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Community-Based Adaptation to Climate Change Bulletin

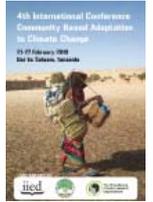
A Summary of the Fourth International Conference on Community-Based Adaptation to Climate Change

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The Ring alliance of policy research organisations



FOURTH INTERNATIONAL CONFERENCE ON COMMUNITY-BASED ADAPTATION TO CLIMATE CHANGE: 21-27 FEBRUARY 2010

The Fourth International Conference on Community-Based Adaptation (CBA) to Climate Change convened in Dar es Salaam, Tanzania, from Sunday 21 February to Saturday 27 February 2010. The conference was organized by the International Institute for Environment and Development (IIED), Tanzania's Environment Protection Management Services (EPMS) and the Ring Alliance of Policy Research Organizations.

More than 180 participants from 35 countries, representing governments, non-government organizations (NGOs), inter-governmental organizations (IGOs), community-based organizations and research institutions took part in the event, which focused on sharing and consolidating the latest developments in CBA planning and practices, particularly in vulnerable communities, throughout the world.

Prior to the start of the meeting, participants took part in two days of field trips to see CBA projects and activities in different parts of Tanzania. They then met for four days of interactive plenary and technical sessions on a wide range of themes relevant to CBA, including: 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 formed *ad hoc* working groups based on communities of interest to further explore a number of CBA-related issues, including gender, economics, civil society, monitoring and evaluation, communications and disaster risk reduction. The groups will continue addressing these issues on an intersessional basis by e-mail and through discussion forums.

A final plenary session discussed next steps for CBA, with participants agreeing to further develop the Global Initiative on Community-Based Adaptation (GICBA), a network which seeks to support CBA-related activities by generating and sharing relevant knowledge.

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.

While mitigation has traditionally been the pivotal issue for many climate change experts, adaptation to the effects of climate change is now 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

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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 crosscutting 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 (SBI).

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" or NWP. 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 (CDM).

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.

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, Bangladesh Centre for Advance Studies (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, 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.

THIRD INTERNATIONAL WORKSHOP ON CBA:

More than 140 participants took part in the third workshop, 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 GICBA to Climate Change.

REPORT OF THE CONFERENCE

OPENING PLENARY

On Wednesday, 24 February, the Fourth International Conference on Community-Based Adaptation (CBA) opened with Saleemul Huq, International Institute for Environment and Development (IIED), welcoming participants. He stressed that



Saleemul Huq, IIED

the conference was an opportunity to exchange CBA experiences. Noting that there are currently many community-based actions in response to climate variability, he said more action is needed to address human-induced climate change, especially in vulnerable communities. He also highlighted a number of ongoing CBA initiatives for sharing experiences, including informal intersessional working groups on a number of CBA issues, the GICBA, a knowledge management network, the CBA exchange (CBA-X) website, and CBA projects profiled on Google Earth.

Louise Chamberlain, United Nations Development Programme (UNDP), noted the importance of enhancing capacity of local communities so as to adapt to climate change in the face of increasing floods, droughts and sea-level rise. She stressed the need to involve the community in adaptation planning and implementation. Providing an overview of the outcomes of the 15th Conference of the Parties to the UN Framework Convention on Climate Change (UNFCCC COP-



Participants during the opening plenary



The dais during the thematic session on strengthening institutions for community-based adaptation

15) in Copenhagen, Richard Muyungi, Vice-President's Office, Tanzania, noted that countries can request support for capacity from the UNFCCC's Adaptation Fund for national bodies and funding for activities supporting communities at the local level.

THEMATIC SESSION I

On Wednesday, following the morning plenary session, participants met in parallel sessions to hear presentations and discuss strengthening institutions for CBA, water, building adaptive capacity, and insurance and microfinance.

STRENGTHENING INSTITUTIONS FOR CBA:

Session Chair Charles Ehrhart, CARE International, noted that institutions need capacity and structures in place as more funding becomes available for CBA activities. Rachel Berger, Practical Action, presented on the governance of community-based action, stressing that adaptation funding is intended for governments to use for the benefit of their people. She noted that in order for adaptation to be relevant to the needs of vulnerable communities, the local people must be involved in the decision-making process.

Nanki Kaur, IIED, and Regmi Bimal, UK Department for International Development (DFID), presented on operationalizing adaptation that focuses on the linkages between National Adaptation Programmes of Action (NAPAs) and Local Adaptation Plans of Action (LAPAs). Noting that NAPAs are currently being managed through a top-down approach, Kaur stressed the need to have community-based approaches inform the national planning process. Bimal shared best practices from Nepal where the NAPA includes the views and practices of local-level actors and communities.

William Chadza, Centre for Environmental Policy and Advocacy, used a case study from Malawi to explore community institutions and climate change adaptation. He said that local leaders, such as village chiefs, have a key role to play in the management of the effects of climate change. In Malawi, this includes responding to drought, flooding and changing rainfall patterns. He added that there is a need to enhance communities' capacity to engage in policy dialogue and shape governance decisions regarding adaptation initiatives.

Robertson Khataza, International Institute of Tropical Agriculture, gave an assessment of the strengths and weakness of using voluntary grassroots groups in disaster management in Malawi. He said that one of the advantages of such groups is that it gives them a chance to actively participate in disaster management, which in turn increases the sense of programme ownership. He noted, however, that grassroots groups need to be better integrated into the policy process to ensure continuity. Shepard Zvigadza, Zimbabwe Energy Research Organisation (ZERO), underscored the important role civil society organizations play in CBA in Zimbabwe, adding that these organizations need to better engage governments and become part of national planning processes.

The ensuing discussion tackled: the broader role of civil society in implementing NAPAs; ensuring accountability and transparency of the NAPA process; the power differentials between governments, civil society and local communities; the need to merge scientific knowledge with indigenous knowledge for grassroots communities; and the importance of monitoring government spending of allocations from the UNFCCC's Adaptation Fund.

WATER: This session was chaired by Charles Nyandiga, UNDP. Cynthia Awuor, CARE International, presenting on integrating CBA in water projects across East Africa, noted that such projects must promote climate resilience and climate-resilient livelihoods. She stressed the importance of disaster risk reduction (DRR), capacity development and the integration of adaptation practices in the planning processes of CBA projects.

John Nyangena, World Wide Fund for Nature (WWF), Kenya, presenting on the vulnerability and adaptation of the Lake Naivasha freshwater ecosystem in Kenya, outlined adaptation measures that include improved dam construction and technological capacity. He noted that CBA projects have provided community support to establish water allocation plans and water regulation plans, and that projects need to be people-centered and an integral part of national and regional policy and legal frameworks.

Bettina Koelle, Indigo Development and Change, stressed that adaptation can provide empowerment for local communities. She outlined steps for adaptation, including integrating adaptation with development, increasing awareness raising and knowledge, strengthening local institutions, providing financial assistance, protecting natural resources and using situation specific strategies.

Discussing the ways in which farmers are adapting to climate change in the semi-arid Zvishavane District in Zimbabwe, Felix Mutemachimwe, Africare, noted that drought-tolerant crops and water-harnessing innovations are effective in increasing crop harvest and water availability. Million Getnet, Haramaya University, Ethiopia, indicated that local community perceptions of weather patterns in eastern Ethiopia are useful where meteorological times series data are lacking. Oswald Mwamsamali, Ministry of Irrigation and Water Development, Malawi, discussed adaptation strategies in his country, which include borehole drilling, dams and flood forecast warning systems.

In the ensuing discussion, participants noted: that adaptation measures may be addressing climate variability as opposed to addressing climate change directly; the need for institutional frameworks; land tenure issues; the importance of quantitative data to raise policy-makers' awareness of adaptation; and the role of local meteorological observations and forecasts to engage scientists with communities.



BUILDING ADAPTIVE CAPACITY: This session was chaired by Charlotte Sterrett, OXFAM GB. On building adaptive capacity in Zambia, Vincent Ziba, Self Help Africa, noted that the organization's projects focus on: institutional development at the local level for increased forest governance, including transforming leadership training and by-law formulation; promotion of technologies for increased "value-added" to enable increased nutrition and market value; training for sustainable agricultural practices; and increased resource management for ecological conservation.

Basra Ali, Stockholm Environment Institute, Kenya, presented on enabling climate adaptation from information provision to network building and knowledge integration, and highlighted the need to integrate adaptive capacity and human development. She listed gaps in trust, governance, finance and focus as key areas that need to be addressed for the integration to be successful.

Beshir Abdikarim, Ogaden Welfare and Development Association, highlighted a project undertaken in Adadle District, Ethiopia, which is prone to recurrent droughts, livestock loss and increased livestock disease. He outlined traditional coping mechanisms, including increasing herd size and traditional restocking of herds. Abdikarim noted that his organization had increased the technical skills of the local administration and provided access to a community development fund to increase adaptive capacity.

On building local adaptive capacity in Kiribati, Maik Pilitati, Pacific Calling Partnership, spoke on the issue of climate change-related migration and the emotional, psychological and financial impacts of climate change on the island state. She highlighted the work of her organization in training potential migrants in better health practices and ensuring higher literacy levels.

Peter Macharia, Kenya Agricultural Research Institute, presenting on climate change and community adaptation strategies in semi-arid regions of Kenya, underscored that increased resource demand has led to biodiversity loss, soil erosion and soil degradation in the area. Outlining community actions against climate change, he highlighted activities such as tree planting, water harvesting and using hardier livestock.

Onesmo Zakaria, IUCN, presented on climate change in integrated water resource management. Using the IUCN/Pangani community project in Tanzania as a case study, he said that the aim of the project is to empower local communities in the management of water as a resource and as a way to improve coping strategies during disasters.

In the ensuing discussion, participants highlighted: the use of markets and donors to promote access to other land; identifying local mechanisms for adaptation and available support to local communities; and how farmers adapt to climate change.

INSURANCE AND MICROFINANCE: Betty Kibaara, Rockefeller Foundation, chaired this session. Mengesha Gebremichael, Relief Society of Tigray (REST), Ethiopia, discussed the provision of credit, insurance and risk reduction in the Horn of Africa Risk Transfer for Adaptation project through the use of weather index models. He recommended that insurance be demand driven, locally owned and focused on building capacity.

Yahannes Gebremeskel, Dedit Credit and Savings Institution, Ethiopia, discussed how microfinance initiatives in Ethiopia, particularly weather index insurance, are helping farmers manage risk and increase their willingness to make

investments critical to adaptation. He noted that such insurance could build farmer confidence in risk taking, and that using modern credit technologies could increase production and productivity.

Satya Priya, UNEP Regional Resource Center for Asia and the Pacific, noted that changes in weather can lead to the development of sustainable risk reduction strategies, underscoring the potential for insurance as an adaptation mechanism. Weather risk insurance, he said, provides an optimal tool for how people should transition between agricultural activities as the climate changes.

Maria Rebecca Campos, University of the Philippines Open University, discussed a project that helps farmers recover from climate change impacts, particularly typhoons, floods and the El Niño phenomenon. She discussed recommendations to set up a calamity specific support insurance fund aimed at assisting eligible farmers recover from losses, acquire credit facilities and sustain farming activities.

In ensuing discussions, some delegates questioned the sustainability of insurance for farmers, noting its present reliance on donor funding. Gebremichael responded that the projects in Ethiopia were currently in pilot stages and thus could not avoid large donor investment. Chair Kibaara noted that the private sector model, such as that applied in Kenya, has a potential for sustainability since it is based on a purely commercial scheme with no subsidies.

PLENARY SESSION I: POLICY LINKAGES

On Wednesday afternoon, Satya Priya, UNEP Regional Resource Center for Asia and the Pacific, chaired the plenary on policy linkages.

Bathiyad Kekulandala, Practical Action, presented on experiences in community governance for mainstreaming climate change adaptation into local development. He noted that community governance is a process where the community is the main stakeholder in the planning and decision-making processes. He stressed that it is a bottom-up, participatory approach for incorporating local knowledge at the policy level and identifying the needs of a community. He added that the process has led to improved information availability, increased social networks and diversifying livelihood options.

Mats Eriksson, International Centre for Integrated Mountain Development (ICIMOD), discussed the need for sound climate change adaptation policies for the Hindu Kush Himalayan region. He noted that generations of people in the region had adapted various strategies to water-related stresses and hazards typical of a monsoon climate. He presented a number of case studies, including one from the Koshi Basin in Nepal where in 2008 the population responded to water shortages by excavating on dry river beds while the government was preparing for floods by constructing dykes; a decision he noted was out of sync with the peoples needs at the time. He said this represents a lack of bottom-up approaches in climate change adaptation policies.

To reduce his carbon footprint, Albon Ishoda, Executive Director, Marshall Islands Conservation Society, delivered a pre-recorded presentation on implementing a national strategy for ecosystem-based climate change adaptation by communities on the outer atolls in the Marshall Islands. He highlighted his country's national conservation plan, which is designed to facilitate resource management planning with local governments and traditional leaders. He stressed

the importance of placing the most vulnerable people, communities and ecosystems at the heart of national climate change adaptation strategies.

Atiqur Rahman, International Fund for Agricultural Development (IFAD), noted a number of key issues for future CBA discourses, including identifying dominant climate change-security linkages; identifying good community-based practices; transferring knowledge between communities and regions; attaining CBA funding; and mainstreaming CBA into development and DRR strategies.

In the ensuing discussion, participants raised issues concerning the need to, *inter alia*: strengthen synergies between the local and district level; engage at the political level and build cross-sectoral networks for greater lobbying positions; and view climate change as an opportunity and not a challenge.

FIELD TRIP REPORTS: From 22-23 February, conference participants journeyed to a number of sites throughout Tanzania to observe CBA problems and activities on the ground. On Wednesday afternoon, 24 February, groups reported to plenary on their experiences.

Tine Rossing, CARE International, reported on a field trip to the Mgeta site in Mnomero District, about 250km from Dar es Salaam, where the group met with a local community to discuss climate impacts, particularly the reduction in rainfall and increased temperatures. Other issues discussed included poverty, lack of food security, land degradation and poor access to markets. The group reported that long-term planning in the community is necessary, such as appropriate technology transfer for sustainable agriculture and other adaptation strategies.

James Hardcastle, The Nature Conservancy (TNC), reported on a visit to two fishing communities near Saadani National Park where the group observed water problems, including erosion and the adverse interaction between freshwater and saltwater. Petra Bakewell-Stone, Pro-Natura International, offered highlights of a visit to the Kisarawe District, 50km west of Dar es Salaam, which included vulnerable communities affected by drought and water shortages. She said it remained to be seen whether the conditions were a result of climate change or mismanagement. In one of the coastal villages visited, the group witnessed a successful community project that was adapting to climatic changes by shifting to more sustainable mangrove harvesting after many agricultural sites had been submerged or abandoned.

Million Getnet, Haramaya University, discussed his group's visit to three villages in the coastal Mukuranga region, which has seen an increase in temperatures and erratic rainfall in recent years resulting in drought and water shortages that have had a significant impact on maize and rice production. He said that to adapt to the situation, some of the villages have shifted to cassava production, a drought-resistant crop, as well as diversified into poultry production.

Nancy Omolo, University of KwaZulu Natal, South Africa, reported on a visit to the Kalimata Women's Group in the Temeke District, which runs a number of income-generating activities, including henna production for export, eco-tourism and mushroom farming. In one of the villages, the group met with a woman who had lost her home to rising sea levels and talked with fishermen about reduced catches.

Nanki Kaur, IIED, told participants about a visit to a site in the Kinondoni Municipality, Dar es Salaam, close to the hotel venue, where increased rainfall intensity is having a significant

impact on urban slums. She noted that communities have found innovative ways of coping with the impacts of climate change that do not require external support and huge investments, such as using rubbish as a flood defense.

PLENARY SESSION II: AGRICULTURE

On Thursday, Atiqur Rahman, IFAD, chaired the plenary session on agriculture. He noted that climate change makes agricultural communities in developing countries more vulnerable than they already are, and more support is needed to help them overcome current constraints.

Khalfan Saleh, IFAD, presented on agriculture projects, which focus on poverty reduction and improved food security on the Tanzanian islands of Zanzibar and Pemba. He noted that through extension services and technology transfer, the projects help farmers adapt to disease tolerant, high-yielding cassava varieties that can tolerate the effects of climate change.

Moussa Na Abou Mamouda, Environnement et Développement du Tiers Monde (ENDA-TM), presented on climate change and food security in southern Niger. Due to a decrease in rainfall and increased rainfall variability, he said communities in the region are trying to implement coping mechanisms to adapt to a changing climate through, *inter alia*, food banks, small-scale irrigation, cattle breeding and income-generating activities. He also stressed the need for better collaboration between decision-makers from Niger to Nigeria on transboundary water resource management.

Dalitso Kafuwa, FAIR, presenting on experiences of the use of different types of organic manures in Malawi, noted that maize yields were higher or at least equal when using organic manures. She added that organic manures are key in improving soil quality.

Hector Mongi, Tumbi Agricultural Research Institute, presented on vulnerability assessments of rain-fed agriculture to climate change and variability in semi-arid regions of Tanzania. He noted that studies suggest a shortening of the growing season, and highlighted that due to difficulty in predicting seasons, indigenous knowledge used for predictions is no longer accurate.

Edward Yeboah, Council for Scientific and Industrial Research, discussed adaptations to climate change by Ayuom farmers in Ghana's semi-deciduous forests. He reported that the Integrated Soil Fertility Management project promoting the use of *Lucinia* plant material to improve soil fertility had enabled increases in maize yields from a maximum of two to six tons within one year.

Supaporn Anuchiracheeva, OXFAM GB, presented on a project to encourage rice farmers of Yasothorn Province in northern Thailand to use organic methods and diversify agricultural systems. She noted that training had encouraged farmers to design their own energy and labor-efficient water systems and subdivide their plots into manageable units.



Panelists during the plenary session on agriculture. L-R: Hector Mongi, Tumbi Agricultural Research Institute; Edward Yeboah, Council for Scientific and Industrial Research; Supaporn Anuchiracheeva, OXFAM GB

In the ensuing discussion, participants stressed the need to better communicate to policy-makers about future climatic changes so as to influence appropriate agricultural policies and adaptation strategies. There was also emphasis on improving coping strategies and CBA vis-à-vis partnerships with support at the national level.

THEMATIC SESSION II

On Thursday morning and afternoon, participants met in parallel sessions to hear presentations and discuss the economics of CBA, CBA in French-speaking countries, drylands and pastoralism, and urban areas.

ECONOMICS OF CBA: Chair Muyeye Chambwera, IIED, suggested that the outcome of the session should be to identify and capture some of the economic issues emerging from CBA to better support the communities at the grassroots level. Golam Rabbani, Bangladesh, presented on the economic implications of climate change, noting that climate impacts are especially hard on the most vulnerable communities. He cited an example from northern Bangladesh where poor farmers are being forced to change their livelihoods due to rising production costs.

Khumbo Kamanga, Coordination Unit for Rehabilitation of the Environment, described efforts to avert drought in Malawi's Shire region by using solar-powered irrigation. He noted that although there has been some success in this project, locals require technological training to maintain equipment at an affordable rate. John Nyangena, WWF-Kenya, presented on the economics of CBA in the Lake Naivasha freshwater system. He noted that economic aspects of CBA to be considered include: large variances in vulnerabilities across the lake basin; costs of adaptation; role of markets; and incentives for communities to undertake adaptation.

John Hardcastle, TNC, presented a number of case studies on the economics used in decision making to undertake climate change adaptation. Highlighting the case of the Chagos Islands in the Indian Ocean, whose population is living in exile, he noted that climate change has been cited as a barrier to returning to the island. He also outlined the case of the Chivoko in the Solomon Islands, who have successfully prevented logging within their community due to the high intrinsic value they place on their natural resources.

Participants discussed the need to provide communities with long-term climate change information, adaptation funding geared towards meeting immediate needs and mitigating future needs, and the potential role of insurance companies in CBA. They also questioned: whether payment for ecosystem services is a strategy for communities to undertake adaptation; the need to increase adaptive capacity; the ability of social networks to "link into" information sources; and using DRR as a framework within which to utilize CBA.

CBA IN FRENCH-SPEAKING NATIONS: Session Chair Moussa Na Abou Mamouda, ENDA-TM, opened the discussion by noting that this was the first opportunity for francophone speakers to participate in a CBA conference, and hoped that in the future a French-speaking CBA conference could be convened.

Niaina Rakotondrastima, IFAD, showed how small-scale rice farmers in southern Madagascar adapted to cyclic drought through irrigation, crop diversification, and the provision of microfinance services. Aimé Randriambola, IFAD,

emphasized that adaptation techniques for farming, such as mixed farming, diversification, drip irrigation and organic methods, are enabling farmers to improve food security.

Sena Alouka, Jeunes Volontaires pour l'Environnement, discussed the role of local organizations in climate change adaptations in Togo. He emphasized the need to incorporate local perceptions of climate change into adaptation strategies and noted that such organizations were important for distributing information and resources and for capacity building and incorporating local knowledge in adapting to climate change.

Isabelle Lemaire, Insightshare, described the production of short, easy-to-make videos as a useful tool for sharing adaptation stories and solutions across communities, organization and nations. She said the process of a group or community creating their own films can help explore CBA and communicate their needs to decision makers and other groups.

Adeline Aubry, UNDP, presented on a CBA project in south-central Niger, an area she said is facing increasing temperatures and higher rates of evaporation. The project, she noted, involves local participation in activities that promote sustainable agricultural and pastoral practices, including tree planting, resilient seed demonstrations and soil fertilization training. Binetou Diagne, AfricaAdapt, noted the importance of information sharing, especially in breaking the Anglophone-Francophone barrier in Africa.

DRYLANDS AND PASTORALISM: Edward Porokwa, Pingo Forum, Tanzania, chaired this session. Mesghena Ghilay Hagos, Ministry of Agriculture, Eritrea, presented on coping mechanisms of agro-pastoralists of the Gash Barka lowland zones to climate change, including provision of watering points for livestock, adjusting breeding seasons to isolate males during the dry season, and setting aside no grazing zones that provide fodder during the dry season.

Eric Kisiangani, Practical Action, discussed survival mechanisms of Turkana and Mandera pastoral communities of northern Kenya to drought. He presented three strategies related to livestock survival: animal diversification and accumulation; rescuing livestock by dispersal to reduce mortality; and migrating and rebuilding livestock populations after disasters by adapting to more hardy varieties.

Presenting on pastoralism and climate change, Brian Otiende, OXFAM GB, said that of all land uses in the drylands, pastoralism is the best placed to adapt to increased climatic variability. He noted that pastoralists have inherent adaptive capacities to deal with climatic changes, including mobility and specialized skills to spread the risk, such as herd splitting and diversification to more resilient species.

Nur Abdi Mohammed, Pastoralist Welfare Organization, presented on CBA strategies among Shinile pastoralists in Ethiopia, who are facing frequent droughts, reduced rainfall and high temperatures. Such climatic conditions, he said, have led to adaptation practices such as moving to distant places in search of water and moving from pastoralism to cultivating crops. He noted, however, that there is a restriction of free mobility and agriculture expansion, and limited water access and pastures in dry season grazing areas.

Wendessen Gulelat, Pastoralist Forum Ethiopia, discussed adaptations of pastoral communities of Awash Fentale Woreda. He highlighted strategies such as traditional early warning systems, herd splitting, breeding control through

castration, and saving money in banks from livestock sales. He emphasized that non-climatic factors were, however, eroding the community's adaptive capacity.

During the discussion, participants raised issues related to the role of local institutions and links to the national policy level in climate adaptation strategies. One participant noted that with continued population growth and erosion of resources, adaptive strategies should focus on alternative livelihoods outside pastoralist economies.

URBAN AREAS: Chairing the session, David Dodman, IIED, noted that over half the world's population now lives in urban areas, and that they are equally vulnerable to climate change effects. Shepard Zvigadza, ZERO, presented a short film on the synergies between urban housing development and climate change adaptation of slum dwellers and the urban poor in Harare, Zimbabwe. Stressing that these communities are as vulnerable as rural communities, he said that many inhabitants had formed cooperatives in order to buy land and provide adequate housing to members.



David Dodman, IIED

Justus Kithia, Macquarie University, Australia, presented on the exploration of the concept of social capital in the context of climate change adaptation in East African coastal cities. He noted many opportunities for adaptation are created by using social capital, where little incentive is needed, can occur under weak governance, and encourages participation of marginalized groups' participation.

George Kasali, Zambia, presented on the climate change adaptation deficit in Lusaka, noting the urban poor are exposed to droughts and floods and face uncontrollable water shortages and fluctuations in food prices. He noted that although Zambia is endowed with water resources, poverty and inadequate technology prevent the urban poor from tapping into this potential.

Komalirani Yenneti, The Energy and Resources Institute, India, presented on adaptation strategies to reduce the vulnerability of the urban poor in Indian cities. She expressed concern for the rising population of cities along the Indian coastline, and lamented that although there is information exchange and education on climate change, the urban poor do not always have ways to adapt as they struggle to meet their daily needs.

Lucinda Fairhurst, Local Governments for Sustainability Africa, presented on strengthening urban governments in planning adaptation. She gave a brief overview of her organization's work in five African cities dealing with water and sanitation, energy, transport, health and livelihoods.

In the ensuing discussion, participants tackled issues such as: how energy sources and energy infrastructure are affected by climate change and adaptation activities; how municipalities are addressing capacity needs in vulnerable communities; whether problems are a result of urbanization as opposed to climate effects; and the role of national governments in local level adaptation.

PLENARY SESSION III: MANAGING AND COMMUNICATING KNOWLEDGE ABOUT GOOD CBA

On Thursday afternoon, Antonio Oviedo, WWF-Brazil, chaired the session on managing and communicating knowledge about good CBA. Anna Taylor, SEI Oxford, and

Charlotte Sterrett, OXFAM GB, introduced their organizations' collaboration on weAdapt, an online knowledge base and web platform for learning and sharing on climate adaptation. Taylor added that weAdapt offers the technology and an expanding network of leading organizations across a range of sectors to manage and deliver critical information and knowledge to make better informed adaptation decisions, plans and strategies.

Moussa Na Abou Mamouda, ENDA-TM, described the AfricaAdapt climate change adaptation knowledge sharing network, which works to: translate research and information to meet stakeholder needs; establish partnerships with organizations and projects to share knowledge; identify and address the capacity constraints to accessing knowledge; and remove barriers to knowledge sharing through increasing literacy and removing structural, geographical and social barriers.

Hannah Cowin, British Council, presented on her organization's role in enhancing communication on climate change. She highlighted projects that focus on knowledge sharing, leadership, innovation and research, including the International Climate Champions project for youth.

Roopa Rakshit, UNEP Regional Resource Center for Asia and the Pacific, outlined the Regional Climate Change Adaptation Knowledge Platform for Asia, which supports research and capacity building, policy-making and information sharing to help countries in Asia adapt to the challenges of climate change. She added that the aim of the platform is to generate new knowledge on climate change adaptation and to work towards an effective knowledge sharing system at the national and regional levels.

Cleofe Torres, University of Los Banos, the Philippines, stressed that communication strategies need to be part of the adaptation process to facilitate access to knowledge and information. Federica Matteoli, UN Food and Agriculture Organization (FAO), described the Communication for Sustainable Development Initiative, which promotes cross-regional, cross-community knowledge sharing on information applied to climate adaptation.

Blane Harvey, Institute of Development Studies (IDS), presented on the CBA exchange (CBA-X) website. He outlined the tools used, including a calendar of events, videos and blogs. He also stated that future plans include collaboration with the SEI, increased synthesis of key issues and debates, and reporting from key global and regional events.

Hamilton Chimala, the Development Broadcasting Unit, presented on the efficiency of radio for CBA in Malawi, noting its success in giving a voice to local people and a platform for national dialogue, advocacy and stakeholder response. He added that the advantage of radio is that it is inexpensive, has a wide reach and is easily accessible.

PLENARY SESSION IV: SCALING UP AND REPLICATING BEST PRACTICE

On Friday morning, Rachel Berger, Practical Action, chaired this session, noting that governments and communities should be the main drivers of CBAs with support from NGOs and civil society organizations, and should focus on highlighting projects that can be successfully replicated and ensure that good practices inform policy.

Noting the increasing drought frequency, Mohamed Siddig Suliman, Practical Action, presented on scaling up work to increase resilience to drought as a way to manage development

in Sudan's Darfur region. He introduced the Greening Darfur programme, which aims to replicate best practices, such as the introduction of water harvesting dams to enhance water supplies, increase vegetation cover and enable off-season crop production.

Teklewoini Assefa, REST, presented on institutional collaboration and scaling up of water harvesting as key adaptation measure in Ethiopia's drought-vulnerable Tigray region. Noting that the work was carried out in conjunction with community institutions and local government, he highlighted objectives of the programme, which include strengthening local capacity building and piloting water harvesting technologies suitable to the area. He also called for more external support, upscaling adaptation methods, integrating existing good practices into development programmes and policies, and facilitating knowledge sharing. Douglas Gumbo, Practical Action, highlighted scaling up models in Zimbabwe that include technology transfer, and are commercially and community based.

Charlotte Sterrett, OXFAM GB, stressed that community involvement was an important consideration in her organization's livelihood, disaster reduction and resource management projects. She emphasized that adaptation should be neither implemented as a one-size-fits-all approach, nor confused with coping mechanisms, which are short-term and often unsustainable.



Charlotte Sterrett,
OXFAM GB

In the ensuing discussion, participants tackled issues including: future climate predictions for Darfur; adoption of new technologies and practices; CBA drivers at the community level; scaling up of adaptation technologies by external organizations; incentives for using new technologies; and differentiating between coping mechanisms and adaptation strategies.

THEMATIC SESSION III

On Friday, participants met in parallel sessions to hear presentations and discuss: vulnerable groups, including women and children; the role of ecosystems in adaptation; DRR; and CBA methodologies.

VULNERABLE GROUPS: Sena Alouka, Jeune Volontaires pour l'Environnement, chaired the session, noting the importance of developing CBA strategies for the benefit of women and children in Togo. Mats Eriksson, ICIMOD, highlighted the vulnerability of women in the Himalayas to harsh conditions related to floods from glacial lakes. He said that women could be counted on for food security and indigenous knowledge in early warning of disasters, but were prone to suicide when livelihoods were threatened.

Lydia Baker, Save the Children, said that given the opportunity, children can lead risk reduction and adaptation activities, and can influence the policy and practice of their local and national governments. She presented experience from a junior farmer life school in Mozambique where children learn about alternative agricultural practices and climate change.

Charles Tonui, Africa Centre for Technology Studies, outlined a number of activities undertaken by communities in Kenya to enhance capacity for adapting to climate change, including building makeshift bridges and drainage canals as part of flood management strategies.

Susan Nanduddu, Development Network of Indigenous Voluntary Associations, discussing experiences from the Pallisa district in northeastern Uganda, noted that the community has a high incidence of poverty and is vulnerable to recurrent droughts and floods. She stressed that women, children and the elderly are more vulnerable to climate change effects and that they are becoming increasingly vulnerable due to water stress, low productivity and poor health. She said that her organization's project in the region is addressing capacity building and knowledge exchange to enhance resilience of the most vulnerable communities. Nancy Omolo, University of Kwazulu-Natal, spoke about gender, food security and climate change among pastoral communities in Mandera and Turkana in northern Kenya, noting that women's workloads increased because of climate variability and change, and that the elderly and disabled were the most vulnerable.

The ensuing discussion included: concerns over broad categorization of vulnerable groups since socio-economic status varies; whether the popularity of maize over other food products may be due to changing agricultural practices rather than affordability; and the exclusion of alternative energy sources as an adaptive strategy due to the strain of collecting firewood.

THE ROLE OF ECOSYSTEMS IN ADAPTATION:

Chairing the session, Hannah Reid, IIED, said managing and conserving ecosystems and natural resources have a key role to play in helping poor communities adapt to climate change. Kit Vaughan, WWF-UK, added that as poor communities often rely heavily on climate-sensitive livelihood activities, such as agriculture, fishing and collecting natural resources, it is important to integrate CBA with ecosystems-based adaptation (EBA) and poverty reduction. He noted EBA can support natural system restoration, flood control and water degradation reduction.

Liz Esiromo, Kenya Wildlife Service, stressed that one cannot discuss climate change without addressing poverty, noting that by empowering vulnerable communities one can improve adaptation and productivity. In particular, she highlighted community adaptation initiatives in the Mt. Kenya region, such as agro-forestry, planting drought tolerant trees, roof-harvesting water, fish farming and beekeeping that are leading to increased incomes.

Tiana Ramahaleo, WWF-Madagascar, presented on effective EBA in Madagascar. He described some of the impacts of climate change in the country, and highlighted WWF's work in harmonizing adaptation and conservation measures in the region, as well as building partnerships and linkages between communities and local and national governments.

Moon Shrestha, WWF-Nepal, presented an integrated approach to CBA in Nepal, highlighting WWF's work on EBA and CBA with regards to climate change. She explained that communities are being trained on DRR, and described efforts to assist farmers' clubs in creating and operating seed banks to gain access to more resilient seeds.

On building resilience to global climate change within the Mesoamerican Region, Nadia Bood, WWF-Central America, lamented the rate of coral bleaching and damage to the coastal ecosystem due to climate change. She stressed the need to promote cooperation between the local, national and regional levels to create more sustainable adaptation strategies.

In the subsequent discussion, participants debated the CBA and EBA approach, with some suggesting that while there is an overlap, the two are separate. Others, however, stressed the

need to further integrate CBA and EBA. One participant noted that the CBA approach often focuses too much on a local scale when addressing large threats, while EBA has a broader focus. He added that it will be difficult to formulate a sustainable response without geographic or time scales. Other issues raised during the discussion included the involvement of communities in bottom-up, integrated planning processes for adaptation, and the need for new partnerships and better cooperation, from community to transboundary level.

DISASTER RISK REDUCTION: Euster Kibona, EPMS, chaired this session. Marcus Oxley, Global Network of Civil Society Organizations for Disaster Reduction, stressed the need to bridge the gap between national policy formulation for DRR and climate adaptation with the realities of implementation on the ground. Effective policy implementation, he added, requires an ability to measure local-level change, and that civil society organizations are well placed to provide monitoring.

Mark Gordon, World Food Programme (WFP), said that in addition to emergency relief response, WFP works to strengthen resilience, early warning and preparedness, and sustainability to ensure food security and livelihoods. Hans Vikoler, WFP, cited a case study from Ethiopia that focuses on community-based participatory natural resource management and good practices for effective response to climate change, which includes hill-slope recovery and stabilization, soil and water conservation and seedling production.

Katie Harris, IDS, and Jo Lofthouse, OXFAM GB, presented on the work of Strengthening Climate Resilience and Africa Climate Change Resilience Alliance, organizations whose role is to assist stakeholders to harmonize the DRR and CBA agendas. Harris stressed that both organizations strive to inform policy using evidence-based research. Lofthouse noted that since both DRR and CBA are evolving disciplines, it has been difficult to define terms and identify common ground for progress in a merged field.

Provash Mondal, OXFAM GB, presented his organization's efforts to assist communities in Vietnam to prepare for the challenges of climate change and disaster risk by: providing equipment for early warning systems and appropriate building materials for reinforced infrastructure; and linking local level actions to the government's action plan for DRR.

In the ensuing discussion, participants sought to: uncover the sustainability of projects where funding is external; understand how to influence policy makers using evidence-based research; further expound on ways to develop sustainable, workable plans to assist food insecure countries; and ensure better drought preparedness at the local, national and regional levels. Participants also heard from a UNDP representative about its working paper under review that will further inform the DRR/CBA agenda, and were urged to form DRR/CBA partnerships when working with communities to enjoy the benefits of a wide knowledge base.

CBA METHODOLOGIES: Anna Taylor, SEI Oxford, chaired the session. Oenone Chadurn, Tearfund, presented a project on environmental degradation risk and adaptation assessment that aims to create linkages for awareness and understanding of climate change. She outlined a step-by-step process for achieving this goal through a strategic, scalable, risk management approach.

Alfei Daniel, IUCN, presented a case study of impacts and possible adaptation strategies for communities of the lower Rufiji river basin in Tanzania. He noted that present

adaptation innovations to floods, drought and strong winds are unsustainable due to climate variability and added that high-level political commitment and policies that address climate variability, indigenous knowledge and coping strategies are needed. Jando Nkhwazi, Rural Foundation for Afforestation, presented a case study from northern Malawi on participatory forest management processes, emphasizing that local knowledge and experience allows ownership of the process, which creates transparency and peer accountability.

Presenting on conservation-based adaptation in the Andean-Amazon landscape, Luis Germán Naranjo, WWF-Colombia, noted that the area was rich in biodiversity but that communities lacked an awareness of climate change. He stressed the importance of dialogue between researchers and communities to increase resilience within the region.

In ensuing discussions, participants discussed key limitations in existing methodologies for CBA; existing methodologies when working with communities on climate change; how long-term focused strategies could be incorporated to avoid "mal-adaptation," and how to link local dynamics and large scale processes.

PLENARY SESSION V: FUNDING CBA

On Friday afternoon, Hannah Cowin, British Council, chaired the session. Alpha Kaloga, Germanwatch, gave an overview of the UNFCCC's Adaptation Fund, which was established to help poorer countries access funding for country-driven adaptation projects. He underlined some of the Fund's innovative features, including that: majority representation comes from developing countries to address the issue of ownership; and that it focuses particularly on vulnerable communities.

Delfin Ganapin and Charles Nyandinga, UNDP/Global Environment Facility (GEF) Small Grants Programme, presented on a global partnership for CBA. They noted a number of pilot projects to demonstrate processes and applications of adaptation, including projects to increase adaptive capacity and resilience, and stressed that CBA can use fewer resources by being innovative. They underscored that civil society involvement must be at all levels.

Andrew Clayton, DFID, presented on his organization's funding mechanisms for climate change adaptation at the country level, with funding available for social protection of vulnerable groups, insurance, low-carbon development, civil society and scaling up projects. He added that funding for communities is being channeled through inter-governmental organizations. Saleemul Huq, IIED, elaborated on the Adaptation Fund, stressing that more advocacy and lobbying needs to be carried out for governments to access available funds.

In the ensuing discussion, participants tackled issues including: how to ensure that developing countries can get funds from developed countries through the Adaptation Fund; the danger of sectoralizing CBA by setting up tailor-made funds; how to distinguish between development and adaptation; concerns that the amount of money per project from the GEF is too small; and funding from corporate social responsibility programmes. One participant noted that enabling partnerships to share lessons and knowledge will avoid sectoralization of CBA. Another lamented that many NGOs and civil society organizations do not wish to work with the private sector.

WORKING GROUPS REPORT BACK

On Saturday, Saleemul Huq, IIED, asked the chairs of the informal working groups to report back on their discussions and their future work.

Charles Ehrhart, CARE International, said his working group on CBA will publish frequently asked questions about CBA in the *Tiempo Climate Newswatch* publication in May 2010, and an academic version in a climate and development journal. Achala Chandani, IIED, reported that the gender working group would publish information on knowledge sharing and success stories to help the public understand women's vulnerability to climate change.

Basra Ali, SEI Kenya, said that the pastoralism working group would form a regional pastoralist climate-based adaptation network. Marcus Oxley, Global Network of Civil Society Organizations for



Achala Chandani, IIED



Bettina Koelle, Indigo Development and Change

Disaster Reduction, said the DRR working group planned to develop a common community resilience framework. Bettina Koelle, Indigo Development and Change, noted that the monitoring and evaluation working group would collaborate with weAdapt on the development of tools for monitoring, evaluation and learning.

Rachel Berger, Practical Action, said the aim of the civil society governance working group is to share case studies of CBA successes and challenges, and that a webpage and blog on weAdapt will be established. Douglas Gumbo, Practical Action, noted that the working group on technology transfer and up-scaling will elaborate on definitions and terms of up-scaling, identify and document CBA technologies, and create resources to scale up technologies.

Bhathiya Kekulandala, Practical Action, said the working group on tools planned to collect information on different tools available for CBA. Anna Taylor, SEI Oxford, reported

that the working group on the CBA-X website and the Google Earth layer plan to continue collaboration to create greater linkages between the two tools. Muyeye Chambwera, IIED, presented plans of the economics working group, which includes setting up a discussion forum on the CBA-X website. Maria Campos, University of the Philippines Open University, highlighted that the working group on communications aims to create online capacity building programmes.

CONCLUDING SESSION

On Saturday, participants met in a closing plenary session to discuss the way forward. Saleemul Huq, IIED,



Delfin Ganapin, UNDP/GEF Small Grants Programme

highlighted a renewed effort to further institutionalize the GICBA. Delfin Ganapin, UNDP/GEF Small Grants Programme, stressed that civil society involvement together with the UN is important for the proper functioning of the GICBA.

Tim Clarke, EU representative, Tanzania, underlined the EU's support for climate change initiatives, highlighting an eco-village project in Tanzania to help communities adapt to eco-friendly activities that promote sustainable livelihoods. He urged participants to come up with concrete actions resulting from the conference.

Richard Muyungi, Acting Director of Environment, Vice-President's Office, Tanzania, said the conference was an important event for Tanzania as it brought together practitioners from across the globe to discuss aspects of CBA. He stressed continued support and collaboration from the Tanzanian government.

Euster Kibona, EPMS, noted that the conference has been a good capacity building opportunity, adding that it would be the start of a long-term collaboration. Saleemul Huq thanked participants for making the conference a success and looked forward to meeting them at the Fifth International Conference on CBA, scheduled to take place in Dhaka, Bangladesh, from 21-27 February 2011. He closed the conference at 12:12pm.



Participants during the meeting

UPCOMING MEETINGS

INTERNATIONAL EXPERT GROUP MEETING: UN FORUM ON CLIMATE CHANGE MITIGATION, FUEL EFFICIENCY AND SUSTAINABLE URBAN TRANSPORT: This meeting is scheduled to take place between 16-17 March 2010 in Seoul, Republic of Korea, and will seek to contribute to global efforts to enhance sustainable development of the transport sector and help curb the global growth of greenhouse gases and other emissions emanating from motor vehicles, in particular in the metropolitan and other rapidly growing urban areas. It will serve as an intersessional meeting of the Commission on Sustainable Development (CSD). For more information contact: Division for Sustainable Development; tel: +1 212 963 9883; e-mail: UN_Urban_Transport_Forum_Seoul@un.org; internet: http://www.un.org/esa/dsd/susdevtopics/sdt_tran_egm0310.shtml

32ND SESSIONS OF THE UNFCCC SUBSIDIARY BODIES, AWG-LCA 9 AND AWG-KP 11: The 32nd sessions of the Subsidiary Bodies of the UNFCCC – the SBI and the SBSTA – are scheduled to take place from 31 May - 11 June 2010, in Bonn, Germany. At the same time AWG-LCA 9 and AWG-KP 11 will also take place. For more information, contact UNFCCC Secretariat: tel: +49-228-815-1000; fax: +49-228-815-1999; e-mail: secretariat@unfccc.int; internet: <http://unfccc.int>

18TH COMMONWEALTH FORESTRY CONFERENCE: This meeting will convene from 28 June - 2 July 2010 in Edinburgh, Scotland. The theme of this conference is “Restoring the Commonwealth’s Forests: Tackling Climate Change.” For more information, contact the conference organizers: tel: +44-131-339-9235; fax: +44-131-339-9798; e-mail: cfcc@in-conference.org.uk; internet: <http://www.cfc2010.org>

2010 INTERNATIONAL CLIMATE CHANGE ADAPTATION CONFERENCE: This event will be held from 29 June - 1 July 2010 in Gold Coast, Australia. The event will focus on “preparing for the unavoidable impacts of climate change, and will be co-hosted by Australia’s National Climate Change Adaptation Research Facility and the CSIRO Climate Adaptation Flagship. For more information contact the Conference Secretariat: tel: +61-7-3368-2422; fax: +61-7-3368-2433; e-mail: nccarf-conf2010@yrd.com.au; internet: <http://www.nccarf.edu.au/conference2010>

SECOND INTERNATIONAL CONFERENCE ON CLIMATE, SUSTAINABILITY AND DEVELOPMENT IN SEMI-ARID REGIONS (ICID II): This meeting will take place from 16-20 August 2010, in Fortaleza, Brazil. ICID I was held in 1992 in the run up for the Rio Conference. For more information, contact the Executive Secretariat: tel: +55-61-3424-9634; e-mail: contact@icid18.org; internet: <http://icid18.org>

DELHI INTERNATIONAL RENEWABLE ENERGY CONFERENCE (DIREC): This event will take place from 27-29 October 2010, in New Delhi, India. It will be the fourth global ministerial level conference on renewable

energy, and will consist of a ministerial meeting, business-to-business and business-to-government meetings, side events and a trade show and exhibition. For more information, contact Rajneesh Khattar; tel: +91-11-4279-5054; fax: +91-11-4279-5098/99; e-mail: rajneeshk@eigroup.in; internet: <http://direc2010.gov.in>

SIXTEENTH SESSION OF THE UNFCCC COP AND SIXTH MEETING OF THE COP SERVING AS THE MEETING OF THE PARTIES TO THE KYOTO PROTOCOL: This meeting is scheduled to take place from 29 November - 10 December 2010, in Mexico City, Mexico. For more information, contact UNFCCC Secretariat: tel: +49-228-815-1000; fax: +49-228-815-1999; e-mail: secretariat@unfccc.int; internet: <http://unfccc.int>

THE FIFTH INTERNATIONAL CONFERENCE ON COMMUNITY-BASED ADAPTATION TO CLIMATE CHANGE: This conference will take place from 21-27 February 2011, in Dhaka, Bangladesh. For more information contact IIED: tel: +44-20-7388-2177; fax: +44-20-7388-2826; e-mail: info@iied.org; internet: <http://www.iied.org/events>

GLOSSARY

CBA	Community Based Adaptation
CBA-X	Community Based Adaptation exchange
CDM	Clean Development Mechanism
COP	Conference of the Parties
DFID	Department for International Development, UK
DRR	Disaster Risk Reduction
EBA	Ecosystem Based Adaptation
FAO	UN Food and Agriculture Organization
GICBA	Global Initiative on Community-Based Adaptation
IPCC	Intergovernmental Panel on Climate Change
LAPAs	Local Adaptation Programme of Action
NAPAs	National Adaptation Programme of Action
NGO	Non-governmental organization
NWP	Nairobi Work Programme
SBI	Subsidiary Body for Implementation
SBSTA	Subsidiary Body for Scientific and Technological Advice
UNDP	United Nations Development Programme
UNFCCC	United Nations Framework Convention on Climate Change