenges and bottlenecks along the way, and argued that CBA activities must be seen as part of living landscapes. She explained how evidence-based trials can have a catalytic effect and provide for continuous experiential learning within living landscapes; the results of both failures and successes from CBA projects can impact societal learning. Further analysis helped to debunk the common claim that CBA projects are too small and sporadically scattered to produce a coherent set of protocols that can be used to shape policies, plans and actions for wider national level impacts. An analysis of over 20 years of practice under the Small Grants Programme engaging with communities in the area of climate change shows—through examples and actual project results—that collecting such evidence should be the way to approach CBA in a programmatic manner if CBA initiatives are to remain popular and attract funding aimed at influencing government priorities and plans at macro and meso levels.

The keynote presentation was followed by a short award ceremony for the winning CBA7 poster, by Popular Gentle, the Institute for Land, Water and Society, Charles Sturt University, Australia. The poster competition was judged by Michael Nkalubo, Ministry of Water and Environment, Uganda, Youssef Nassef, United Nations Framework Convention on Climate Change, and Negussie Kefeni, Early Warning and Response Directorate of Disaster Risk Management and Food Security Sector of Ministry of Agriculture of Ethiopia. Following the award ceremony, conference participants circulated freely amongst the posters, asking questions and discussing poster contents with those who had presented.

Enabling vulnerable communities to adapt to climate change Reflection on the role of local institutions

Popular Gentle, Rik Thwaites, Digby Race, Kim Alexander

Institute for Land, Water and Society, Charles Sturt University, Australia



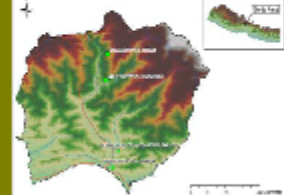
Research context

- Local institutions develop rules and arrangements to successfully manage common resources
- Resource dependent communities are vulnerable to climate change and poor are most impacted
- Problem is severe in agriculture based livelihoods in the rural mountains of Nepal
- Limited research on how local institutions can better enable climate change adaptation amongst the most vulnerable



Methods

- Case study research conducted in Lamjung, rural hill districts in Nepal
- Livelihoods mostly based on subsistence agriculture
- Mixed method approach
 - In-depth interview
 - Focus group discussion
 - Household survey, and
 - Climate vulnerability analysis



Results and conclusions

- Existence of local institutions with experience in collectively managing forests, water and micro-finance
- These institutions are already contributing to climate change adaptation
- Some successes in reducing collective risks at community level
- The institutions are mostly captured by elites in terms of decision-making and benefit sharing
- Internal governance of local institutions is weak, elite leadership has very low trust for poor people and is resistant to implement pro-poor provisions
- Enabling most vulnerable to reduce individual and household level vulnerability is impossible without transformation of policies, structures and mindset of institutions
- Changes required in agencies and government to improve program implementation and monitoring of outcomes.

Research questions

- How do local institutions contribute to climate change adaptation?
- What benefits do local institutions deliver to the most vulnerable?
- What roles and characteristics of local institutions best support vulnerable?



Contact details

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Plenary session 23: Finance and other emerging challenges for Mainstreaming CBA

This session, chaired by Saleemul Huq (IIED/ICCCAD), covered a number of issues critical to the successful mainstreaming of CBA, including finance for CBA and lessons that can be learned from experiences with mainstreaming gender into development activities. The session also posed provocative questions about the way forward and the role for CBA within the wider context of global efforts to address climate change.

Speaking about how climate finance can support CBA, Daniel Gallagher, a member of the Adaptation Fund Board, provided insights into how the Adaptation Fund is working to ensure that communities can play an active role in decisions around how climate finance is used. He noted that the Fund has a governing board where a majority of the members are from developing countries. In addition, the Fund adheres to strict guidelines on transparency, invites external input during the project design and review process, and makes all of its technical review documents available online. Furthermore, an international network of NGOs led by Germanwatch provides a channel through which voices and concerns of local communities and civil society can be brought to the attention of the governing board. The Fund also uses several criteria to ensure that input from vulnerable communities is incorporated into the design of all projects, including a requirement for consultation with communities and local governments.

Mr Gallagher also highlighted the Adaptation Fund's unique mechanism for direct access, in which developing countries are able to nominate a national entity that will take the lead on managing climate finance. This provides recipient countries power and control over how finance is used and helps build a legacy of strong institutions able to manage future finance flows. Gallagher also highlighted a few challenges for the Fund going forward, including how to facilitate more community input during the design and review of projects and how to balance urgent adaptation needs in the short term with the long-term aim to focus on mainstreaming.

Providing experiences from a Bangladesh perspective, A.K.M. Mamunur Rashid, General Economics Division, Government of Bangladesh spoke about efforts to mainstream climate finance into the local government system. He identified major challenges to these efforts, including a lack of technical capacity within local government institutions to address climate change adaptation, a lack of national coordinating mechanisms that reach the local level, political disputes with central government officials, low human resource capacity and low transparency and accountability of local government institutions. Rashid explained that Bangladesh is now working to develop a local climate fiscal framework, which is being piloted in eight Union Parishads. This pilot project is focused on helping local government institutions develop a costed adaptation plan, prioritize adaptation activities, access finance and ensure accountability. This local framework will align with the national climate fiscal framework to improve mainstreaming.

Agnes Otzelberger, CARE, summarized the outcomes of the gender photo campaign, which took place throughout CBA7 and asked conference participants to answer the question, "What can mainstreaming CBA learn from mainstreaming gender?" The responses brought out a number of different themes, such as the need to ensure that women and girls are more involved in CBA discussions and the importance of addressing underlying risks and vulnerabilities. Other participants emphasized the importance of self-reflection in mainstreaming and the urgency to take action now. Motivation was also identified as an important factor, since those working on other fields will need to invest additional time and energy to incorporate CBA into their work. Still others highlighted the need to make a business case for mainstreaming CBA, the importance of focusing on rights and power relations and the need to be persistent and not complacent.

Lastly, Terry Cannon from IDS concluded the session with a thought-provoking presentation on potential problems with CBA and the role it should be playing in larger-scale adaptation efforts. He challenged the audience to think critically and to think big. He emphasized the difficulty in defining what is meant by “community,” and the fact that not enough attention is paid to internal divisions, power relations and control over land and resources. According to Mr Cannon, there really is no such thing as a unified community and communities should not be thought of as “warm and cuddly”.

Mr Cannon also raised the issue that CBA can inherently target only a small subset of the full population. Yet we cannot ignore and exclude other members of the global population who will also need support in adapting to climate change. Thus, we must start to focus on creating systems that allow scaling up of adaptation activities to reach everyone. The role of CBA should be to experiment with adaptation options to produce evidence of what works. We must identify adaptation measures that are self-starting and self-sustaining. In addition, we should use evidence generated from successful CBA activities to help design top-down policies that create an enabling environment for more widespread adaptation. It is important to challenge ourselves and think about the bigger picture, such as promoting alternative livelihoods to make large numbers of people less climate dependent, supporting strategic retreat or migration, and investing in small town growth centres. Mr Cannon also emphasized that enormous amounts of money are still being spent on developing fossil fuels, and if we do not find ways to act on a larger scale, resources for adaptation will remain tiny by comparison.

Following the presentations by the speakers, audience members asked questions that furthered the discussion. One participant pointed out that powerful companies continue to have strong political influence, in response to which Terry Cannon noted that many fossil fuel companies are building up huge inventories that could lead to the bursting of a “bubble” if an international agreement on climate is reached. In his view, these companies with a strong interest in undermining such an agreement are committing genocide. Another participant asked about the impact that diversifying livelihoods away from agriculture would have on food security, to which Mr Cannon responded that far more people are employed in agriculture than are needed to produce the same amount of food; rather, it is the unfair structure of the current land tenure system that is keeping people working the land for very low wages while remaining in poverty. Another participant asked whether the Adaptation Fund is able to provide technical support to civil society. Daniel Gallagher replied that the Fund’s mandate under the Kyoto Protocol does not allow it to support capacity building, but the system of direct access does provide a mechanism for enhancing institutional capacity within countries. Another audience member raised concerns about advocating for a shift to top-down policies, in response to which Cannon clarified that he is not in favour of ineffective top-down policies, but he believes that we must all be involved in designing top-down policies that can support those not covered directly by CBA projects. Agnes Otzelberger challenged the idea that CBA inherently cannot cover everyone, arguing instead that CBA can in fact happen at all levels and scales, and the purpose of mainstreaming is to achieve this.

In his concluding remarks, Saleemul Huq wrapped up the discussion and outlined the way forward, announcing that CBA8 will be held in Nepal in 2014. The theme of the next conference will be Finance for CBA. Preparation for next year begins now, and anyone interested in shaping the conference is invited to participate in work along six tracks: gathering evidence, working with governments, working with donors and funders, engagement with the private sector, advocacy, and communications.

Plenary session 24: Conference closing session

The conference closing session was chaired by Shafiqur Rahman Patwari, Secretary, Ministry of Environment and Forests (MOEF), Government of the People's Republic of Bangladesh, and Atiq Rahman, BCAS. Speakers included:

- Christiana Figueres (video address), Executive Secretary, UNFCCC
- Pauline Tamesis, Country Director, UNDP Bangladesh
- Robert W Gibson, British High Commissioner to Bangladesh
- Shafiqur Rahman Patwari, Secretary, MOEF, Government of the People's Republic of Bangladesh
- Mary Robinson, Mary Robinson Foundation Climate Justice: introduction to the Climate Justice Dialogue (and its aim to create a constituency of demand within the community based adaptation practitioners).
- Camilla Toulmin (Director, IIED)
- Atiq Rahman (BCAS)

The venue for the seventh CBA conference, to be held in early 2014, was announced as Nepal. The theme of CBA8 will be financing community-based adaptation.

Concluding Comments: Reflections on the Status of Mainstreaming

Historically, non-government organizations have led most initiatives on CBA. Indeed, at the early CBA conferences, participants were primarily from non-government organizations. Over the years, however, CBA in general and the conferences in particular have attracted an increasingly broad range of stakeholders, including academics, students, those working at research and policy institutes, and increasingly representatives from government. Non-government organizations have done much to promote learning on CBA and implement activities at the grassroots level, but stronger engagement with government provides opportunities for moving away from isolated pilot projects and mainstreaming CBA into levels of policy and planning to an extent that non-government organizations cannot do.

Governments are professional and pragmatic, and the seriousness of climate challenges to development is reflected in the purposeful approaches that many are taking to planning and implementation of ways to address climate change. Governments at national and sub-national levels are becoming involved. Interactions amongst those involved in national planned adaptation and local, often autonomous, adaptation are playing out in interesting ways. This can be seen from the four country case studies on climate mainstreaming presented at CBA7, from The Gambia, Kenya, Bangladesh and Cambodia.

Core ministries of planning and finance are increasingly becoming involved in developing strategies to address the impacts of climate change on national development. It is important to note that countries are finding their own ways of doing this. Trajectories have different starting points and pathways but objectives are common, so learning from experience can be shared among countries. At CBA7, over 30 representatives from governments agreed to form a 'Government Network on Mainstreaming Climate Change.' This is an indication of their level of interest as well as a demonstration of the emergence of a 'community of practice' on this topic.

CBA6 in Hanoi and CBA7 in Dhaka have offered opportunities for those involved in national planned adaptation and those providing support to local adaptation to share their experiences and the lessons learned so far. This has facilitated a more nuanced understanding of the factors and approaches that trigger and contribute to a more systematic mainstreaming of community-based adaptation into local and national development planning, and also the associated bottlenecks and challenges. For example, participants identified a need for developing key steps for including CBA into planning processes, and guidance on integrating climate information into adaptation planning. The need for better integration of CBA with disaster preparedness activities, including early warnings and disaster risk reduction activities, was apparent, and the role of the private sector as well as of indigenous knowledge and practices in adaptation and how both can potentially strengthen current knowledge and introduce innovative approaches and appropriate technologies needs more analysis.

Selected Feedback

Daniel Gallagher, Adaptation Associate, Adaptation Fund

"I really enjoyed the week in Dhaka, especially sharing experiences with the other delegates, and hearing some new perspectives. Thanks for the opportunity to join the discussion on finance on the last day, no doubt some of that will form the framing of next year's discussions"

Daniela Tarizzo, Community-Based Adaptation and Monitoring & Evaluation Specialist, CBA Global Coordination, UNDP / UNV - GEF Small Grants Programme

"...after being back in Rabat and having had the chance to think over the extremely positive days spent in Dhaka under your usual top-class guidance, I am writing to ensure I specifically thank you for granting me this invaluable opportunity to participate in CBA7, to support it with any skills I could offer, and to help pave the way to the next conference. It has meant another precious learning opportunity, a chance to meet new and old friends, to reconfirm how many valuable professionals are doing their honest and highly productive work, as well as a consolidation of my intentions to persevere in future endeavors in this field."

Dirk Platzen, AusAID

"The 5 days in Dhaka were extremely valuable and stimulating. I am completely new to CBA and have learned so much by listening, observing and most of all meeting a stunningly diverse set of dedicated actors in this active and important field of development work. Bringing this together every year is a fabulous achievement and I hope as invaluable for others as it was for me."

Melissa Bull, Environment and Climate Team, Sustainable Economic Development Branch, AusAID

"we really did find CBA7 useful and our sincere thanks for all your efforts in organising such a high-quality conference"

Fathimath Ghina, UNDP

"Many thanks for your hospitality and congratulations on a successful event. Even though I am not the best judge here as it was my first CBA, but I felt it went very well. It was a great learning experience for me, as well as to meet and interact with practitioners and others involved in CBA. Thanks also for the opportunity to participate and present on behalf of my colleagues."

Fiona Percy, CARE

"thanks for an inspiring and productive time! CBA7 raised ideas for all kinds of future work – from how to organise the Africa adaptation forum next year, to how to improve our sharing of CBA work in CARE, to new networks, and how to apply good practices from other parts of the world. I am sure each of the participants carried away a great number of similar inspirations."

Pham Thi Hong, Policy Advocacy Coordinator, COHED, Viet Nam

"I have learn on how to mainstreaming CBA into local planning process with authorities and many things I have learn from your CBA7 are definitely useful for my work here in Viet Nam. IIED has shown that you are real professional organizer and topic/theme designer so that all of the sections you created are matching with expectation and learning areas of the participants. We told each other that how could IIED with small number of team but they could organize and manage huge works with professional challenges and different people."

Joel Hafvenstein, Tearfund

"I came out of CBA7 with lots of useful new information and contacts, which is my standard for the value of a conference. Many thanks for making it happen!"

Julie Newton, Manager Research Policy and Practice: Food Security & Livelihoods, Save The Children in Bangladesh

“Thanks again for all your support over last few weeks. I learnt so much!”

Koko Warner, EHS UNU

“Congratulations on such a great conference...really enjoyed and benefitted from having attended CBA7”

Saskia Daggett, International Coordinator, Africa Climate Change Resilience Alliance (ACCRA) Oxfam GB Uganda

“thanks sooo much for CBA7 - I had a thoroughly enjoyable, challenging (in the best sense), thought provoking and useful time! It was fab - and well done team CBA!!!”

Tracy C. Kajumba, Capacity Building and Advocacy Coordinator Africa Climate Change Resilience Alliance (ACCRA), National Office World Vision Uganda

“Thanks for a job well done! The sessions were enriching with lots of discussions and we had a lot to learn as well as share. On the ACCRA side we are really grateful for your flexibility in ensuring we were well positioned and able to share our work widely. It was a great opportunity for us and we hope we shall be able to contribute to CBA8”

Shepard Zvigadza, ZERO Regional Environment Organisation, Zimbabwe

“I really learnt a lot. Our next step here in Zimbabwe is to organise a feedback to CSOs and mostly government departments about some interesting presentations, but though we missed some sessions. I am doing this with Tariro from Practical Action who also attended the M and E as well as CBA7... Myself and Tariro from Practical Action are organising this and we are currently talking to Ministry of Environment to make sure the feedback takes place.”

Conference Participants

No.	Name	Institutional Affiliation	Country
1	Abkowitz, Mark David	Vanderbilt University	USA
2	Adrião, Maria de Nadia	Ministry of Planning and Development	Mozambique
3	Ahammad, Ronju	UNDP	Bangladesh
4	Ahmed, Elena	Plan Bangladesh	Bangladesh
5	Ahmed, Masud	South Asia Partnership (SAP)	Bangladesh
6	Ahsan, Syed Matiui	Save the Children Bangladesh	Bangladesh
7	Akhter, Badi	Oxfam Bangladesh	Bangladesh
8	Alam, Ashraful	University of Eastern Finland	Finland
9	Alam, Jahangir	Dhaka Ahsania Mission	Bangladesh
10	Alam, Masud Nurul	Participatory Research and Action Network (PRAN)	Bangladesh
11	Ali, Liakath	DFID	Bangladesh
12	Ali, Syed Md. Iqbal	ARCAB, BCAS	Bangladesh
13	Almansi, Florence Ruth	IIED Latin America	Argentina
14	Amakye, Emmanuel Buabeng	INACOD	Ghana
15	Amoah, Derick Yaw	INACOD	Ghana
16	Ampaire, Edidah Lubega	International Institute for Tropical Agriculture (IITA)	Uganda
17	Ampomah, Gifty	ENDA	Senegal
18	Andani, Iddrisu	CARE International	Ghana
19	Anderson, Simon	IIED	UK
20	Anlaue, Saide	ACCRA	Mozambique
21	Anwer, Saima	Asia Foundation	Bangladesh
22	Appadurai, Nambi Arivudai		
23	Archer, Diane	IIED	UK
24	Arias, Mirko Gamez	CBA program manager, Bairro-pite, Rio de Janeiro	
25	Asad, Anik	Oxfam Bangladesh	Bangladesh
26	Ashaduzzaman, Md	World Vision Bangladesh	Bangladesh
27	Azam, Imamul Shahi	Plan Bangladesh	Bangladesh
28	Aziz, Humaira	CARE	Bangladesh
29	Baas, Stephan	FAO	
30	Baffour, George Kyei	INACOD	Ghana
31	Baillat, Alice	ICCCAD	Bangladesh
32	Banerjee, Prolay	World Vision Bangladesh	Bangladesh
33	Banerjee, Soumyadeep	Int'l Center for Integrated Mountain Development (ICIMOD)	India
34	Barek, Abdul	World Vision Bangladesh	Bangladesh
35	Barthelt, Christian Hermann	Munich Re Foundation	Germany
36	Begum, Helena	UN Women, Bangladesh	Bangladesh
37	Begum, Karia	UN Women, Bangladesh	Bangladesh
38	Begum, Zinat Ara	Plan Bangladesh	Bangladesh
39	Bhalla, Nita	Thomas Reuters Foundation	India
40	Bhandari, Pawan Singh	Department of Agriculture	Nepal
41	Bhatt, Somya	GIZ	India
42	Bill, Laura	UNICEF	Nepal
43	Birch, Barrie	Media link	UK
44	Borchard, Caroline	Plan International	Thailand
45	Boydell, Edward	CARE Australia	Australia
46	Brandao, Gerson	UNICEF	
47	Braun, Melody	WorldFish Centre	Bangladesh
48	Brown, Anna	Rockefeller Foundation	Thailand

49	Brown, Kourtnei Sarah	Asia Foundation	USA
50	Buabeng, Amakye Emmanuel	INACOD	Ghana
51	Bull, Melissa	AusAid	Australia
52	Camara, Isatou	Min. of Finance and Economic Affairs	The Gambia
53	Campos, Maria Rebecca	U. of the Philippines Open University	Philippines
54	Cannon, Terry	ICCCAD/IDS	UK
55	Chaki, Sanjay	Channel I	Bangladesh
56	Chakma, Swarnali	UN Women, Bangladesh	Bangladesh
57	Chhun, Seiha		Cambodia
58	Choudhury, Dhrupad	Int'l Centre for Integrated Mountain Development (ICIMOD)	India
59	Chowdhury, Sarwat	UNDP	Bangladesh
60	Chu, Eric K.	MIT	UK
61	Coirolo, Cristina E.	IDS	UK
62	Corendea, Cosmin	UNU-EHS	Germany
63	Daggett, Saskia	ACCRA	Uganda
64	Dayal, Ashvin	The Rockefeller Foundation, Asia Regional Office	Thailand
65	Dieleman, Wouter	ECOREM	Belgium
66	Dhali, Abdur Rashid	UNDP	Bangladesh
67	Dixit, Ajaya	ISET-Nepal	Nepal
68	Dossou, Krystel	OFEDI	Benin
69	Faherty, Mary	Mary Robinson Foundation - Climate Justice	Ireland
70	Faleiro Jessica Joanne	Action Aid International	India
71	Fanta, Taddesse Bekele	Ministry of Agriculture -Disaster Risk Management and Food Security Sector	Ethiopia
72	Faulkner, Lucy	ARCAB	USA
73	Fenton, Adrian Francis	Univ. of Leeds, Centre for Climate Change Economics and Policy, Int'l	UK
74	Fernandes, Colin	IFRC	Sri Lanka
75	Firoz, A. B. M.	ITT	
76	Fisher, Suzanne	IIED	UK
77	Fissha, Medhin	ACCRA	Ethiopia
78	Gallagher, Daniel	The Adaptation Fund	USA
79	Gentle, Popular	Charles Sturt University of Australia	Nepal
80	Ghina, Fathimath	UNDP	Maldives
81	Goaldar, Bhagabati	UN Women, Bangladesh	Bangladesh
82	Gomes, Dulon Joseph	Christian Aid	
83	Gongbuzeren	Peking University	China
84	Gyang, Romanus	CARE International	Ghana
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