

Community-Based Adaptation to Climate Change Bulletin

A Summary of the Fifth International Conference on Community-Based Adaptation to Climate Change

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SUMMARY OF THE FIFTH INTERNATIONAL CONFERENCE ON COMMUNITY BASED ADAPTATION: 28-31 MARCH 2011

The Fifth International Conference on Community-Based Adaptation (CBA), organized by the International Institute for Environment and Development (IIED) and Bangladesh Centre for Advanced Studies (BCAS), took place at the Sheraton Hotel in Dhaka, Bangladesh from Monday, 28 to Thursday, 31 March 2010. The conference was themed "Scaling Up: Beyond Pilots," focusing on the need to spread CBA knowledge and practical lessons horizontally across communities and vertically across levels of governance and action.

Over 390 participants, representing over 190 nongovernmental organizations (NGOs), branches of government, international organizations, and academia were in attendance. The conference began with an inaugural speech by Bangladeshi Prime Minister Sheikh Hasina, and included daily morning and afternoon plenaries, numerous daily technical sessions, a poster session, and British Council-sponsored short film presentations, to be posted on the Climate4Classrooms website: http://uk.climate4classrooms.org/. Plenary and technical sessions covered topics such as: agriculture, local resilience and climate prediction services; communicating knowledge about CBA; bridging local, sub-national and national levels in adaptation; gender; health; funding and funding architecture; supporting adaptive capacity; the economics of CBA; CBA tools and toolkits; and synergies between disaster risk reduction, ecosystems, wider development projects and CBA. Additionally, prior to the conference, 300 of the participants took part in multiple three-day field trips to locations around Bangladesh illustrating CBA.

Recurring issues raised at the conference revolved around its theme of scaling up successful CBA projects. These issues included the importance of: understanding power-relations dynamics between genders, between local peoples, and between communities and other levels; incorporating youth and children into CBA project design and projects; communicating non-ambiguously with stakeholders at all levels; scaling meteorological prediction services down to levels more useful for dispersed rural populations; and integrating CBA with other developmental and environmental projects.

Based upon work presented and collaborations agreed upon at the conference, a book will be published through Earthscan summarizing key advances and insights from the CBA context.



A BRIEF HISTORY OF CLIMATE CHANGE ADAPTATION AND DEVELOPMENT ISSUES

Climate change is considered to be one of the most serious threats to sustainable development, with adverse impacts expected on the environment, human health, food security, economic activity, natural resources and physical infrastructure. Global climate varies naturally, but scientists agree that rising concentrations of anthropogenically-produced greenhouse gases in the earth's atmosphere are leading to changes in the climate. According to the Intergovernmental Panel on Climate Change (IPCC), the effects of climate change have already been observed, and scientific findings indicate that precautionary and prompt action is necessary.

IN THIS ISSUE

A Brief History of Climate Change Adaptation and		
Development Issues		
Development issues		
Report of the Conference		
Inaugural Session		
Plenary Sessions		
Technical Sessions		
Conference Closing Statements and Next Steps 14		
Upcoming Meetings		
7 · · · · · · · · · · · · · · · · · · ·		
Glossary16		
Glossary10		

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While mitigation has traditionally been the pivotal issue for many climate change experts, adaptation to the effects of climate change is acknowledged as necessary for responding effectively and equitably to the impacts of both climate change and climate variability. In recent years, adaptation has become a key focus of the scientific and policy-making communities and is now a major area of discussion in the multilateral climate change process.

Adaptation has been implicitly and explicitly linked with development-focused action, particularly as the IPCC has underscored that developing countries are disproportionately vulnerable to climate change and lack adaptive capacity. Development processes and trajectories will be affected by the rate of climate change, and this is especially important for developing countries with growing economies. Particular attention will need to be paid to the management of water and other natural resources and agricultural activities, as well as energy sources and generation.

UNFCCC PROCESS: Under the UN Framework Convention on Climate Change (UNFCCC), adaptation appears as a cross cutting theme. While the first Conference of the Parties (COP-1) in 1995 addressed funding for adaptation (decision 11/CP.1), it was not until the adoption of the Marrakesh Accords in 2001 that adaptation began to be more widely seen as a prominent area for action, as set out in decision 5/CP.7 (adverse effects of climate change). Following the release of the IPCC's Third Assessment Report, COP-9 in 2003 requested the UNFCCC Subsidiary Body for Scientific and Technological Advice (SBSTA) to initiate work on the scientific, technical and socioeconomic aspects of, and vulnerability and adaptation to, climate change (decision 10/CP.9).

Parties reached a milestone at COP-10 in 2004 with decision 1/CP.10, known as the Buenos Aires Programme of Work on Adaptation and Response Measures. The COP set up two complementary tracks for adaptation: the development of a structured five-year programme of work on the scientific, technical and socioeconomic aspects of vulnerability and adaptation to climate change under SBSTA, which was adopted at COP-11 in 2005 (decision 2/CP.11); and the improvement of information and methodologies, implementation of concrete adaptation activities, technology transfer and capacity building under the Subsidiary Body for Implementation.

At COP-12, parties concluded the initial list of activities to be undertaken under the five-year SBSTA programme of work and renamed it the "Nairobi Work Programme on Impacts, Vulnerability and Adaptation to Climate Change." Parties also made progress on the governing principles of the Adaptation Fund, which was established by the Kyoto Protocol to fund adaptation activities through a two percent levy on emission reduction projects under the Clean Development Mechanism.

The IPCC's Fourth Assessment Report and key finding from Working Group II on impacts, adaptation and vulnerability indicates that hundreds of millions of people will be exposed to increased water stress, that many millions more people will be exposed to flooding every year, and that access to food in many African countries will be severely compromised.

Furthermore, the report states that adaptation will be necessary, but that many impacts can be avoided, reduced or delayed by mitigation.

At COP-13, held in Bali, Indonesia, in December 2007, a roadmap for a post-2012 climate regime was agreed with adaptation as one of the four building blocks (along with mitigation, finance and technology). Delegates further developed details and modalities of the Adaptation Fund at COP-14, held in Poznań, Poland, in December 2008.

The Copenhagen Accord, agreed upon at COP-15 in Copenhagen, Denmark, in December 2009, stressed the need to establish a comprehensive adaptation programme, and agreed that developed countries should provide "adequate, predictable and sustainable financial resources, technology and capacity-building" to support the implementation of adaptation action in vulnerable developing countries, such as in Africa. The collective commitment by developed countries is to provide new and additional resources approaching US\$30 billion for the period 2010-2012, with balanced allocation between adaptation and mitigation. A significant portion of such funding should flow through the Copenhagen Green Climate Fund.

The Cancun Adaptation Framework, agreed at COP-16 in Cancun, Mexico, in December 2010, as part of a larger package of the Cancun Agreements, invites parties to enhance adaptation action by: planning and implementation of adaptation actions identified in national adaptation planning processes, and impact, vulnerability and adaptation assessments; strengthening institutional capacities and enabling environments; building resilience of socio-economic and ecological systems; enhancing disaster risk reduction strategies; technology development and transfer; and improving access to climate-related data. The Framework also established an Adaptation Committee to promote implementation of enhanced action through: technical support and guidance; enhancing information sharing on good practices; promoting synergy and strengthening engagement of organizations, centers and networks; providing information on good practices on means to incentivize adaptation implementation and reduce vulnerability; and considering communications by parties on monitoring and review of adaptation actions with an aim to recommend further actions.

FIRST INTERNATIONAL WORKSHOP ON CBA:

The first international workshop on CBA took place from 16-18 January 2005, in Dhaka, Bangladesh. Jointly organized by IIED, RING Alliance, BCAS and the World Conservation Union (IUCN), the workshop was attended by more than 80 experts, policy-makers, NGO representatives and grassroots practitioners. The participants discussed possible impacts of climate change on local communities living in vulnerable areas and how to enable them to adapt to climate change in the future.

SECOND INTERNATIONAL WORKSHOP ON CBA:

More than 110 participants attended the second workshop on CBA, which was held from 24-28 February 2007, in Dhaka, Bangladesh. Three days of technical sessions and interactive discussions were preceded by field visits to four different regions in Bangladesh, including flood and drought-prone regions. Technical sessions addressed agriculture, drought,



food security, extreme events, health, mainstreaming and partnership, and communication and knowledge. The workshop resulted in the formation of a CBA Network. IISD Coverage of the second CBA conference: http://www.iisd.ca/ymb/sdban/

THIRD INTERNATIONAL WORKSHOP ON CBA:

More than 140 participants took part in the third workshop on CBA, which was held from 18-24 February 2009, in Dhaka, Bangladesh. Technical sessions addressed: methods and tools in designing CBA; adaptation measures and practices related to agriculture; women, education and awareness for adaptation; advancing adaptation through communication for development; mainstreaming and partnership for adaptation; disaster and climate change; and urban adaptation. Participants at the workshop agreed to establish the Global Initiative on Community Based Adaptation (GICBA) to Climate Change, a network seeking to support CBA-related activities by generating and sharing relevant knowledge. IISD Coverage of the third CBA conference: http://www.iisd.ca/ymb/sdcab/

FOURTH INTERNATIONAL CONFERENCE ON

CBA: More than 180 participants took part in this conference, held in Dar es Salaam, Tanzania, from 21-27 February 2010. Technical sessions and ad hoc working groups discussed, inter alia: strengthening institutions; water; building adaptive capacity; insurance and microfinance; policy linkages; agriculture; economics; drylands and pastoralism; urban areas; managing and communicating knowledge; scaling up and replicating best practice; vulnerable groups; role of ecosystems in adaptation; disaster risk reduction; methodologies; and funding. Participants also agreed to further develop the GICBA. IISD Coverage of the fourth CBA conference: http:// www.iisd.ca/ymb/climate/cba4

REPORT OF THE CONFERENCE

INAUGURAL SESSION

Welcoming participants to the Fifth Conference on Community Based Adaptation (CBA) on Monday, Atiq Rahman, Bangladesh Centre for Advanced Studies (BCAS), emphasized the growing impacts of climate change on productive capacities and development paths, and the need for adaptation tools.



Youssef Nassef, United Nations Framework Convention on Climate Change (UNFCCC), stressed that the CBA conference could provide key inputs to the new processes and institutions

being formed under the Cancun Adaptation Framework.

Ian Burton, University of Toronto, emphasized the need to expand CBA to all communities, link CBA to developments at national planning levels, integrate adaptation into new areas, make CBA more strategic, and increase progress on mitigation.



Stressing the need for support from the international community, Hasan Mahmud, State Minister, Ministry of Environment and Forests, Bangladesh, emphasized the vulnerability and resilience of Bangladeshis.

Saleemul Huq, International Institute for Environment and Development (IIED), stressed the



opportunity for the conference to provide meaningful input to the International Panel on Climate



Sheikh Hasina, Prime Minister of Bangladesh

Change's (IPCC) Fifth Assessment Report.

Sheikh Hasina, Prime Minister of Bangladesh, stressed that poor communities are in the forefront of climate change adaptation and applauded the participants' efforts to provide governments, scientific communities and non-governmental

organizations (NGOs) with guidance.

PLENARY SESSIONS

Throughout the week, participants engaged in nine plenary discussions on a variety of topics, including: concepts and terms; national policy action to foster CBA; agriculture, local resilience and climate prediction services; bridging local, subnational and national levels in adaptation - the articulation of institutions across scales; and funding and funding architecture to support up-scaling.

KEY CONCEPTS AND TERMS IN CBA: This session took place on Monday morning. Lisa Schipper, Stockholm



Lisa Schipper, SEI

Environment Institute (SEI), discussed the importance of shared understanding and clear communication of core ideas in adaptation theory, policy and practice. She stated that ideas, rather than definitions, must guide action.

Charles Ehrhart, CARE, described CBA as being grounded in human rights principles, including: nondiscrimination of marginalized

and vulnerable communities; active, free and meaningful participation; and increased accountability in decision making.

During a panel discussion, Schipper explained that although the definitions of vulnerability and resilience have often been seen as opposing one another, the presence of one does not preclude the presence of the other. Saleemul Hug, IIED, underlined the importance of replicating successes, multiplying activities at the local level and influencing decisions from the ground up. Marcus Oxley, Global Network for Disaster Reduction, discussed the relationship between terms used in the disaster risk reduction and CBA communities. He cited that over 90% of disaster losses are related to climatic events, noting that vulnerabilities are often affected by environmental, resource accessibility, governance and poverty variables. On social change and adaptation, Harjeet Singh, ActionAid,



stressed that, in order to fully address adaptive capacity in vulnerable communities, it is necessary to deal with key social problems including extreme poverty, land redistribution, health, education and energy.

During the ensuing discussion, many participants stressed the importance of understanding and shifting currently unbalanced power relations back towards the community, and into the hands of women. One participant differentiated between "Adaptation" as the actions of governments and "adaptation" as the responses from communities that have to deal with these actions. Others stressed that although CBA approaches are people-centered, they should include ecosystems-based knowledge, and another called for incorporating "animal and plants rights" into CBA discussions.

David Dodman, IIED, concluded the session, highlighting, *inter alia*: the importance of using a variety of approaches to engage with different communities in order to achieve CBA goals; the importance of building synergies and engaging with the non-human world; and the role of knowledge and power at all levels.

NATIONAL POLICY ACTION TO FOSTER CBA:

Session Chair Heather McGray, World Resources Institute, introduced this Tuesday morning session.

Nahau Rooney, Manus Provincial Government, Papua New Guinea, discussed her country's national development strategy, which includes a climate change and environment component, and aims to contribute to climate change adaptation and the improvement of governance and decision-making in environmental policy. She described one province's vulnerability and the measures its communities are taking to adapt to climate change, including mangrove planting along the coastline.

Jeremiah Mushosho, Zero Regional Environment Organization, presented on how his organization is meeting information and advocacy needs for climate change adaptation, stressing the importance of media involvement in disseminating information. He emphasized greater stakeholder involvement and public participation, a human-rights based approach to climate change, and policy-relevant research on climate change.

Nick Hall, Plan International, stressed the importance of adopting a children-centered approach to climate change adaptation. He highlighted challenges, including that 85% of climate change-related disease is borne by children and that approximately 500,000 children are displaced by flooding every year. Hall called for designing adaptation policies and investments that encourage children to take an active role in adaptation policymaking both locally and nationally.

Legesse Gebremeskel, Ethiopian Environmental Protection Authority, discussed national, regional and local adaptation mechanisms dealing with extreme events, such as weather and floods, in areas dependent on rain-fed agriculture or pastoralism. He outlined that National Adaptation Programmes of Action (NAPAs) befefits include increased awareness and involvement of individuals and increased capacity among experts at the sectoral, regional, and local levels.

Arivudai Nambi Appadurai, M.S. Swaminathan Research Foundation, presented a weather-based farming model as a tool to enhance adaptive capacity, optimize delivery systems, and improve policy dialogue and advocacy. He explained that farmers who are trained to use locally-generated weather information are able to fine-tune their agricultural practices to enhance adaptive capacities in the long run, and disseminate weather information to inform policy makers.

In the ensuing discussion, participants tackled issues including: the identification of actions for governments to help scale up CBA projects; appropriate measures to strengthen climate change systems at the local and national levels; and communicating climate change messages to illiterate communities.

AGRICULTURE, LOCAL RESILIENCE AND CLIMATE PREDICTION SERVICES: This session took place on Tuesday morning and was co-chaired by Sudip Rakshit, Asian Institute of Technology (AIT), and Richard Ewbank, Christian Aid. Rakshit stressed the need to tailor climate forecasts to farmer needs and develop trust between farmers and data providers.

Mokbul Ahmad, AIT, examined major drivers and impacts of agriculture transformation, impacts of climate change on agriculture in South East Asia, and the potential for organic agriculture to address climate change impacts. He stressed that organic agriculture is ecologically friendly and reduces dependency on pesticides and fertilizers, and that organic crops perform better under climate change conditions than nonorganic crops.

Ben Twinomugisha, Ecological Christian Organization, outlined barriers to integrating scientific technology and indigenous knowledge, and discussed means to scale up. He stated that the future of small-scale farming will be threatened if not strengthened by modern science and technology, and that scientists must take account of local and indigenous knowledge.

Dinanath Bhandari, Practical Action, outlined climate prediction practices in Nepal, stressing the need to integrate local knowledge and improve community access to, and understanding of, climate forecasting. He described community-based forecasting techniques, knowledge exchange, livelihood strategies, the scope of CBA and the potential to generate more precise information on climate variation and impacts.

Linda Kiluma, Environmental Protection and Management

Services, discussed enhancing adaptive capacities of communities in semi-arid areas by harmonizing indigenous knowledge on weather forecasting with conventional forecasting. She maintained that challenges include up-scaling indigenous techniques into modern systems and down-scaling contemporary forecasting to the small-scale needs of communities. Ewbank



Linda Kiluma, Environmental Protection and Management Services

reported on the results of adaptation projects in Africa. He



L-R: Session Co-Chair Richard Ewbank, Christian Aid; Session Co-Chair Sudip Rakshit, AIT; Dinanath Bhandari, Practical Action; Ben Twinomugisha, Ecological Christian Organization; and Mohamed Azmey, World Food Programme

detailed that future projects must address: proprietary data hurdles; the lack of adequate climatic information resources at the community level; and the need for better two-way communication channels. For adaptation researchers, he indicated a need to: go beyond awareness raising; avoid misattributing agricultural problems to climate change; move from single issue to multi-risk adaptation; and "get money moving downstream." On scaling up, he noted need for more: broadly relevant case studies; farmer-to-farmer linkages; cost-effective and replicable approaches; and integration of CBA into district planning.

Mohamed Azmey, World Food Programme, discussed linking climate information to food security information, and community early warning systems for disaster risk reduction in Sri Lanka. He observed that one key lesson learned is to better align interventions with both community and government priorities.

In the ensuing discussion, one participant noted that each of the presentations indicated that new institutional roles and arrangements are needed. Another lamented that some presentations treated local knowledge as static, technical and classifiable, while in reality it is dynamic and innovative.

COMMUNICATING KNOWLEDGE ABOUT CBA:

This Tuesday afternoon session was chaired by Pablo Suarez, Red Cross/Red Crescent Climate Centre. Noting that Bangladeshi Prime Minister Sheikh Hasina had asked participants to strengthen mutual understanding, Suarez opened the session with a "broken telephone" game to demonstrate the practical barriers to communicating knowledge about CBA, and stressed the need to identify: tensions in project communication; tools to scale up CBA communication; and means to mobilize resources for scaling up.

Mokhlesur Rahman, Curtin University, presented a case study on Bangladeshi villagers' understandings of climate change and its impacts on their livelihoods. Noting that, although many of the challenges faced by villagers were

weather-related, knowledge of climate change was limited, he highlighted the need for climate change issues to be introduced into people's "life worlds" and local knowledge.

Charles Chikapa, Malawi Broadcasting Corporation, described the impacts of radio as an effective means of communicating CBA efforts to Malawian farmers. He stated that



community radio can be used as a catalyst for improving food security in the face of climate change by successfully encouraging farmers to take CBA actions.

Susan Nanduddu, Development Network of Indigenous Voluntary Associations (DENIVA), described a collaborative project that, over time, identified and integrated other organizations. She stressed the importance of such collaborations, which include reciprocal knowledge sharing between stakeholders and communities, a larger scope of influences, and increased accountability horizontally and vertically.

Bettina Koelle, INDIGO Development and Change, discussed the pressure to implement CBA projects and called for concise yet flexible guidelines for a CBA methodology



L-R: Bettina Koel, INDIGO Development and Change; Susan Nanduddu, DENIVA; and Charles Chikapa, Malawi Broadcasting Corporation



based on both successful and unsuccessful, old and new learning experiences. She stressed the importance of designing projects carefully in addition to "listening well," which could require unlearning previously learned knowledge to fully understand what others are communicating.

In the ensuing discussion participants focused on: tensions revolving around discussing knowledge for CBA; the importance of listening to all stakeholders; and the stressors affecting practitioners and subsequently projects, especially regarding responsibilities to donors. Panelists discussed: challenges in fitting CBA into natural resource management activities; the risk of oversimplifying CBA messages and not disclosing uncertainties; the need to build bridges up to the global level to mobilize resources; the need for greater involvement of communities in designing communication strategies; the importance of bringing CBA into the worlds of ordinary people; the need for improving regional modeling and engaging communities in that modeling; and the importance of NGOs confronting governments and not giving in to clientelism.

BRIDGING LOCAL, SUB-NATIONAL AND NATIONAL LEVELS IN ADAPTATION - THE ARTICULATION OF INSTITUTIONS ACROSS

SCALES: Robin Mearns, World Bank, chaired this Wednesday morning session, beginning the session by saying that NGOs



should not expect governments to lead or pioneer adaptation activities.

Arun Agrawal, University of Michigan, presented on two cross-regional studies on CBA outcomes, stressing that adaptation is a structured choice based on uncertainties. He suggested focusing on patterns of vulnerability, citing household characteristics as important

determinants of vulnerability that can help identify adequate interventions.

Antonio Oviedo, World Wide Fund for Nature (WWF), discussed adaptation activities in Amazon fisheries, saying management scheme development should be a communitydriven process. He described the concept of "barefoot managers" - local experts who facilitate and implement data collection and monitoring systems, as well as define roles of government in management schemes.

Jess Ayers, IIED, discussed the role of institutions in adaptation and bottom-up planning. She said that institutions should focus on enabling the implementation of CBA projects and let communities decide which projects best fit their needs. Ayers identified the importance of "nested" institutions that nurture information



Jess Ayers, IIED

flow, create enabling environments and intercept projects which may negatively impact communities.

Margaret Barihaihi, Africa Climate Change Resilience Alliance (ACCRA), discussed the role of local governments in CBA, describing the results of a capacity gap analysis



undertaken in Uganda and her project's recommendations to improve district planning,



coordination, planning and central government support.

Adeline Aubry, United Nations Development Programme (UNDP), discussed the importance of partnership building at local and national levels for scaling up CBA. Describing the scaling up of small Global Environment Facility (GEF)funded community driven projects,

she described how partnerships can inspire stakeholders and drive scaling up efforts.

Participants then heard from two discussants. Noting the roles of institutions in compelling and hindering the flow of resources for CBA, Margaret Arnold, World Bank, stressed: the importance of "scaling out" as well as scaling up; solutions outside the environment sector; the value of scaling down; the need to provide outreach and decentralization; and the importance of recognizing and formalizing the role of communities.

Yvan Biot, United Kingdom Department for International Development (DFID), observed that: CBA processes are starting to tackle the vulnerabilities of communities by building on knowledge from community-based natural resources management (CBNRM) and planning; wider social, environmental and economic issues must be taken into account in CBA; long-term community vulnerability needs must be addressed; and CBA must consider root causes of community threats.

During the ensuing discussion, participants raised issues concerning: corruption as a challenge to CBA; international processes supporting or hampering CBA; the contribution of domestic social and political actions to vulnerability; and challenges to local engagement after scaling up CBA.

FUNDING AND FUNDING ARCHITECTURE TO **SUPPORT UP-SCALING:** This session was held on Wednesday afternoon and was chaired by Fumiko Fukuoka, UNDP.

Achala Chandani, IIED, explained financing options for CBA under the UNFCCC's financial architecture, including the: Least Developed Countries (LDC) Fund, Special Climate Change Fund; and Adaptation Fund. She observed that although UNFCCC funding remains very limited, the Cancun Agreements hold opportunities for CBA through the nascent Adaptation Framework and Green Climate Fund, as do non-UNFCCC options such as national fast-start finance programmes.



Andrew Adwera, African Centre for Technology Studies, explained the roles of existing and new governmental and



African Centre for Technology Studies

non-governmental funding options. He underscored that if adaptation financing is not taken seriously, progress made and money spent thus far on the Millennium Development Goals will have been for naught.

James Hardcastle, The Nature Conservancy, on behalf of Albon Ishoda, Marshall Islands Conservation Society, talked about the difficulties in progressing on CBA in extremely remote

areas such as the outer atolls of the Marshall Islands. He remarked that creating national frameworks for action, as well as national guidance on CBA, are instrumental in achieving CBA goals in such diffuse contexts. He underscored the need to raise awareness about CBA, noting preparations for a canoe trip across Pacific islands to do so.

Charles Nyandiga and Bhujang Dharmaji, UNDP, presented results of an analysis of ten pilot projects in countries with high donor dependence and high vulnerability. They illustrated that many donor funded "development" projects had been designed

to be CBA-oriented, and suggested that participants pursue funding in this way. They also encouraged participants to bring politicians into their programmes and encourage them to voice CBA needs back up to higher levels.

Aminul Islam and Sarwat Chowdhury, UNDP, discussed lessons learned from the use of the Local Disaster Risk Reduction Fund (LDRRF) for scaling



up CBA. Islam stressed that disaster risk reduction must be integrated with climate change adaptation and emphasized how

the Fund works to achieve this through community engagement. Chowdhury outlined the advantages of tools such as the LDRRF to channel adaptation funds to frontline victims of climate change.

Leena Wokeck, Corporate Social Responsibility Asia Centre at AIT, discussed means to engage and incentivize private sector investment in CBA. She reviewed the advantages, requirements, barriers and opportunities



Leena Wokeck, Corporate Social Responsibility Asia Centre at ALT

for private sector involvement, stressing that work needs to be done through more effective consultations, regulatory requirements, improved multi-stakeholder processes, and public and consumer awareness raising.

Participants posed questions concerning the creation and functioning of public-private partnerships, the impacts of actions on national policies, and the need for community involvement in private sector engagement in CBA.

HOW TO UP-SCALE CBA WHILE KEEPING THE FOCUS LOCAL – EMERGING LESSONS: On Thursday morning, Saleemul Huq, IIED chaired the concluding plenary session.

Anne-France Wittmann, UNDP/GEF, presented on a CBA pilot program using UNDP/GEF's small grants mechanism. She described a participatory approach and design that includes community volunteers and can be tailored to local realities and experiences. Wittmann proposed that participatory videos showcase local experiences, techniques and achievements, and directly transmit messages to decision makers and donors.

Vincent Ziba, WWF, described a CBNRM programme based on benefit sharing and resource management, as a vehicle for CBA. He identified principles of CBNRM as, *inter alia*: the devolution of power; resource monitoring; and evaluation of structures at the community level. One participant lamented that CBNRM's reputation has been tarnished by a large number of poorly implemented projects, and advocated more rigorously defining what CBA projects are and are not, to minimize similar reputational effects within CBA.

Presenting lessons learned from the conference, Saleemul Huq highlighted that the conference had not only attracted practitioners, but also members of the academic community and that the conference proceedings had become more analytical and scientific. He emphasized the need for further linking and engaging with key decision-makers on the national and international levels, greater scaling up and better communication of CBA messages.

Hug then invited participants to reflect on their impressions of the meeting. Participants raised issues concerning the need for: government representative attendance at CBA conferences; greater analytical rigor; youth engagement; education initiatives; innovative thinking; international negotiator attendance, including members of the future UNFCCC Adaptation Committee; translation of sessions; media participation; media training; and discussion of migration issues. They also spoke about: harmonization and coherency among groups; deeper discussions on gender issues; greater private sector engagement; CBA training on local levels; learning from past experiences; scaling up to all regions; focusing on an integrated approach; prioritizing specific CBA projects; sustainably increasing community knowledge; addressing land-use planning issues; greater government action; and spreading awareness of CBA through improved communication skills and broader channels.

TECHNICAL SESSIONS

Throughout the week, participants met in 15 technical sessions, covering a broad array of topics related to CBA and scaling up efforts to achieve its goals. This report includes coverage of 12 of these sessions, on: adaptive capacity – why is it significant? How do we support it?; water governance and climate adaptation; gender; the economics of CBA; tools and toolkits for adaptation – supporting rapid replication and good practices; institutional capacity dimensions of scaling up CBA; building synergies between disaster risk reduction and CBA; how wider development interventions contribute to community adaptive capacity; the role of ecosystems in adaptation; health; and CBA knowledge management.

ADAPTIVE CAPACITY – WHY IS IT SIGNIFICANT?
HOW DO WE SUPPORT IT? Rachel Berger, Practical
Action, chaired this session, which took place on Monday



afternoon. She noted that the session aimed to illustrate that the quality of adaptation is broadly determined by institutions and relationships, power and power sharing, knowledge and

information, and innovation and



Kirsty Wilson, ACCRA, discussed the importance of incorporating adaptive capacity building into climate change resiliency programmes in Ethiopia. She remarked that, to be successful, projects need to include stronger evaluations of

crop choices, enable more equitable institutions, and provide enhanced weather information.

Indrani Phukan, Christian Aid, discussed an approach to strengthening CBA that aims to: tackle disaster risks and uncertainties through their integration into climate change programme designs; enhance adaptive capacity by strengthening abilities of actors; and address the structural causes of poverty and vulnerabilities by promoting more socially-just and equitable economic systems.

Lorena del Carpio, Oxfam America, presented lessons learned from working with indigenous communities in the highlands of Peru. She described a scaling up project involving enhanced water and pasture management, early warning measurement systems, and the creation of community committees to coordinate preventative and responsive action.

Krishna Lamsal, Local Initiatives – Biodiversity Research and Development (LI-BIRD), discussed an approach to managing sloping and shifting cultivation lands in Nepal that increased from 11 test plots to nearly 70 farms via word-ofmouth. He found that broad local public-private partnerships and stakeholder participation were key to this success, as were location-specific adaptation techniques - in this case, integrated hedgerow farming.

George Kasali, Copperbelt University, presented on barriers and opportunities for adaptive capacity building in an agricultural community in southern Zambia, calling for the introduction of new community-compatible technologies and the recognition of kinship networks in strengthening adaptive capacity.

John Ajigo, Nigerian Environmental Study Action Team, described a CBA pilot project aimed at increasing resilience and adaptive capacity, highlighting the importance of gender-



L-R: George Kasali, Copperbelt University, and John Ajigo, Nigerian **Environmental Study Action Team**

sensitive, participatory peer-to-peer experience-sharing to create awareness, at the local level, of climate change impacts and adaptation measures.



Srijita Dasgupta, Mahidol

Srijita Dasgupta, Mahidol University, presented on the adaptive capacity of a fishing community in Bangladesh, noting that, due to the effects of climate change, fishing has become a seasonal activity and not the key livelihood activity in the community. She called

for installation of early warning

systems, and to limit the control of urban fish markets over

Anwar Begum, Caritas Fisheries Program, outlined a CBA initiative in Bangladesh, describing measures taken to increase adaptive capacity, including; rainwater harvesting; the creation of information dissemination centers to increase awareness on the impacts of climate change; and crop diversification.

WATER GOVERNANCE AND CLIMATE

ADAPTATION: This session, held on Monday afternoon,

was chaired by Katharine Cross, IUCN. Cross observed the need to identify how climate change adaptation approaches are affected by water governance structures, mechanisms for ensuring good water governance, and strategies for scaling up. She then presented on the integration of climate change adaptation into water governance institutions in Tanzania through integrated water basin



management and stakeholder engagement. She described ongoing efforts to replicate this work in Uganda, Kenya and in other water basins in Tanzania.

Bhathiya Kekulandala, Practical Action, presented on adapting water resource management practices to account for climate change risks and reduce vulnerability in Sri Lanka. She described local community engagement leading to the rehabilitation of traditional irrigation systems, modification of cultivation practices, and crop selection.

Kazi Rashed Hayder, WaterAid Bangladesh, described efforts to strengthen domestic water-supply infrastructure against damage from climate change. He listed new technologies in rainwater harvesting, disaster resilient ponds, and raised ponds and filters, and described how these approaches may be replicated.



L-R: Bhathiya Kekulandala, Practical Action, and Kazi Rashed Hayder, WaterAid Bangladesh



Bach Tan Sinh, Ministry of Science and Technology, Vietnam, presented on the use of local knowledge and CBA in

flood management in the Mekong Delta. Using the example of local communities "living with floods," he stressed that innovative practices can be used to derive benefits from climate change impacts.

Madyoury Tandia, the Centre for Innovation for Development (TENMIYA), described a project aimed at rehabilitating degraded land in southern Mauritania. He stated



Madyoury Tandia, TENMIYA

that through mobilization of the community through awareness raising and capacity building, efforts were made to restore farmlands using a watershed approach, traditional practices, and local know-how.

During the discussion, participants spoke on strategies for scaling up water governance approaches, challenges that are encountered and tools that can be used. Questions were raised concerning the modeling used for developing adaptation strategies, how elites in local communities are engaged, upstream and extra-jurisdictional impacts on projects, protective measures against land salinization, the responsibility for costs of maintaining projects, user conflicts, and the determination of the levels of necessary adaptation.

GENDER: This session, held on Monday afternoon, was chaired by Achala Chandani, IIED.



Krystel Dossou, Organisation des Femmes pour la gestion de l'Energie, de l'Environnement et la promotion du Développment Intégré (OFEDI), reported on the introduction of fuelefficient cookstoves made of locally available materials into women's groups to decrease vulnerability to fluctuations in energy prices and availability, as well as to reduce deforestation rates. He

noted that the aforestation component of the project ultimately

resulted in some of the women running seed nurseries autonomously.

Assalama Sidi, Plan International, submitted that gender and age discrimination are two root causes of climate change risk, lamenting that, although girls and young women are greatly affected by climate change, they are often excluded from adaptation discussions. She argued that allocating



adaptation funds towards educating girls and young women about climate change would enable them to make valuable contributions in adaptation discussions and lower their communities' levels of risk in the future.

Basra Ali, independent community development consultant, discussed a report on scaling up community level work. She outlined the report's findings, saying that in order to scale up, it is important to look at: actors, including individuals,

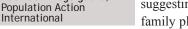


L-R: Assalama Sidi, Plan International, and Basra Ali, independent community development consultant

government officers, and the politics of funding between them; activities, including continuous humanitarian interventions and

> current programmes with room for expansion; and donor interest.

Kathleen Mogelgaard, Population Action International, discussed direct linkages between reproductive health, family planning and climate change. She illustrated that geographic areas of rapid population growth overlap with those most vulnerable to climate change, suggesting increasing access to family planning and reproductive



Kathleen Mogelgaard,

health information as means to improve adaptation efforts.

Charles Nyandiga, UNDP, discussed the importance of mainstreaming both genders into all aspects of CBA projects. He stressed that to ensure a gendered approach, practitioners should focus on: an initial analysis of dynamics, including those of power within the community; fostering equitable community participation; using new techniques and technology as entry points; designs that accommodate women's traditional roles and responsibilities; and providing easy and accessible training to both women and men.

THE ECONOMICS OF CBA: This session, held on Tuesday morning, was co-chaired by Muyeye Chambwera, IIED, and Nahau Rooney, Manus Provincial Government, Papua New Guinea.

Rachel Berger, Practical Action, spoke on cost-benefit analysis as a tool for CBA projects. She stressed that these



Rachel Berger,

analyses should go hand-in-hand with evaluations of the social impacts of CBA projects.

Maria Rebecca Campos, University of the Philippines, presented a case study of the economics of adaptation of sea cucumber fisheries, outlining impacts of climate change to this sector in recent years, including decreases in export earnings. Stressing the

importance of creating marine protected areas (MPAs) to protect reefs as well as to restore livelihoods of sea cucumber fishers, she called for better management of MPAs, and increased financial resources to maintain them.





L-R: Jessica Frank, Twin Trading; Katharine Cross, IUCN; Ricky Carl, Federated States of Micronesia; Martin Obermaier, REDEH; and Maria Rebecca Campos, University of the Philippines

Jessica Frank, Twin Trading, illustrated a model of working with farmer organizations to reduce risks and vulnerabilities due to climate variability. She submitted that advantages of working with such organizations include their: large memberships; existing social capital, infrastructure and technical expertise; existing networks and partnerships; and social enterprises' attributes. She stated that challenges include exclusion of marginal groups; reaching beyond membership; and competing priorities.

Katharine Cross, IUCN, discussed adaptation options for microfinance institutions (MFIs). She indicated that MFIs can assist adaptation efforts by developing organizational-level disaster plans, educating their customers, introducing new products or incentives, and flexibility clauses. She listed challenges including that: scaling up microfinance needs to be realistic; MFI clients may be economically active but are not neccessarily the most vulnerable; MFIs are not suited to address necessary large-scale adaptation investments; and MFIs must take care not to fund projects which increase vulnerability.

Martin Obermaier, Rede de Desenvolvimento Humano (REDEH), discussed a holistic approach to reduce poverty and adapt to climate change in semi-arid parts of Brazil, with the specific objective of improving production of food and fodder on small plots of land.

Ricky Carl, Federated States of Micronesia, reported on using conservation trusts to help fund CBA activities. He noted that these trusts are independent, accountable and transparent, and that they can align well with national development frameworks, should complement government support for CBA and build on community action.

In the discussion, participants raised issues concerning, *inter alia*, private sector partnerships with communities, the need for toolkits for successful cost-benefit analyses, and the need for information on creating and maintaining MPAs.

TOOLS AND TOOLKITS FOR ADAPTATION - SUPPORTING RAPID REPLICATION AND GOOD

PRACTICES: This session, held on Tuesday morning, was chaired by Tine Rossing, CARE International.

Anna Ricoy, UN Food and Agriculture Organization (FAO), discussed FAO's e-learning tool to enhance awareness and technical capacities in agriculture and related sectors. She outlined four modules focusing on: improving understanding of climate change and associated impacts; linking concepts of agriculture and food security; and tools for preparing and implementing CBA projects.

Julie Webb, CARE Australia, presented CARE's new CBA "how-to" toolkit, developed as a guide for practitioners at all project cycle stages. She explained that the toolkit helps practitioners understand when to use which tool at different project cycle stages and creates a high quality standard for both the process and outputs of each stage.

Gretel Gambarelli, IUCN, discussed IUCN's Climate Vulnerability and Capacity Analysis Tool and Community-



based Risk Screening Tool to assess vulnerability to climate change and identify adaptation options at the community level. She explained that no single tool can meet all needs, stressing that tools should be adapted and modified to specific scenarios.

Fiona Percy, CARE International, presented on using CBA for local empowerment and examined



methods and practices from CARE's adaptation work in Africa. Underlining the need to develop local capacity, tackle underlying causes of vulnerability, reduce disaster risk, and build resilient livelihoods, she stressed the importance of developing robust communication systems, promoting community ownership and addressing gender inequalities.

Mayukh Hajra, Development Alternatives, discussed community-



Fiona Percy, CARE International

led efforts to assess and track community carbon footprints through the use of report cards that document baselines, environmental quality, climate friendliness and the adaptive potential of community practices. Emphasizing a focus on assessment, awareness, action and advocacy, he stressed the impacts of these efforts to encourage environmental protection and achieve carbon neutrality.

During the ensuing discussions, participants focused on: constraints to the widespread application of adaptation tools; ways of learning from past experiences to improve tools; and striking a balance between quality and scale. Participants also raised issues regarding, *inter alia*, the: diversity of existing toolkits; challenges in sustaining the continuing use and innovation of tools; need to address non-climate-related community priorities; and the needs of children.

INSTITUTIONAL CAPACITY DIMENSIONS OF SCALING UP CBA: This Tuesday afternoon session was chaired by Maarten van Aalst, Red Cross/Red Crescent Climate Centre, who outlined roles of institutions and institutional capacity issues arising when scaling up CBA.

Focusing on a case study of activities in Bhopal, India, Nidhi Mittal, Save the Children, discussed the role of community-based organizations as vehicles for empowerment and climate resilience in cities. She examined the organizational, technical, social and strategic dimensions of these organizations and barriers, and possible solutions for their scaling up.

Ranga Pallawala, Practical Action, presented on harmonizing formal and informal local governance systems to support CBA. He emphasized that linking and harmonizing these systems strengthens sustainable development and CBA.



L-R: Nidhi Mittal, Save the Children; Anna Taylor, SEI; Nadia Bood, WWF UK and Belize; Tahia Devisscher, SEI; Helen Jeans, WWF UK; and Maarten van Aalst, Red Cross/Red Crescent Climate Centre

Sherpard Zvigadza, ZERO Regional Environment Organisation, discussed the importance of addressing poverty alleviation priorities in CBA. He stressed engaging stakeholders in decision-making, determining how climate change impacts will affect the poor, and prioritizing adaptation measures.

Raju Chettri, Climate Action Network International, discussed implications of the Cancun Adaptation Framework for CBA and pointed out opportunities for NGO interaction with national and international actors currently struggling to understand how to implement the commitments at UNFCCC COP-16. He posited that civil society should work to: ensure financial and other resources are targeted at, and reach, the most vulnerable; partner with government and existing networks to develop frameworks for collaborative action; and share capacity building experiences. In terms of immediate action, Chettri explained that NGOs can: share experiences on the Nairobi Work Programme on Impacts, Vulnerability and Adaptation to Climate Change website; initiate meetings with national climate networks; get to know Adaptation Fund Board members; and encourage governments to submit proposals to the Adaptation Fund.

Anna Taylor and Tahia Devisscher, SEI, with Helen Jeans and Nadia Bood, WWF UK and Belize, presented options for, and barriers to, better integrating governance of development, climate adaptation, and ecosystems. They contended that opportunities include promoting: better integration and coordination; cross-scale NGO work; and better channeling of global funds and market-based mechanisms. Barriers they found included: poor policy implementation and enforcement; limited sectoral policy scopes; coordination gaps between scales; and poor coordination of funding and investments.

The discussion focused around provocative questions given by van Aalst to spark conversation, all of which led to a mix of opinions. During the ensuing discussion, participants debated whether: institutions for good development are the same as those for CBA; whether the main gap in institutional capacity for CBA is the ability to transfer funds to the local level; and whether institutional capacity for CBA is the capacity to link to other institutions.

BUILDING SYNERGIES BETWEEN DISASTER RISK REDUCTION AND CBA: Marcus Oxley, Global Network of Civil Society Organizations for Disaster Reduction, chaired this session on Tuesday afternoon, drawing attention to the



Terry Cannon, Institute for Development Studies

need to break down the disaster risk management and the climate change adaptation discourses and understand both from the local, national, regional and international scales.

Terry Cannon, Institute for Development Studies, presented on the Climate Smart Disaster Risk Management (CSDRM) approach, which focuses on development, climate change adaptation and disaster risk reduction. He pointed





L-R: Jessica Mercer, Oxfam East Timor; Karina Copen, Oxfam America; Pramita Harjati, Mercy Corps; Peter Raab, Concern Universal Bangladesh; Stephane Bonduelle, CUB; and Marcus Oxley, Global Network of Civil Society Organizations for Disaster Risk Reduction

out that the CSDRM can be used to guide future planning and evaluating existing disaster risk management and climate change adaptation policies.

Jessica Mercer, Oxfam East Timor, spoke about disaster risk reduction and CBA in East Timor, noting that the former is actually rooted in a community-driven approach, while the latter is policy driven. She suggested that climate change adaptation should be embedded into the disaster risk reduction approach.

Pramita Harjati, Mercy Corps, described the work of the Asian Cities Climate Change Resilience Network in Indonesia, highlighting some of the challenges facing the organization, including a lack of coordination between national government sectors dealing with disaster risk reduction and climate change adaptation.

Karina Copen, Oxfam America, reasoned that one effective way of addressing vulnerability is to strengthen community organizing and networks to build adaptive capacity. Describing a project to reduce vulnerability in El Salvador, she stressed that communities' collaboration with authorities is key to decreasing vulnerability.

Ben Wisner, University College London, suggested that the core of CSDRM is risk and opportunity management. He noted participatory approaches as a common theme, but suggested that they are merely instrumental, and focus should rather be on transformative participation.

Stephane Bonduelle, Concern Universal Bangladesh, underlined that in order to build synergies, up-scale and mobilize and train community individuals, development worker roles must change from "doers" to facilitators.

In the ensuing discussion, participants focused on: the need to combine the numerous existing frameworks and tools; take a more encompassing approach at the local level; and increase attention to areas affected by pervasive, recurring disasters.

HOW WIDER DEVELOPMENT INTERVENTIONS CONTRIBUTE TO COMMUNITY ADAPTIVE

CAPACITY: On Wednesday morning, Eva Ludi, ACCRA/ Overseas Development Institute, chaired this session, highlighting ACCRA's work on enhancing adaptive capacity through development initiatives.

Jo Lofthouse, Oxfam and ACCRA, presented preliminary findings from ACCRA projects in Uganda, Mozambique and Ethiopia, drawing linkages between social protection programmes, disaster risk reduction and communities' adaptive capacities. She stressed the need to harmonize national planning processes to reduce duplication of efforts among organizations working in development, disaster risk reduction and climate change adaptation.

Sarah Wiggins, Tearfund, presented integrated approaches to adaptation, defining these as holistic coordinated actions between agencies from the outset of a project, and not the optimization of an individual agency's actions. Noting that this approach enables scaling up and increased cost



L-R: Eva Ludi, ACCRA/Overseas Development Institute; Partha Das, Aaranyak; Sarah Wiggins, Tearfund; and Jo Lofthouse, Oxfam and ACCRA



effectiveness through inter-sectoral cohesion, she called for the establishment of a funding mechanism that "reaches the people."

Partha Das, Aaranyak, presented a case study on waterrelated, local adaptation strategies in India and Nepal, and linked governance to the success of local-level adaptation actions. He gave examples of community involvement in government-led climate change adaptation projects, emphasizing that without either government involvement or community participation, such projects would be unsustainable.

Lawrence Aribo, Climate Change Unit, Uganda, talked about his country's NAPAs and CBA. He indicated that Uganda's NAPA prioritized nine CBA-related areas, including community tree growing, land degradation management and strengthening regional meteorological capacities. Aribo closed with challenges related to NAPAs, including a difficulty in accessing international adaptation funding and limited implementation capacity.

In the ensuing discussion, participants inquired about the value of cash/food-for-work programmes, bringing high-level decision makers to project sites to illustrate their importance, and gender and power-relations dimensions of innovation and entitlement.

THE ROLE OF ECOSYSTEMS IN ADAPTATION: Helen Jeans, WWF, chaired this session on Wednesday morning.

Metui Tokece, WWF, discussed engaging communities in an integrated ecosystem approach, noting dependencies upon coastal ecosystems. He stressed the importance of government involvement, expressing that governments play a key role in scaling up and replicating projects.

Jimmy Kereseka, The Lauru Land Conference of Tribal Communities, discussed building resiliency across the Solomon Islands, focusing on Choiseul province. He promoted working with traditional leaders to make decisions sustainable and successful, networking amongst provinces, and a participatory 3D modeling tool to help islanders explore adaptation options.

Mouhamadou Farka Maiga, Ong Amade-Pelcode, discussed restoring palm groves degraded by both human activity and weather, citing a 20% decrease in rainfall over the past two decades. He emphasized that the project is based on social and cultural norms, and the participation, accountability, and empowerment of rural communities.

Nella Canales Trujillo, CARE, described her organization's experiences in using ecosystem management to support adaptation, highlighting collaborative vulnerability and capacity assessment work undertaken by WWF and CARE in Peru. Stressing the need for comprehensive approaches integrating ecosystem and people-centered dimensions, she emphasized the need to adapt livelihoods in an environmentally sound manner.

Focusing on the challenges of integrating ecosystem management into CBA projects, Pauline Buffle, IUCN, presented results of a comparative analysis of CBA projects and good practices addressing ecosystem management. She remarked that all project work that was examined in the analysis was community driven, that practices were

context specific, and collaboration among stakeholders, communication, and compliance incentives were important factors.

During the ensuing discussion, participants raised issues including: tensions between applying ecosystem and peoplecentered approaches; linkages between ecosystems and human development; divergences between ecosystem and communitybased approaches; challenges of integration; the importance of addressing both urban and rural adaptation needs; the need for local empowerment; and the value of shifting from a projectfocus to a systems focus.

HEALTH: On Wednesday afternoon, session chair Joy Guillemot, World Health Organisation, remarked that this was



Ministry of Health,

the first panel dedicated to health in the history of the CBA conferences, and asserted that health problems and worries over health are vulnerability multipliers.

Rada Dukpa, Royal Ministry of Health, Bhutan, described outcomes of a UNDP/GEF project to strengthen national capacity to identify and prevent adverse climate change-related health problems. These included: a risk assessment and surveillance of

climate sensitive health risks; capacity building of community and health sector institutions to respond to these risks; and development of emergency preparedness and disease prevention measures in high-risk areas.

Kristie Ebi, ClimAdapt LLC, discussed the goals of a new GEF project on health and agricultural adaptation in Samoa. She said the project aims to: develop information services, such as a climate early warning system for seasonal illnesses and issues; mainstream activities to ensure information is professionally assessed and broadcast to communities; and carry out pilot studies on seasonal diarrheal diseases, dengue fever control through school training on larval surveys, and hypertension due to salinization of water through sea-level rise.

Thuan Nguyen, International Federation of the Red Cross and Red Crescent Societies, spoke about a project managing increasing uncertainty regarding fever prevention in Vietnam. She explained that surveys were carried out to identify base knowledge, attitudes and perceptions about dengue, and to identify base perceptions about climate change. Nguyen noted that next steps include designing and testing methods to shift infection-exacerbating behavior of communities.

Osama Kittaneh, Ministry of Health, Jordan, outlined efforts being taken in his country to address water scarcity and protect human health from climate change. Scaling up, he indicated, requires adequate human resources, clear understanding of baseline risk conditions, the use of the media for generating community awareness, and the need for active community buy-

Iqbal Kabir, Ministry of Environment and Forests, Bangladesh, outlined efforts being taken in his country to identify adaptive strategies against outbreaks of climate sensitive diseases. He highlighted the importance of healthcare



capacity building work, partnership building, expanding community healthcare clinics, community participation, and the engagement and education of youth.

Ebi described how the healthcare sector has benefited from lessons learned in other sectors when addressing climate change adaptation issues. She stressed the importance of integration with the international processes to assist in the dissemination of information and exchange of lessons learned, as well as the importance of focusing on the needs of children when addressing adaptation.

During the ensuing discussion, participants raised questions regarding: challenges concerning health and food security; health impacts of salinization; the sustainability of health care projects; research on the links between climate change and health; challenges in translating policies into action; and the role of public-private partnerships.

CBA KNOWLEDGE MANAGEMENT: On Wednesday afternoon, Mozaharul Alam, UNEP, chaired the session on CBA Knowledge Management.

Sukaina Bharwani, SEI, spoke on sharing information and learning lessons on climate adaptation, describing changes and innovations to the knowledge management web portal WeADAPT: http://weadapt.org/. The portal aims to improve collaboration between practitioners and among sectors, as well as increase knowledge-sharing capacity and provide space for the sharing of lessons and experiences.

Introducing the Global Initiative on CBA (GICBA), Corinne Schoch, IIED, stressed the need to bring CBA activities under one umbrella. She spoke about the Google Earth layer of CBA projects on WeAdapt, highlighting placeholders marking the geographic location of CBA projects, or areas where CBA faces challenges. She called on participants to use this tool to engage with other practitioners to communicate successes, challenges and lessons learned.

Roopa Rakshit, AIT, informed participants about the Asia Pacific Adaptation Network and the Regional Climate Change Adaptation Knowledge Platform for Asia which include: a web portal; bi-monthly sharing and learning thematic seminars on disaster risk reduction, climate change adaptation and ecosystems-based adaptation; and workshops and training.

Cleofe Torres, University of Los Baños, discussed Communication for Development (ComDev), FAO's mechanism for planned learning and knowledge sharing. She explained that ComDev focuses on communication and social processes, ensures equitable access, and enables scaling up via decentralized communication services.



L-R: Dinesh Raj Bhuju, Nepal Climate Change Knowledge Management Center; Roopa Rakshit, UNEP; Cleofe Torres, University of Los Baños, the Philippines; Mozaharul Alam, UNEP; Corinne Schoch, International Institute for Education and Development; and Sukaina Bharwani, Stockholm Enviornment Institute

Dinesh Raj Bhuju, Nepal Climate Change Knowledge Management Center, stressed that in order to address different communities' capacities, knowledge sharing and activities must be facilitated by practitioners. He explained that base strategies should include new knowledge and technology, and not be based on promoting traditional practices.

In the ensuing discussion, participants focused on: if and how these tools can be beneficial at the local level; the need for different media to effectively disseminate adaptation knowledge across levels; and the importance of educating children, who are more likely than adults to embrace new tools and spread the message about climate change.

CONFERENCE CLOSING STATEMENTS AND NEXT STEPS

The concluding session was chaired by Atiq Rahman, BCAS, on Thursday morning. In summarizing the conference, Saleemul Huq, IIED, welcomed the CBA group's development from one primarily sharing results to one rigorously analyzing results scientifically. He noted the importance of: differentiating between projects adapting to climate variability and those adapting to climate change; improving internal communication of CBA issues with stakeholders and the wider world; and bringing community knowledge into reports and papers. He then encouraged participants to begin submitting their project information to the CBA website which currently has over 1,000 examples of CBA projects: http://community.eldis.org/cbax/. He closed by announcing that the Sixth CBA meeting will be held in Vietnam in 2012.

Ian Burton, University of Toronto, discussed up-scaling adaptation from local to global levels. He discussed out-scaling, up-scaling, strategy, integration, mitigation and pathways. Burton called out-scaling a positive "process of contagion," requiring engagement of entire localities, and suggested up-scaling as a "flood-up" movement, which will require new communication methods and instruments. He noted CBA activities must consider location and relocation, and warned not to ignore the value of mitigation efforts in their activities. Lastly, Burton urged the establishment of climate resilient development pathways.

Mesbah Ul Alam, Ministry of Environment and Forests, Bangladesh, described the work of the Bangladeshi government on climate change, and highlighted the importance of sustaining financing these numerous projects.



L-R: Rajendra Pachauri, Chair, IPCC, and Mesbah Ul Alam, Ministry of Environment and Forests, Bangladesh



Rajendra Pachauri, Chair, IPCC, stressed the need for greater global attention to adaptation issues, emphasizing the importance of scaling up, linking up and ensuring that adaptation experiences are shared broadly. Highlighting the importance of inputting lessons learned from the conference into the drafting process of the IPCC's Fifth Assessment Report, he urged participants to publish their work as quickly and as extensively as possible. Pachauri stressed the need for: closing knowledge gaps; ensuring adaptation measures address vulnerability; increasing adaptive capacity; work on adaptation on the global and national levels, with action centered on local initiatives; rigorous analysis ensuring that efforts are taken in the right directions; facilitating frameworks and actions at every level; inputs from outside the CBA community; local preparedness through incentives and regulation; mitigation; and the building of synergies among sectors, including the development and disaster prevention communities.

Rahman concluded by emphasizing the gravity of climate change impacts on human welfare, the urgent need for both adaptation and mitigation efforts, and the overarching necessity of poverty reduction. Rahman then closed the conference at 12:58pm.

UPCOMING MEETINGS

First Session of the IRENA Assembly and Fifth
Preparatory Commission for IRENA: The fifth session of
the Preparatory Commission for the International Renewable
Energy Agency (IRENA), which will take place on 3 April
2011, will be followed by the first session of the Assembly
of IRENA, on 4-5 April 2011. dates: 3-5 April 2011 venue:
C 67 Office Building Khalidiyah (32nd) Street Opposite Al
Khalidiyah Ladies & Children's Park location: Abu Dhabi
(Abu Dhabi), United Arab Emirates www: http://www.iisd.ca/
irena/irenaal

AWG-KP 16, AWG-LCA 14 and Workshops: The 16th session of the *Ad Hoc* Working Group on Further Commitments for Annex I Parties under the Kyoto Protocol (AWG-KP 16), the 14th session of the *Ad Hoc* Working Group on Long-term Cooperative Action under the Convention (AWG-LCA 14), and workshops pursuant to the Cancun Agreements will be held concurrently. dates: 3-8 April 2011 venue: United Nations Economic and Social Commission for Asia and the Pacific (UNESCAP), Rajdamnern Nok Avenue, Bangkok 10200, Thailand location: Bangkok (Krung Thep), Thailand contact: UNFCCC Secretariat phone: +49 228 815 1000 fax: +49 228 815 1999 e-mail: secretariat@unfccc.int www: http://www.iisd.ca/climate/ccwg14/

LDC-IV Preparatory Committee - Second Session:
The second session of the Intergovernmental Preparatory
Committee for the Fourth UN Conference on the Least
Developed Countries (LDC-IV) will take place in April. dates:
4-8 April 2011 venue: UN Headquarters location: New York
(New York), United States of America contact: Margherita
Musollino-Berg, OHRLLS e-mail: musollino@un.org www:
http://www.un.org/wcm/content/site/ldc/home/preparations/
pid/13103

Second UNECE Workshop on Water and Adaptation to Climate Change in Transboundary Basins: The workshop will be organized by the UN Economic Commission for Europe

(UNECE) under the Water Convention. **dates:** 12-13 April 2011 **location:** Geneva (Geneve), Switzerland **contact:** UNECE **phone:** +41 (0) 22 917 44 44 **fax:** +41 (0) 22 917 05 05 **e-mail:** info.ece@unece.org **www:** http://www.unece.org/env/water/meetings/transboundary climate adaptation workshop.html

Fourth Meeting of UNECE Task Force on Water and Climate: This is the fourth meeting of the UNECE Task Force on Water and Climate which is responsible for activities related to adaptation to climate change, including flood and drought management, working in close cooperation with the Task Force on Extreme Weather Events established under the Protocol on Water and Health. date: 14 April 2011 location: Geneva (Geneve), Switzerland contact: UNECE phone: +41 (0) 22 917 44 44 fax: +41 (0) 22 917 05 05 e-mail: info.ece@unece.org www: http://www.unece.org/env/water/water_and_climate.htm

Climate Change, Price Volatility and Food Security:
Perspectives from Southeast Asia: This international
workshop is hosted by the International Food Policy Research
Institute (IFPRI) with the Indonesian National Poverty
Commission and Ministry of Agriculture. date: 20 April 2011
location: Jakarta (Jakarta Raya), Indonesia www: http://
www.ifpri.org/event/climate-change-price-volatility-and-foodsecurity?

UNISDR Third Session of the Global Platform for Disaster Risk Reduction: This meeting will discuss what the disaster risk reduction framework will look like post-2015. dates: 8-13 May 2011 location: Geneva (Geneve), Switzerland contact: Connie Brown phone: +41 22 91 78908 fax: +41 22 91 78964 e-mail: globalplatform@un.org www: http://www.preventionweb.net/globalplatform/2011/?pid:50&pif:3

Fourth UN Conference on Least Developed Countries (LDC-IV): This conference aims to assess the results of the 10-year action plan adopted at the third UN Conference on LDCs and to adopt new measures and strategies for their sustainable development. dates: 9-13 May 2011 location: Istanbul (Istanbul), Turkey contact: Ricardo Dunn phone: +1 917 367 6006 e-mail: dunn@un.org www: http://www.un.org/wcm/content/site/ldc/home

IPCC 33: The 33rd session of the Intergovernmental Panel on Climate Change (IPCC 33) dates: 10-13 May 2011 location: Abu Dhabi (Abu Dhabi), United Arab Emirates contact: IPCC Secretariat phone: +41 22 730 8208 fax: +41 22 730 8025/13 e-mail: IPCC-Sec@wmo.int www: http://www.ipcc.ch/calendar of meetings/calendar of meetings.shtml

Sixty-fourth World Health Assembly: The World Health Assembly is organized by the World Health Organization's (WHO) World Health Assembly will be held from 16-24 May 2011, in Geneva, Switzerland. **dates:** 16-24 May 2011 **location:** Geneva (Geneve), Switzerland **www:** http://www.who.int/mediacentre/events/2011/wha64/en/index.html

GEF Council Meeting: The GEF Council functions as the main governing body of the GEF. Its 32 members meet twice a year, with each representing a group of countries ('constituency') including both donors and recipients of GEF funding. **dates:** 23-26 May 2011 **venue:** GEF Headquarters **location:** Washington (District of Columbia), United States of America **www:** http://www.thegef.org/gef/council_meetings

Resilient Cities 2011: Second World Congress on Cities and Adaptation to Climate Change: The Second World Congress on Cities and Adaptation to Climate Change



will focus on, *inter alia*: urban adaptation planning and practice, urban risk assessment, costs and financing of urban climate change adaptation, socio-economic and institutional dimensions of climate change adaptation. **dates:** 3-5 June 2011 **location:** Bonn (Nordrhein-Westfalen), Germany **contact:** Alice Balbo **phone:** +49 228 976 299 36 **fax:** +49 228 976 299 01 **e-mail:** bonn2011@iclei.org **www:** http://resilient-cities.iclei.org/bonn2011/

UNFCCC Subsidiary Bodies June 2011: The 34th sessions of the UNFCCC Subsidiary Body for Implementation and Subsidiary Body for Scientific and Technological Advice (SBSTA) along with meetings of the *Ad Hoc* Working Groups will be held in Bonn. dates: 6-17 June 2011 location: Bonn (Nordrhein-Westfalen), Germany contact: UNFCCC Secretariat phone: +49 228 815 1000 fax: +49 228 815 1999 e-mail: secretariat@unfccc.int www: http://unfccc.int/meetings/unfccc_calendar/items/2655.php?

CIF Partnership Forum 2011: The Forum provides an opportunity for all stakeholders – governments, civil society, indigenous peoples, private sector, and others – to contribute to deepening global understanding of climate change and development in the Climate Investment Funds (CIF) context. dates: 24-25 June 2011 location: Cape Town (Western Cape), South Africa contact: CIF Admin Unit phone: +1 202 458 1801 e-mail: CIFAdminUnit@worldbank.org www: http://www.climateinvestmentfunds.org/cif/partnership_forum_2011_home

Indigenous Peoples, Marginalized Populations and Climate Change Workshop: The workshop will bring together representatives of indigenous peoples and marginalized populations, natural and social scientists, and other experts in relevant domains to identify, compile and analyze relevant indigenous and local observations, knowledge and practices related to understanding climate change impacts, adaptation and mitigation. dates: 19-21 July 2011 location:

Mexico (Distrito Federal), Mexico contact: UN University – Institute of Advanced Studies Traditional Knowledge Initiative

phone: +61 8 8946 6792/7652 **fax:** +61 8 8946 7720 **e-mail:** tki@ias.unu.edu **www:** http://www.unutki.org/default.php?doc_id=187.

42nd Meeting of the Pacific Islands Forum: The Pacific Islands Forum is a regional political and economic policy institution comprising 14 Pacific Island countries, Australia and New Zealand. This meeting, marking the 40th anniversary of the Forum, will be hosted by the Government of New Zealand. **dates:** 6-9 September 2011 **location:** New Zealand **www:** http://www.forumsec.org.fj/pages.cfm/newsroom/press-statements/2010/communique-of-41st-pacific-islands-forum.

GLOSSARY

ACCRA	Africa Climate Change Resilience Alliance
AIT	Asian Institute for Technology
BCAS	Bangladesh Centre for Advanced Studies
CBA	Community Based Adaptation
COP	Conference of the Parties
CSDRM	Climate Smart Disaster Risk Management
GEF	Global Environment Facility
GICBA	Global Initiative on Community Based Adaptation
IIED	International Institute for Environment and Development
IPCC	Intergovernmental Panel on Climate Change
IUCN	International Union for the Conservation of Nature
NAPAs	National Adaptation Programmes of Action
NGOs	non-governmental organizations
SBSTA	Subsidiary Body for Scientific and Technological Advice
SEI	Stockholm Environment Institute
UNDP	UN Development Programme
UNFCCC	UN Framework Convention on Climate Change
WWF	World Wide Fund for Nature



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