

Early Lessons from Implementation of Climate Change Adaptation Projects in South-eastern Africa

Regional Workshop in Maputo, Mozambique

Maputo Conference Room, Hotel VIP Maputo

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Workshop Report



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LIST OF ABBREVIATIONS (IN ALPHABETICAL ORDER)

AR	Assessment Report
CBA	Community Based Adaptation
CBO	Community Based Organization
CCAA	Climate Change Adaptation in Africa
CDM	Clean Development Mechanism
CLACC	Capacity Strengthening of Least Developed Countries for Adaptation to Climate Change
CO ₂	carbon dioxide
ENDA	Environmental Development Action Third World
ETC	Commitment to People, the Environment and Equity
FCO	Foreign and Commonwealth Office
GEF	Global Environment Facility
GTZ	Deutsche Gesellschaft fuer Technische Zusammenarbeit
IIED	International Institute for Environment and Development
IISD	International Institute for Sustainable Development
INGC	National Institute for Disaster Management (Mozambique)
IPCC	Intergovernmental Panel on Climate Change
RCCCC	Red Cross Climate Change Centre
SSN	SouthSouthNorth
SADC	Southern African Development Community
LDCF	Least Developed Countries Fund
M&E	monitoring and evaluation
MICOA	Ministério para a Coordenação da Acção Ambiental
MoU	Memorandum of Understanding
NAPA	National Adaptation Programmes of Action
NGO	Non-governmental Organization
PARPA	National Action Plan for the Reduction of Absolute Poverty
PV	Photovoltaic
SPA	Strategic Priority on Adaptation
UNEP	United Nations Environmental Programme
UNFCCC	United Nations Framework Convention on Climate Change
UNITAR	United Nations Institute for Training and Research
WG	Working Group
WMO	World Meteorological Organization

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- The Dutch Ministry of Foreign Affairs (DGIS) for supporting the participation of the SSN Adaptation Country Teams; and
- The International Institute for Environment and Development (IIED) for supporting the participation of the CLACC Fellows.

CONFERENCE ORGANIZERS

International Institute for Sustainable Development (www.iisd.org)

The International Institute for Sustainable Development is a not-for-profit research institute established in 1990 that has offices in Winnipeg, Ottawa, New York and Geneva. It promotes the transition to a sustainable future by continually working to demonstrate how human ingenuity can be applied to improve the well-being of the environment, economy and society. The Institute focuses on advancing policy recommendations in the areas of climate change and energy, international trade and investment, economic policy, measurement and assessment, and sustainable natural resource management. Through our research and through effective communication of our findings, we engage decision-makers in government, business, NGOs and other sectors to develop and implement policies that are simultaneously beneficial to the global economy, the global environment and to social well-being.

Contact: Ms Jo-Ellen Parry: jparry@iisd.ca

SouthSouthNorth (www.southsouthnorth.org)

SouthSouthNorth (SSN) is a network-based non-profit organization sharing two decades of experience in the fields of climate change and social development. We directly pursue structural poverty reduction in Sub Saharan Africa, Asia and Latin America by building Southern capacity and delivering community based mitigation and adaptation projects. SSN leads through projects to build capacity, to ensure the adequate and appropriate receipt and transfer of technologies and to contribute positively to the international policy environment. We seek to place poverty reduction efforts at the centre of all climate change issues.

Contact: Ms Adèle Arendse: adele@southsouthnorth.org

Early Lessons from Implementation of Climate Change Adaptation Projects in South-eastern Africa

Workshop Report

1) BACKGROUND AND OBJECTIVES OF THE WORKSHOP

Across south-eastern Africa, a growing number of non-governmental organizations, governments, research institutes and development agencies are developing or implementing projects specifically designed to support adaptation to climate change. These early experiences are providing insights into the challenges and opportunities associated with responding to the increasing risks resulting from climate change. There is a need, however, to develop stronger links within this expanding community of practice—to share experiences, examine challenges and identify better ways of moving forward.

Objectives of the workshop:

- provide an opportunity for individuals and organizations implementing climate change adaptation projects in south-eastern Africa to learn from each other's experiences in identifying, selecting, designing, seeking funding and implementing projects;
- increase the knowledge of government policy- and decision-makers of the linkages between climate change impacts and sustainable development, and the actions that can be taken to reduce vulnerability at the local and national level; and
- to initiate an informal regional adaptation network within south-eastern Africa.

2) WORKSHOP PROCEEDINGS

Unless otherwise noted, all presentations made during the workshop can be downloaded from the workshop's website at: <http://www.iisd.org/climate/vulnerability/lessons.asp>

2.1 Day 1: 24 April 2007 – SHARING EXPERIENCES

2.1.1 Session A: Welcome and Introduction, Opening and Key Note Addresses

a) Summary of Welcoming Address (Francisco Lichucha, MICOA)

Mr. Lichucha¹ stated that increases in atmospheric concentrations of carbon dioxide and nitrogen, as well as other greenhouse gases, have collectively increased the temperatures of the Earth and subsequently affected water resources. Combined with prevailing climatic conditions at global and localized scales, this situation seems to lead to the conclusion that climate change is happening. He also stated that water resources are negatively affected through extreme flooding and drought events, and that the immediate effects on agriculture (and food production) are seriously detrimental to the state of the Mozambican economy. Mr. Lichucha noted that in Mozambique, loss of life due to natural disasters is mainly from droughts (six droughts occurred in the 1990s) while the displacement of people is attributed to floods (10 floods from the year 2000). He outlined an urgent need to identify adaptation measures to increase the capacity of people and communities to adapt to climate change. The Government of Mozambique has a five-year plan to reduce vulnerability to climate change, mainly by reducing the fatalities associated with extreme events. He thus reiterated that the aim of this workshop is to learn through the sharing information on projects, and discussion of issues (such as identifying vulnerabilities, activities, and securing funding) that must be shared with policy-makers so as to be included in the development of national policies.

b) Summary of Keynote Presentation (Dr. Pauline Dube, University of Botswana)

Dr Dube² informed the participants that the IPCC (Intergovernmental Panel on Climate Change) was established in 1988 by the WMO (World Meteorological Organization) and UNEP (United Nations Environmental Programme). It has three Working Groups (WG) and to date has produced four Assessment Reports (AR). She outlined that the reports include assessments (sectoral, regional, and response assessment chapters), as well as summaries for technical practitioners and policy-makers. It is clear that from the effects of greenhouse gases and its anthropogenic causes that carbon dioxide (the most important greenhouse gas) is following an increasing trend globally.

She informed participants that the summary for policy-makers from WG 1 reports that water availability is an issue in most of the tropics and highlands; that increases and decreases in drought in mid-latitudes and semi-arid latitudes are expected; and that these projected changes have important implications for Africa. Ecosystems, food systems and coasts will also be affected. Changes in the natural systems controlling rainfall patterns have been identified in southern Africa, and extreme drying trends have been observed in the Sahel and Mediterranean regions. The 4th IPCC WG1 report stated that there is an increasing temperature trend on a global scale. For Africa, limited information on extreme events in relation to warming trends makes information difficult to assess. The situation for Sub-Saharan Africa, which is already vulnerable to current climate variability, looks bleak in the future, even if there is stabilization of atmospheric concentrations of greenhouse gas emissions. To enhance

¹ Presentation available in Portuguese only.

² Presentation not available.

adaptive capacity in the region, Dr Dube felt that there is a strong need for reliable projections on future climate scenarios. A current lack of computational facilities and human resources undermines capacity in this area.

Dr Dube stated that the key impacts on Africa open up the need for adaptation to climate change, which can only happen if other factors are addressed. She felt that adaptation and the role of insurance also need to be seriously considered and addressed, even though it was not included in the Africa chapter.

2.1.2 Session B: Sharing of Experiences - On-going Adaptation Efforts in South-Eastern Africa

a) Summary: Plenary Session 1 - Coping with Extreme Events (Chair: Lwandle Mqadi)

This session covered the impact of a projected increase in the number of extreme events in the region and what it means for disaster relief and disaster management. Most importantly, it highlighted some local experiences on how to design and choose coping strategies that affected local people can adopt.

Mario Norman from AMBERO gave insight into a fire-management project in Mozambique that is co-funded by UNEP-GEF and the Government of Germany through GTZ. He stated that the incidence of fire in Mozambique is increasing in frequency, size and intensity due to human activities (e.g., agriculture, hunting) and potentially combined with climatic change. On average, about 30 million hectares of land burns each year in Mozambique (FAO, 2000), with June to September being the most active fire season due to higher temperatures.

The first phase of the project involved providing training and fire fighting equipment to six communities. The improvements seen thus far are that fires have been reduced by more than 50 per cent in the general community. He informed participants that these communities are also involved in natural resource management activities and are initiating their own new program to begin fire management in Sofala Province.

Presenting on behalf of the Centre for Science and Technology Innovations, **Maggie Opondo** gave details on the drought-prone Makueni District in Kenya. The project she is involved in has been funded by GEF and the Government of the Netherlands. Some parts of Makueni District are already vulnerable, and with climate change this vulnerability is increased. The project location, Sakai Division, is drought-prone and relies on rain-fed agriculture for livelihood provision. This area is not the most at risk in Makueni District, but was chosen due to the existence of the Arid Land Resource Management Project (ALRMP) in the area. This project is being used as a conduit for opportunities for continuity and exposure for better learning. The project's goal is to enhance adaptive capacity in Sakai by providing information and analysis; diversifying livelihoods; enabling access to high quality seeds; and increasing access to quality water through sand dams. Innovation has been seen so far in the way the community itself has taken ownership of the interventions from the beginning. As well, the ALRMP is taking lessons learned to date and replicating project activities in 28 districts. Self-help groups will also be assisted with activities that promote sustainable livelihoods. As the project develops, information is being fed to policy-makers in order to inform them of changes that will increase the adaptive capacity of Kenyan farmers. Challenges do exist, however, and the lack or unavailability of climate data, raised expectations from farmers, and funding delays have been felt.

From Mozambique, **Moisés Benessene** of the National Institute for Meteorology presented lessons learnt in flood related disaster management. Mozambique is vulnerable to flooding due to its location as well as the vulnerability of much of the country's population (60 per cent of whom live below the poverty

line). In 2000, more than 700 fatalities occurred due to flooding that occurred as a result of Cyclone Eline; in 2007, floods of greater magnitude resulted in less than 20 deaths. This decline in fatalities is largely due to changes introduced after 2000, when it was recognized that Mozambique had limited capacity to respond to disasters. GTZ and INGC (National Institute for Disaster Management) undertook a disaster risk reduction project that sought to increase the coping capacity of local communities by, in part, introducing a people-centered early-warning system (SIDPABB) in the region of the Buzi river basin. This system enables communication of weather information to and from the local level, and ensures that communities are ready to use this information. The SIDPABB warning system alerted communities to danger in February of 2007. This warning was heard and taken seriously, and those at risk reacted appropriately. This system, accompanied with the downscaling of weather information and strengthening coordination between government and civil defence, reduced the loss of life in 2007.

The land-locked country of Malawi is also threatened by extreme climate risks. **Ethel Kaimila** from the Malawi Red Cross stated that communication and the use of weather and climate predictions is critical to enabling adaptation. She also noted that illiterate farmers and other community members will become more vulnerable as climate change progresses. In response, the Malawi Red Cross Society has partnered with the Malawi Meteorological Services, Red Cross Climate Change Center (RCCCC), Malawi Institute of Management and the International Institute of Applied Sciences (IIASA) to undertake a project funded by UNITAR and RCCCC up until December 2008. The overall purpose is to enable the use of audio-visual tools to strengthen the capacity of small-holder farmers in Salima District to adapt to droughts and floods. As a pilot project, the objectives are to accelerate and enhance learning/training in risk communication, and to learn from the communities their views and interpretation of climate change and adaptation. Activities include stakeholder meetings, community sensitization, various social learning methods (e.g., vulnerability capacity assessment), review and application of climate change scenarios, and participatory workshops. Currently the project is in the community consultation phase. Its goal is to develop a long-term adaptation program based on lessons learnt at the community level. However, difficulties are being experienced around communication between largely literate information on weather/climate data and the mostly illiterate farmers. Obtaining funding is another challenge because it is difficult to motivate specifically for adaptation projects, as these are more long-term than normal development ventures.

*b) Summary: Plenary Session 2—Coping with Health Effects of Climate Change
(Chair: Saleemul Huq)*

Climate change is a relatively new concept in many countries and only a small number of individuals and scientists are aware of its importance and potential consequences. This session thus highlighted that health is one sector that will be seriously affected by changes in local and global climate regimes.

Presenting on a project initiated by IIED, Dr. **George Kasali** from Energy and Environmental Concerns for Zambia, defined health as including mental, social and physical aspects. The project described was located in drought-prone areas of Zambia characterized by high poverty levels, the prevalence of AIDS and opportunistic diseases (cholera, malaria), and since 2001, alternating floods and droughts (the worst floods to date were in 2007). Malaria is the second largest killer disease in Zambia, yet its sensitivity to climate change has not been established. The project objective was thus to assess the linkages between health (using malarial threats) and climatic conditions so as to inform policy. The duration of the project was two years and cost 5,000 pounds, provided by IIED. To understand climate-health interactions, the project required data sets of 20 to 30 years in length. As official Ministry of Health data dates from 1998, the project found health data back to the 1960s by going through discarded files stored in health facilities and information on diseases and health conditions back to the

1940s in the national archives. Another innovation was to gain additional funding by tweaking the projects' scope to include AIDS, children etc. As well, climate data was sourced not just from official dossiers but also from newspaper reports and disaster relief organizations such as the Red Cross. Due to the case studies commissioned by health professionals, the Minister of Health has made an official policy statement on the importance of climate change. Some of the challenges experienced by this project included: initial resistance of health personnel to climate change issues due to initial national focus on mitigation efforts; inadequate technical skills for the analysis of human health and climate change linkages; and the difficulties in extrapolating local findings to national levels. Dr. Kasali concluded that Zambia and Africa present excellent models for presenting health and climate change issues; that the National Vulnerability Assessment Committee under the Southern African Development Community has become a relevant source of data on flood and droughts (health data is included); and that a holistic approach to climate change effects should be taken.

Within the context of Mozambique, Dr **Maria Hauengue** from the Mozambican Department of Environmental Health expanded on the health implications of cyclones and floods. She began by noting the vulnerability of Mozambique to floods; the largely rural and poor profile of the country's population; the influence of the environment, diseases and floods on the health system; and how these factors are interlinked and influence each other. Infrastructure is destroyed by cyclones and floods, and the health risks increase. In 2005, flooding in five provinces displaced half a million people. Relief efforts saw the establishment of more than 100 temporary accommodation centres, but these had poor hygienic conditions, inadequate water supply and sanitation facilities, which in turn increased the risk for outbreaks of malaria, cholera, dysentery and other preventable diseases. The number of people affected, the time that people stay in centres, and the infrastructure at the temporary facilities all affect human health.

The Health Department aims to increase the capacity of the health sector to respond to emergency situations, prevent and treat disease outbreaks, and meet the needs of the most vulnerable victims of disasters (women, children, elderly), as well as provide treatment of respiratory diseases and malnutrition. To achieve these goals, the Department reinforced malarial treatment, vaccination campaigns, health education and guidelines for solid and liquid waste disposal. Dr Hauengue concluded by noting that adaptation is a key issue for the present and that it is context-specific. There is a need to strengthen existing institutions and involve those at risk. The expansion of the knowledge base is also necessary, while informed policy and international finance is also crucial.

Summary of the discussion session

- A study conducted in Kenya established a strong link between climate change and malaria and cholera. The study investigated the prevalence of these diseases in high poverty situations and households.
- The unpredictability of natural disasters contrasts with the short-term planning of local level policy.
- To understand the differences between and within adaptation to climate change projects, we need to attempt to define what is meant by 'adaptation'.
- There needs to be an understanding of how disaster relief fits into adaptation. The views expressed are towards future long-term adaptation of the communities affected, as well as a need for stakeholder engagement in collaboration.
- More funds go towards disaster relief instead of disaster preparedness. This fact could indicate that funders are not clear as to what action to take (relief vs. adaptation). There is also a clear

distinction between what has happened (disaster relief) and what can be prevented from happening (is this adaptation?).

- There is still debate over whether adaptation is separate from development. Verification of inputs (data, needs, etc) could be a way to discern adaptation from development (if this is appropriate).
- Adaptation to climate change has more to do with social research and social institutions. Vulnerability is created by factors other than climate change, yet it is increased by climate change and variability. Social processes must be included in how we deal with adaptation.

c) Summary: Plenary Session 3: Coping with Climate Change Impacts on Energy and Natural Resources (Chair: Anne Hammill)

Jean-Claude Uwizeye from the Kigali Institute for Science and Technology in Rwanda provided information on a pilot project that aims to reduce the vulnerability of Rwanda's hydroelectric energy sector to the impacts of climate change. In Rwanda, 90 per cent of electricity is derived from hydropower but only 1 per cent of the population has access to this energy source. To initiate the project, baseline studies on community vulnerability and the country's energy sector were undertaken. The project's policy component is supported by a Steering Committee, which is being used as a vehicle for determining appropriate interventions. The planned interventions include: watershed management to protect the Rugezi wetland for hydropower potential; improved management and operation of two power stations; and integration of climate change adaptation into policies. Expected outcomes are better management and ecological restoration of watersheds; implementation of agro-forestry, erosion control, livestock development, and alternative energy sources in pilot communities; training, data collection and analysis with hydropower plant staff; and recommendations for policy change at the national level. Information gathered will be used to inform Rwanda's National Consultative Forum on Environment.

In Tanzania, the rising sea level is negatively impacting fresh water wells along the coast. **Oscar Kibazohi** from Environmental Protection and Management Services explained that coastal communities dependent on the fresh water from wells are at risk. The sea is reclaiming the land in many parts, and the fresh water supply of about eight million people is threatened. The planned project is to investigate alternative water sources, rehabilitate existing wells and construct new wells. A partnership with SSN brought funding to develop the project to attract further resources. However, challenges are still prevalent in approaching the possible interventions to the problem. Issues around the sustainability of well rehabilitation, for example, and the sourcing of new freshwater are difficult to assess. Proposed activities are to increase the communities' awareness of the causes and impacts of climate change, and to explore their own adjustments to identified impacts. Identification of wells that have been inundated by seawater along the coast and rehabilitation of those for which it is viable is an additional exercise. Surveying for alternative freshwater sources is also planned, as well as construction of new wells or other appropriate solutions for increasing water supply. In concluding his presentation, Dr Kibazohi pointed out that lack of freshwater has other consequences, namely conflicts and disease outbreaks. Lessons learned through this intervention will be duplicated to help other communities in Tanzania, as well as those in other countries.

In Zimbabwe, the energy benefits from wind power could provide energy to 20 to 35 per cent of the population. **Johannes Chigwada** from Zimbabwe Energy Research Organisation provided background on a project funded by the Dutch government, with a broad objective to contribute to the provision of an affordable and renewable energy alternative for rural people in Zimbabwe. There were three phases to the project. The first phase involved the scoping of wind speeds and data collection. In the second

phase, equipment (imported from the UK) was vandalized, which led to the formation of a community power trust to ensure maintenance of the equipment. The third phase included, amongst others, the use of wind energy to obtain a water supply; borehole drilling for water provision; the establishment of food gardens and drip irrigation; the setting up of beekeeping and mushroom farming; and the establishment of a biodiesel processing plant. Another important aspect of this project were the market responses (researched prior to initiation) that led to additional income-generating activities. Other achievements were the training of local personnel in basic repair work and maintenance of the wind turbines and the production of an operator's manual for the wind system.

Dr **Boaventura Cuamba** from Action Group for Renewable Energies and Sustainable Development in Mozambique presented on one of their projects that is assisting communities to cope with drought by providing clean energy and clean water. It is an adaptation project, but with mitigation elements. The project focuses on the 30 per cent of land in Mozambique that is semi-arid and arid. In arid areas, boreholes are the best solution for providing communities with water. There are around 8,000 boreholes throughout the country. Some have hand-pumps but these are ineffective when the pumping head is high (about 45m deep). The project proposes to use solar energy to power photo-voltaic (PV) pumps, a cleaner, more energy-efficient method of water extraction. GED currently operates two PV systems in Catine (Gaza province) with funding from IUCN, and another near Maputo funded by DANIDA. Summarily, the main objectives of the project are to demonstrate the technologies, learn how to introduce the technology to communities, incorporate local skills and materials to reduce costs, and prepare training activities for different stakeholders.

Summary of the discussion session

- Contrasting the problem of affected energy sources with the experience of developed countries, it is clear that richer nations can afford and have access to technologies for the supply of fresh water. Adaptation might occur in less-developed countries like Tanzania, but there is a lack of resources.
- A question was raised as to the validity of wind energy as being “community adaptation”. The response (from the presenter) was that his own view had changed regarding the feasibility of wind power.
- In terms of the sustainability of the adaptation project presented by Dr Boa Cuamba, for the implementers, “capacity building is building sustainability”. They also added that although there are many other problems (e.g., salinity) in Mozambique, they cannot address them all, and that the Department of Water Affairs had been exploring alternatives to some of these issues.
- Responding to a question about the labeling of the project as ‘adaptation’, Dr Cuamba explained that it is an adaptation to climate change project (as opposed to a normal water supply project) because the project was designed in the context of climate change and adaptation.

2.1.3 Session C: Sharing of Experiences—The Key Concerns, Challenges and Opportunities with Implementing Adaptation projects

Three breakaway sessions were held at the end of the first day of the workshop. Participants were asked to share their experiences on the difficulties and/or successes of their work in adaptation to climate change. The three topic areas were: Adaptation in Mozambique (in Portuguese); Engaging Local Communities in Adaptation; and Monitoring and Evaluating Adaptation. These groups were prioritized based on interest expressed by participants when registering.

The group facilitators who gave their time and effort were:

- Albertina Bambaige (Adaptation in Mozambique)
- Maggie Opondo (Engaging Local Communities in Adaptation)
- Pierre Mukheibir (Monitoring and Evaluating Adaptation)

The summaries of the group work were presented on Day 2.

2.2 Day 2: 25 April 2007 — OVERCOMING CHALLENGES

2.2.1 Session D: Opening of Second Day & Report Back from Day 1 Breakaway Sessions

a) Summary of the Report back from the Breakaway Sessions on Day 1

There were three breakaway groups attended by the participants on the 24th April. Short summaries of the topics discussed are provided below:

- **Adaptation in Mozambique** (*Facilitator: Albertina Bambaige*)

It was difficult to approach the definition of adaptation in Mozambique. The group focused on the country's advantages in order to identify what would strengthen the implementation of adaptation to climate change projects. The group identified that one strength is the government's coordination unit responsible for bringing together different but related arms in disaster management—MICOA (Ministério para a Coordenação da Acção Ambiental). There are also climate change focal points, as well as the Natural Disaster Management Institute. Early warning systems are utilized in the agricultural, water and meteorological sectors. Regional cooperation through agreements with SADC countries also fosters good collaborative efforts.

However, the group also identified barriers to successful implementation of adaptation that include: lack of data for climate, vulnerability and risk; lack of risk assessment for decision making; lack of resources; poor capacity for data interpretation; poor communication between science and other stakeholders; few meteorological stations; centralized early warning systems and the lack of a clear national strategy on climate change.

The group felt that the opportunities presented were to use the existing UNFCCC funds for adaptation (e.g., Least Developed Countries fund, Special Climate Change Fund, Adaptation Fund). Lessons learnt from previous and recent disasters (e.g., 2007 floods) should also be used for action in future extreme events. Decentralization of the planning process should happen at the community level, as well as a focus on the existing cultural habits of the community and indigenous knowledge. Recommendations were for an elaboration of National Policy on climate change; improving the coordination among different role-players, the incorporation of climate change into other sectors; technology transfer and technical capacity at various levels; awareness raising and training; research programs for adaptation; and the development of a database for easy access. In Mozambique, community-based projects (e.g., Buzi district) and the existence of mapping and early warning system projects in the Limpopo Basin have contributed to the experiences of adaptation interventions.

- **Engaging Local Communities in Adaptation** (*Facilitator: Maggie Opondo*)

The group agreed that the effectiveness of participation in communities is dependent on the entry point. Trust-building and confidence is a process and not just a once-off event. There must be respect for, and integration of, local knowledge and preconceived ideas and solutions should not be imposed. In terms of a Participatory Vulnerability Assessment (which involves listening, speaking the local language, and understanding past coping strategies through historical timelines), implementers should not be prescriptive and must recognize differences in gender and community priorities. Capacity building is an important aspect of engaging communities. Partnerships between communities and different stakeholders (e.g., public and private sector, CBOs and NGOs) should take a holistic approach. The historical background must be taken into account when communicating with communities in projects and different contexts. In terms of research into adaptation and indigenous knowledge, the results must be shared with communities, and an example was given in a project undertaken by ICPAK (Institute for Climate Prediction and Analysis). Successful engagement with communities affected by climate variability and change helps to build the capacity of NGOs, funders and beneficiaries.

- **Monitoring and Evaluating Adaptation** (*Facilitator: Pierre Mukheibir*)

The background to monitoring and evaluation (M&E) is linked to donors' indicators and checkpoints for outputs. Traditionally, M&E rectified or modified strategies during the implementation of a project or intervention, and the results were used for future replication. One goal is to establish the level of benefit and another is to communicate the success or failure of the project. In terms of climate change and risks, M&E can be successful as a tool for future risk management. The group concluded that, for adaptation to climate change, an adaptation benefit equals a post-project situation less a pre-project situation. However, the climate variability and resilience aspects of any situation or context must be taken into account, and this refers to the baseline for any intervention. The baseline is comprised of science (climate science and coping capacity) and policy (e.g., NAPAs) which contribute to indicators. It was noted that different stakeholders respond to different indicators (beneficiaries, governments, funders, implementers). The group felt that when assessing adaptation projects, indicators must have extended time boundaries, as adaptation is not a short-term intervention.

2.2.2 Session E: Overcoming Challenges

Stefan Raubenheimer and John Drexhage began the session by providing insight into their own views on adaptation projects. It was noted that on one hand this workshop presents an opportunity to inform the 'grey areas' between development and adaptation work, and to begin to develop a structured format for these projects. The perspective was contrasted with the question: Is there such a thing as an adaptation project? It seems that the linkages between practitioners and communities (themselves practitioners) is the key to understanding the differences between development and adaptation.

a) Plenary Session 1 - Tools and Techniques to identify, select and implement adaptation projects (Chair: Steve Thorne)

Steve opened the session by offering these questions in order to initiate thought and discussion:

1. What is Adaptation? Is the start vulnerability?
2. The Bespoke Designed Adaptation Project—what is this?

The participants were then invited to take part in an exercise to inform a generic adaptation project cycle (see Figure 1). Participants were asked to form four groups. Two kinds of projects were used as entry points for the exercise: a development project with climate change as an add-on and a project

whose starting point is informed by climate change (i.e., adaptation project). The four groups then used four of the six aspects of the generic project cycle presented to them to think about issues surrounding those factors in both kinds of projects. This process was assisted by four facilitators responsible for individual stages of the project cycle. Groups rotated (in 10 minute intervals) between stations hosted by each of the facilitators.

The group facilitators were:

- Saleemul Huq (Identification of issues)
- Anne Hammill (Objective Setting and Planning)
- Maggie Opondo (Implementation)
- Pierre Mukheibir (Monitoring and Assessment / Evaluation)

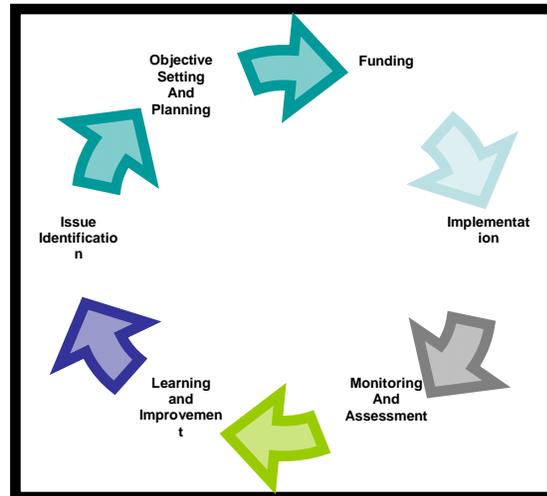


Figure 1: Generic Project Cycle

Summary of the feedback from these group inputs

Outcomes of the group exercise illustrated that both project perspectives have common issues at different stages of project development and implementation. Both development and adaptation projects address vulnerability, through awareness of the issue or by identifying current coping strategies. The group exercise highlighted these similarities in the four stages of the hypothetical adaptation project.

▪ **Identification of the issues**

Most groups had similar views on how to identify crucial issues to define an ‘adaptation to climate change’ project. A strong assessment of climate change impacts and current coping strategies (which inform the baseline) in the context of the project is the first step towards identifying the entry point. Livelihoods assessments go hand in hand with ensuring sustainable development objectives. Indigenous and traditional knowledge systems must be recognized in the formation of livelihoods profiles. The identification of actual activities or interventions as well as the relevant roles and actors are initiated in this stage, as well as the subsequent stages.

▪ **Objective Setting and Planning**

After delineating and characterizing the context-specific issues in the identification stages, projects now need attainable objectives and plans. Much of the base work to inform the objectives would have occurred in the identification phase. These objectives must be attainable and also involve participatory negotiations around decision-making. Collectively, the groups felt that human development indicators (improved quality of life; improved adaptive capacity) should guide all planning. Temporal aspects of different goals must be kept in mind and monitored (long or short term objectives and their respective feasibility and sustainability). This phase should also see the development of LFA (Logical Framework Analysis) and M&E strategies. In the planning process, human, financial and technical resource needs must also be identified.

▪ **Implementation**

During the implementation of both adaptation and development projects, many similarities also presented themselves. Issues such as community and local stakeholder ownership through working with partners were at the forefront of the shared aspects between the two kinds of projects. Here the identification of roles and capacity building mirrors the first phase (Issue Identification) in that crucial

role-players (both from the beneficiaries and implementers) are sourced. Timelines for implementation was also brought up, however here monitoring and evaluating of the occurrences should be incorporated into implementation, thereby providing flexibility to adjust in this phase. Linked to the monitoring is accountability for and of the various activities or success/failures of implementation. Scenario-sketching also came up as an issue, in terms of the socio-economic, climate and policy aspects of the project. The ease of access and use of information (e.g. climate data) is a concern and should be ensured (in part) through cooperative stakeholder interaction.

- **Monitoring and Assessment/Evaluation**

Monitoring and evaluation as an adaptation tool focuses on the most significant indicators related to the problem and intervention. These indicators must be long-term in nature and must measure resilience to climate change as well as socio-economic indicators such as livelihoods, migration patterns, health, conflicts, etc. The groups felt that there was no difference between an adaptation and a development project's approach to M&E. From the first stage, the establishment of the baseline is the start of an ongoing monitoring process that occurs throughout the life-cycle of the project. The experiences of beneficiaries are crucial to effective monitoring and post-implementation assessment of interventions. In this stage, stakeholder inclusion must occur as well, while independent (external) auditors should be utilized for objectivity. Evaluation is different from monitoring in that it occurs post-implementation, and the benefits of this assessment help to refine future project goals and refine indicators used.

To **conclude**, issues that must be considered in the development of adaptation to climate change projects are similar in many respects to those of development projects. One possible drawback in the exercise was that not all phases of the hypothetical project cycle were analyzed by a group simultaneously. Different practitioners and their shared experiences begin a dialogue on what an 'adaptation' project can claim to be, and this will ultimately inform the development and donor industry as well. The exercise also set the tone for the forthcoming inputs from project methodology practitioners.

Presentations on Tools and Techniques to identify, select and implement adaptation projects

Anne Hammill from IISD gave an overview of a recent workshop in Geneva hosted by the World Bank, IISD and the Institute for Development Studies that brought together practitioners in the fields of climate adaptation tools. The aim of the meeting was to improve decision-making (of tools) at all scales to reduce risks and avail opportunities associated with climate variability and change. Additional goals were to share screening tools, discuss databases for shared sources of climate information, and networking and linkage opportunities. Not all tools are technical, and some examples from methodologies that large funders and aid organizations utilize were given. An example is ADAPT (which is used for World Bank projects). The workshop found that cross-referencing and collaboration is occurring between tool developers to learn more and limit inefficient replication. Because of different user groups, purposes and aims, these tools are now catering for niche markets. There is a trend toward collaboration, but this is still at an early stage. Although there is a commonality in the approach to these tools (climate change is viewed as an additional stressor), gaps do exist between the grassroots levels (traditional leaders and communities) and national and international levels (governments and policies). Tools are also relevant to international policies.

Ms Hammill then presented on CRISTAL, which is an acronym for *Community-based Risk Screening - Adaptation and Livelihoods*, a computer-based risk screening tool which helps users (community-level project designers and managers) to systematically understand links between livelihoods and climate. The tool was developed to enable users to assess the impacts of a project on a community's adaptive capacity and identify appropriate interventions that reduce long-term vulnerability. When developing

CRISTAL, IISD and its partners drew upon Environmental Impact Assessment models and the sustainable livelihoods framework (for elements of local coping/adaptation). The tool is packaged in a logical, user-friendly format. Two modules based on four framing questions are used to (i) synthesize information on climate and livelihoods, and (ii) plan and manage projects for adaptation.

Elaborating on a particular methodology for identifying and selecting adaptation projects, **Lwandle Mqadi** from SSN explained the SSNAPP (*SouthSouthNorth Adaptation Project Protocol*) methodology. This model has four phases. The first begins by investigating in-country or regional vulnerabilities using poverty and climate information on predictions as indicators. Overlaying maps of poverty and vulnerability are used to identify 'hotspots' (national areas where poverty and climate indicators interact negatively/significantly). Both desktop and community information must be verified to distinguish the actual effects of poverty-climate interaction in the communities identified. Potential partners (organizations that are active in the identified communities) are also identified. Subsequently, the design phase involves building partnerships and fundraising (stakeholder identification, MoU between the partners, and the concept note for the proposed intervention). This phase also outlines potential activities or interventions in a Project Identification Note. The next phase is implementation, and this is initiated by funding sourced for the project. The last phase is the M&E, which continue indefinitely from the point of implementation. In conclusion, Ms Mqadi noted that sustainable livelihood activities are heterogeneous and vary between communities. Therefore, context-specific activities are required to enhance the adaptive capacities of communities, enabling them to cope and combat the adverse impacts of climate variability and change.

Summary of the discussion session

- With respect to CRISTAL, experience to date has been that the information needed when using this tool to guide decision making is available; it's a question of where to access it and how to use it. CRISTAL has been field tested in Mali, Bangladesh and Nicaragua. Training exercises demonstrated that there was a positive reception to the tool and allowed for critical self-analysis of the tool's design and application.
- It was suggested that most tools pre-suppose a stable set of inputs in assessing climate change risks. The humanity of the situation is ignored if the methodology used to analyze climate change and livelihoods is rigid, as these elements are dynamic and unstable by nature.
- Training in the use of CRISTAL occurred after the workshop, in a separate training workshop held over two days in Maputo.

b) Plenary Session 2: Building Adaptation into Policy Making (Chair: John Drexhage)

Antonio Mavie³ from FEWS-NET in Mozambique briefly explained a project funded by USAID that involves early-warning systems for droughts. He is working with risk maps that plot cyclones, floods and droughts using historical information to assist in decision-making related to efforts that reduce the risks (to food security and human life) associated with natural disasters. The project is raising awareness of vulnerability. Some response measures can be seen in publications such as the *Atlas for Disaster Preparedness*. Through these books, the New Cyclone Early Warning System can be better communicated. Mozambique (and Zimbabwe) is also one of the countries benefiting from the Coping with Drought Project funded by the GEF.

³ Presentation not available.

Oscar Kibazohi⁴ related the experience of mainstreaming adaptation into national policy in Tanzania. Tanzania's NAPA covers many sectors, including health, industry and water, in terms of impacts of climate change and poverty indicators. Even though historical data is used for future projections, it does not always accurately inform present conditions. Studies have shown rainfall patterns increasing in variability and time; temperature increases in certain parts of the country; snowmelt on Mt Kilimanjaro; and changes in fresh water supply for coastal areas. These water supply changes are critical to livelihoods and the hydroelectricity generation industry. The health sector is also affected by the expansion of malaria into highland areas. Obstacles to overcoming these issues lie with the decision-makers, yet their time is limited, restricting their capacity to deal effectively with all of the problems. The solution to overcome this gap in capacity was to establish committees, which oversaw the areas of concern, and are more visible and knowledgeable about climate change impacts. To do this effectively, more Tanzanian resource personnel and environmental experts are needed; their local exposure and knowledge can better assist their decision-making.

Lawrence Flint from Environmental Development Action in the Third World (ENDA) in Senegal provided insight into how translating adaptation at decision-makers levels affects the success of relationships between stakeholders. He noted that there are many levels of decision-makers in any situation, from the livelihood practitioner who is most affected by climate change (e.g., farmers) to village chiefs or religious leaders, and then to authorities (e.g., municipal departments) and national or international role-players. The interactions between these levels and individuals are different and the role-players don't necessarily have the same views of each other. Because interactions must be context-specific, they must take into account the constraints and challenges associated with definitions of problems. How do we define adaptation? Different levels of role-players will see the issue in different ways, and thus have different descriptions. For Lawrence Flint, adaptation is the consequence of the decisions we make now, and can be short and long term. Adaptation is also about creating options and alternatives to living with the effects of climate change. But there are barriers to effective understanding of shared issues, such as the limited understanding (across many decision-making levels) of climate change, and the limited capacity and time for changing mind-sets. Mr. Flint concluded by saying that because development is about creating choices, decision-making must be an intimate process in which understanding, empathy and flexibility are included.

Summary of the discussion session:

- There were questions relating to problems experienced with NAPAs in LDC countries which no-one could really provide feedback on due to most countries represented were either at the start, currently in the development process, or not LDC countries.

c) Plenary Session 3: Financing Adaptation (Chairs: Jo-Ellen Parry and John Drexhage)

The chairs gave a brief introduction to adaptation features in the media and to the session on financing. Jo-Ellen commented that the costs for adaptation are not definite at this stage and that the World Bank has suggested that US\$9 to 41 billion per year will be needed to climate proof new investments. Insurance is also an important and relevant issue in adaptation to climate change.

To provide a basic overview of the funding situation under the UNFCCC, **Saleemul Huq**⁵ of IIED provided some background. At the 7th COP, two funds were set up to address the costs of adaptation to human-induced climate change. One of these, the Least Developed Countries Fund (LDCF), is made up of voluntary contributions from wealthy countries and currently stands at about US\$100 million. The

⁴ Presentation not available

⁵ Presentation not available.

main aim of the LDCF is to assist LDC countries to prepare their NAPAs. The other fund is the Special Climate Change Fund, which currently has about US\$400 million. Both funds are managed by the GEF. Under the Kyoto Protocol, the Adaptation Fund was established and is being funded by a two per cent levy on certified emission reduction credits produced by Clean Development Mechanism (CDM) projects. This fund is not yet operational.

International donors also contribute to funding for adaptation work, such as the GEF's SPA (Strategic Priority on Adaptation) which was granted US\$50 million over three years, with US\$5 million allocated to CBA projects through its Small Grants Programme. DFID (Department for International Development, UK) has also given funding to the International Development Research Center for the Climate Change Adaptation in Africa program. The European Union also provides funds, which are administered by UNITAR. The Swedish International Development Agency and Danish Development Agency are also contributors. Dr Huq also explained carbon finance: a market-based system whereby developed countries (who ratified the Kyoto Protocol) can offset their greenhouse gas emissions by investing in or purchasing credits produced by CDM projects. These are compulsory offsets, whereby the voluntary carbon market can offset their emissions independently.

To provide some insight into how the Foreign and Commonwealth Office (FCO) of the British High Commission operates in terms of funding, **Daniel Fieller**⁶ explained why the British Government is concerned about climate change. The FCO is not a funding organization but can facilitate funding, and the website (www.fco.gov.uk) can provide for more information in that regard.

Mr. Fieller noted that current climatic variability is a glimpse into the future of impacts; the threat has grown and predictions are being surpassed by reality. Although the Stern report has shown that it's in our collective economic interests to take action, there is still an antagonistic relationship between costs and positive advantages. Because an "us and them" syndrome exists, the FCO feels that more linkages in effort and cooperation are required. The FCO avoids ownership of projects and encourages participatory actions. Lobbying for more funding for adaptation and mitigation efforts, and for increases in active dialogue between governments and affected communities and role-players are also part of the FCO's portfolio. It is important to bring new ideas and partnerships into the debate, and also to raise the profile of adaptation to climate change endeavours, as there are many good and relevant examples.

From DFID, **Andrew Maclean**⁷ said that poverty reduction is the goal of DFID. Having recently taken up the cause for climate change, DFID have also begun lobbying other organizations and funders to make it a priority. Most development funding goes towards direct budget support for governments and in Mozambique 80 per cent of DFID's funds are committed to government. Despite this, climate change issues are missing from current documentation. There are also areas for opportunities with regards to infrastructure and policy. Global climate change affects countries and regions differently.

Antonio Serra from EnviroTrade offered a project perspective on financing mitigation projects. The Nhambita Community Carbon project has various partners and is operating in a community with 1000 families located on the outskirts of the Gorongosa National Park, Mozambique. The community is characterized by high poverty levels, with livelihoods consisting of slash and burn agriculture, hunting, traditional beekeeping, charcoal and fishing. These practices are placing pressure on the Park's natural resource base. The project was initiated three years ago, roughly at the same time of the start of heavy logging activities. The project is using a tool called *Plan Vivo* for planning, managing and monitoring the supply of carbon offset project by small farms that encourage rural livelihoods. The process involves

⁶ This presentation is not available.

⁷ This presentation is not available.

farmers signing up voluntarily, mapping of plots, and then the signing of a contract by those who commit. The project provides trees, and the growth periods of between three to four years are monitored. After a period of four to five years, payments can be expected. Project activities are reforestation, agro-forestry, beekeeping, encouragement of biofuel use and production, and concurrent research with the University of Edinburgh. Income generated through the project has been used by the community to build a school and gain water from improved wells. A new clinic is under construction and associated indirect jobs have also been created. Another important result of the project has been a shift in attitude about natural resource use and community processes.

An input was also given by Phil O'Keefe of ETC. He mentioned that funding is difficult to ascertain because developed countries will not admit responsibility for contributing to global climate change. This lack of commitment translates into a lack of funds. There have been different focal areas for funders over the last few decades, and Mr. O'Keefe asked whether or not there was "life after NAPAs?" There is no global energy policy and he felt that poverty reduction is seen as a threat to some.

2.2.3 Session F: Closing Summary

There is a clear need across the south-eastern African region (and globally) to form partnerships and understand vulnerabilities to climate variability and change. However, this needs to be accomplished from the affected community's perspectives—i.e., understanding what works and does not work for them. Existing institutional arrangements must be utilized for the identification and understanding of vulnerabilities and response strategies. The sustainability of responses, both to short-term natural disasters as well as long-term adaptation to climate variability and change needs must be incorporated into planning. For disaster response, there must be integration into development strategies.

Impacts and adaptation in the health sector is important for most countries. More research into this field is needed. In this sector also, the inclusion and participation of various stakeholders is crucial for fruitful engagement.

Climate change and variability also affects other valuable sectors, such as energy and natural resources. The need for better energy policy and regulation in light of climate change and adaptation is required to mitigate negative effects on this sector. Adapting to energy constraints and challenges can be called adaptation when climate variability and change is taken into consideration. However, most technologies (for alternative energy creation) and costs still lie with developed countries and not enough 'hand-over' takes place towards developing countries in need.

In attempting to identify, select and apply what we call adaptation projects, many similarities (and differences) to development projects can be seen. From this workshop, the need for more rigorous, participatory and socially-sensitive project processes (including learning assessments) is apparent. By sharing experiences, practitioners were able to exchange not only lessons learnt and challenges, but also gain insight into new ways of approaching the adaptation to climate change debate. However, the issue to understand adaptation still exists in the international arena; there is still a need for education about this aspect of climate change at all levels (policy, different sectors, local).

Most importantly, understanding must reach the donor sectors, so that more projects can be funded and the adaptive capacity of vulnerable communities can be ensured.

3) APPENDICES

3.1 Participants List

Name	Organization and Country	Email
Allison, Gaia	Danida, Mozambique	Gaia.allison@gmail.com
Arendse, Adèle	SSN Africa, South Africa	adele@southsouthnorth.org
Awour, Cynthia	African Centre for Technology Studies (ACTS), Kenya	c.awuor@cgjar.org
Baixo, Eduardo	MICOA, Mozambique	eduardo.baixo@micoa.gov.mz
Bambaige, Albertina	GED, Mozambique	abambaige@cdn.co.mz or tynnaa@hotmail.com
Benessene, Moisés	National Institute of Meteorology, Mozambique	Moises_b@inam.gov.mz
Bila, Silene	GED, Mozambique	silenebila@gmail.com
Blaauw, Rosa	SSN Africa, South Africa	rosa@southsouthnorth.org
Brito, Rui	INGC-GA, Mozambique	ruibrito@tvcabo.co.mz
Cabrita, Joao	Translation Services	cabrita@gmail.com
Chalufo, Rabeca	Red Cross Mozambique	rabeca.chalufo@redcross.org.mz
Cuamba, Boaventura	GED, Mozambique	boaventura.cuamba@uem.mz
Chigwada, Johannes	ZERO, Zimbabwe	Johannes@zeroregional.com
Dengo, Ivete	Red Cross Mozambique	ivete.dengo@redcross.org.mz
Desjardins, Rene	CIDA-PSU, Mozambique	rene@cida-psu.com
Drexhage, John	IISD, Canada	jdrexhage@iisd.ca

Name	Organization and Country	Email
Dube, O. Pauline	University of Botswana	DUBEOP@mopipi.ub.bw
Ferraao, Manuel	CENACARTA, Mozambique	manuel.ferrao@tvcabo.co.mz
Fieller, Daniel	United Kingdom High Commission, Mozambique	daniel.fieller@fco.gov.uk
Flint ,Lawrence	ENDA, Senegal	lawrence@endaenergy.org ; lawrence.flint@gmail.com
Hachikeka, Excellent	IUCN Zimbabwe	excellent.hachileka@iucn.org
Hammill, Anne	IISD, Canada	ahammill@iisd.ca
Hauengue, Maria dos Anjos	MICOA, Mozambique	mariahauengue@yahoo.com
Huq, Saleemul	IIED, UK	Saleemul.huq@iied.org
Izidine, Samira	IUCN, Mozambique	Samirai.uicn@tvcabo.co.mz ; SIzidine@yahoo.com
Jantilal, Hiten	MAP, Mozambique	hjantilal@map.gov.mz
Kaimila, Ethel	Red Cross Malawi	ethelkaimila@Africa-Online.net
Kakono, Tafirenyika	CARE, Zimbabwe	kakono@mweb.co.zw
Kalonga, Clement	Action Aid Malawi	kalongaeck@yahoo.com
Kamanga, Khumbo	CURE, Malawi	kjkamanga@yahoo.co.uk
Kamugisha, Sylvand	IUCN, Tanzania	sylvand.kamugisha@iucn.org ; smkamugisha@panganibasin.com
Kibazohi ,Oscar	EPMS, Tanzania	kibazohi@udsm.ac.tz
Kasali, George	EECZ, Zambia	kasali_george@yahoo.com
Kvammen, Ingrid	Emb. of Norway	ike@mfa.no

Name	Organization and Country	Email
Lavigne, Anne-Marie	CUSO, Mozambique	amlavigne@playmind.com
Lichucha, Francisco	MICOA, Mozambique	
Luboyera, Festus	UNFCCC Secretariat ,Germany	fluboyera@unfccc.int
Lucio, Filipe	Meteorological Services, Mozambique	flucio@inam.gov.mz
Maclean, Andrew	United Kingdom Department for International Development	a-maclean@dfid.gov.uk
Masekende, Absolom	Practical Action, Zimbabwe	absolomm@practicalaction.org.zw
Manjate, Marilia Telma Antonio	MICOA, Mozambique	Telma.manjate@micoa.gov.mz
Mavie, Antonio	FEWS-NET, Mozambique	amavie@fews.net.or / Antonio_mavie@yahoo.com.br
McDonnell, Yasmin	Action Aid, Malawi	yasmin@actionaid.org
Monjane, Marta	IUCN, Mozambique	Marta.manjane@iucn.org
Mqadi, Lwandle	SSN Associate / IIED International Fellow, South Africa	lwandle@southsouthnorth.org
Mukheibir, Pierre	Helio International, South Africa	pierre.mukheibir@uct.ac.za / pierre@energetic.uct.ac.za
Nakangu, Barbara	IUCN, Uganda	barbara.nakangu@iucn.org
Nalugya, Prossy	DENIVA, Uganda	pna@deniva.or.ug
Norman ,Mario	Ambero-IP, Mozambique	marionorman3@yahoo.com.br
O'Keefe, Phil	ETC UK	phil@etcuk.org
Opondo, Maggie	Centre for Science Technology Innovation, Kenya	maggie@swiftkenya.com
Parry, Jo-Ellen	IISD, Canada	jparry@iisd.ca

Name	Organization and Country	Email
Petulante, Antonio	CUSO, Mozambique	antonio.petulante@cuso.org.mz
Rao, KP	ICRISAT, Zimbabwe	K.P.Rao@cgair.org
Raubenheimer, Stefan	SSN, South Africa	stef@southsouthnorth.org
Sacramento, Ataide	Red Cross, Mozambique	ataide.sacramento@uem.mz ; ataide.sacramento@redcross.org.mz
Saide, Antonio	Ministry of Energy, Mozambique	aoss@me.gov.mz
Serra, Antonio	EnviroTrade, Mozambique	antonio.serra@envirotrade.net ; antonioserra05@yahoo.com.br
Sigavane, Sergio	Practical Action, Mozambique	Ssigavane@tdm.co.mz
Stiebens , Wolfgang	Ambero-IP, Mozambique	stiebens@vt.edu
Thorne ,Steve	SSN, South Africa	steve@southsouthnorth.org
Uwizeye, Jean Claude	Kigali Institute for Science, Technology and Management, Rwanda	jc.uwizeye@kist.ac.rw
Wingqvist, Gunilla Ölund	Government of Sweden	gunilla.wingqvist@foreign.ministry.se
Zandamela, Zacarias	GED, Mozambique	zzandamela@gmail.com

3.2 Evaluation Feedback

Early Lessons from Implementation of Climate Change Adaptation Projects in South-eastern Africa

EVALUATION FORM - SUMMARY

1. What were the highlights of the workshop for you?

Most participants mentioned that the lessons learnt (effects and impacts) from local examples of projects was the highlight of the workshop, while others also highlighted the understanding of adaptation (especially distinguishing between adaptation and development projects), policy formulation, funding of adaptation, community based adaptation and the adaptation project cycle sessions as interesting and critical focus areas of the workshop.

Others also felt that this workshop was a good opportunity to further raise awareness of the issues of adaptation and the need to effect engagement on the issue across various sectors.

2. What was your favorite discussion session and/or breakaway session, and why?

Most participants felt that the session on 'Coping with Extreme Events' and the breakaway session on 'Community Engagement' were their favourite sessions of the workshop—where practical issues and learnings as well as insight into how communities are able to cope with the impacts of climate change were deliberated.

Other favorites include: Adaptation in Africa – Dr Pauline, Policy formulation, Funding Adaptation, the adaptation project cycle, the Monitoring and Evaluation breakaway session (seen as grey areas in implementing adaptation projects), tools for adaptation projects and the Mozambique discussion session (covering areas on discussed at a national level).

Some general comments include that it was good to share and learn from others' experiences at a project level, whilst the workshop also provided a good interface and interaction between practitioners and academic/scientists

3. In your opinion, what are the areas for improvement (e.g. organization, facilitation/chairing, content, duration, etc.) for (possible) future workshops similar to this one?

Most participants felt that the workshop facilitation and overall structure of the workshop was good and diverse. However, most participants felt that time-keeping should have been more strictly adhered to, since some of the presentations were too long and too many, which limited the time needed for more engaging deliberation of the issues highlighted (especially in the group discussions).

Some also felt that there perhaps needed to be more local community examples covered in the workshop as well as more examples of the practical application of the methodologies and tools presented at the workshop including more discussions on the funding of adaptation.

Others also felt that the presentations should have been made available to participants at the workshop in either printed or on CD as some do not have regular access to the internet.

Some of the participants felt that there is a need to improve the focus of similar workshops with clearer objectives as well as ensuring that more donors (e.g., EC, US, World Bank, Danida, etc.), policy makers and even the private sector are represented at the workshops where practitioners could benefit from the interaction.

4. Would you be interested in establishing and/or maintaining and/or participating in a network of adaptation practitioners working in South and East Africa? If so, how would you prefer that this network maintain communication between members (e.g. listserv, web site, newsletter, conference calls or any other method of communication) and what do you think the critical issues for engagement should be?

Almost all the participants felt that a website would be the most functional method to maintain communication amongst the participants. Others felt that setting up a listserv and circulating emails would also be a good method of communication, while a few favoured conference calls, periodic (e.g. annual) meetings and newsletters as another way to keep abreast of the issues and discussions within the region.

The critical issues highlighted to be discussed and shared on the website/listserv, email, conference calls, meetings and newsletters include:

- Practical local examples/case studies of adaptation projects, including community voices and testimonials, which outline the lessons learnt and key findings (e.g. on progress, achievements, challenges, opportunities, threats); this could provide good information that can be developed into messages that can be targeted at SADC, AU, international donors, companies, government as well as other NGOs, etc.
- Tools and methodology for vulnerability assessments and practical examples and lessons learnt from implementation
- Research findings
- Funding opportunities

Saleemul Huq noted that there is an existing network on Community Based Adaptation (CBANetwork) being developed (coming out of the international workshop on CBA held in Bangladesh in February 2007). This initiative could be used to support further collaboration between workshop participants. Further information about the CBANetwork can be obtained from www.iied.org or by sending an email to: saleemul.huq@iied.org.

3.3 Workshop Agenda

Early Lessons from Implementation of Climate Change Adaptation Projects in South-eastern Africa

April 24 and 25, 2007
Maputo Conference Room, Hotel VIP Maputo
Avda 25 de Setembro 692, Maputo
Maputo, Mozambique

AGENDA

Tuesday, April 24, 2007

Sharing Experiences

08:30 - 09:00	Registration
Session A – Welcome & Introduction, Opening & Key Note Addresses	
09:00 - 09:10	Welcome & Introduction <i>Chair:</i> Stef Raubenheimer, SouthSouthNorth
09:10 – 09:20	Opening Address: Mr Francisco Lichucha, Ministry for Coordination of Environmental Affairs (MICOA)
09:20 – 09:50	Keynote Address: Climate Change and Africa: Recent findings and responses Dr Opha Pauline Dube, Department of Environmental Science, University of Botswana
Session B - Sharing of Experiences: On-going Adaptation Efforts in South-eastern Africa	
09:55 – 11:00	Plenary Session 1: Coping with Extreme Events <i>Chair:</i> Lwandle Mqadi, SouthSouthNorth
	<p><i>Case Study/Practice Inputs:</i></p> <ul style="list-style-type: none"> ▪ Community Based Fire Management in Central Mozambique Mário Norman, Ambero-IP ▪ Increasing Community Resilience to Drought in Makueni District, Kenya Maggie Opondo, Centre for Science and Technology Innovation (CSTI) ▪ Disaster Preparedness in Malawi Ethel Kaimila, Malawi Red Cross ▪ Experience in Coping with Floods in Central Mozambique Moisés Benessene, National Institute of Meteorology <p><i>Discussion</i></p>
11:00 – 11:20	TEA/COFFEE Break

11:20 - 12:30	Plenary Session 2: Coping with the Health Effects of Climate Change <i>Chair:</i> Saleemul Huq, International Institute for Environment and Development
	<i>Presentations:</i> <ul style="list-style-type: none"> ▪ Climate Change and Human Health Study in Zambia George Kasali, Energy and Environmental Concerns for Zambia (EECZ) ▪ Health and Climate Change in Mozambique Dr Maria Hauengue, Department of Environmental Health, Government of Mozambique <i>Discussion</i>
12:30 – 13:30	LUNCH
13:30 – 14:50	Plenary Session 3: Coping with Climate Change Impacts on Energy and Natural Resources <i>Chair:</i> Anne Hammill, International Institute for Sustainable Development
	<i>Case Study/Practice Inputs:</i> <ul style="list-style-type: none"> ▪ Reducing Vulnerability of the Energy Sector in Rwanda Jean-Claude Uwizeye, Centre for Innovations and Technology Transfer (CITT) ▪ Impacts of Sea Level Rise on Coastal Fresh Water Supply Oscar Kibazohi, Environmental Protection and Management Services (EPMS) ▪ Wind Power Technology for Climate Change Adaptation Johannes Chigwada, Zimbabwe Energy Research Organisation (ZERO) ▪ Clean Energy, Clean Water Boaventura Cuamba, Action Group for Renewable Energies and Sustainable Development (GED) <i>Discussion</i>
15:00 – 15:20	TEA/COFEE Break
15:20 – 16:45	Session C - Sharing of Experiences: What are the key concerns, challenges and opportunities with implementing adaptation projects?
	<i>Discussion Groups as selected by participants:</i> <ul style="list-style-type: none"> ▪ Adaptation in Mozambique (<i>Facilitator:</i> Albertina Bambaige, GED) ▪ Engaging Local Communities in Adaptation (<i>Facilitator:</i> Maggie Opondo, CSTI) ▪ Monitoring and Evaluation (<i>Facilitator:</i> Pierre Mukheibir, University of Cape Town)
16:50 – 17:00	Reconvene in Plenary – Plan for Day 2 <i>Chair:</i> Stef Raubenheimer

Day Ends @ 17:00

Wednesday, April 25, 2007

Overcoming Challenges

08:30 – 09:00	Registration
Session D – Opening of second day	
09:00 – 09:10	Opening, Plan for Day 2 and summary of main points of DAY1 <i>Chairs:</i> John Drexhage (IISD) / Stef Raubenheimer (SSN)
09:10 – 09:25	Report back from the Break-Out Groups
09:25 – 09:30	Introduction to Session E – John Drexhage, IISD
Session E – Overcoming Challenges	
09:30 – 11:00	Plenary Session 1: Tools and Techniques to identify, select and implement adaptation projects <i>Chair:</i> Steve Thorne, SSN
	<i>Exercise:</i> Project Management and Adaptation <i>Case Study/Practice Inputs:</i> <ul style="list-style-type: none"> ▪ Tools and Processes for Adaptation Anne Hammill, IISD ▪ SSNAPP Methodology Lwandle Mqadi, SSN ▪ Rooibos Tea Case Study Adele Arendse / Rosa Blaauw, SSN <i>Discussion</i>
11:00 – 11:20	TEA/COFFEE Break
11:20 – 13:30	Plenary Session 2: Panel Discussion: Building Adaptation into Policy Making <i>Chair:</i> John Drexhage, IISD
	<i>Panel Inputs:</i> <ul style="list-style-type: none"> ▪ Adaptation in Mozambique Antonio Mavie, Famine Early Warning System (FEWS-NET) ▪ Community Level Adaptation for Policy Makers Lawrence Flint, Environment and Development Action in the Third World (ENDA) ▪ Adaptation in Tanzania Oscar Kibazohi (EPMS) <i>Discussion</i>
12:30 – 13:30	LUNCH

13:30 – 15:00	Plenary Session 3: Financing Adaptation <i>Chair:</i> Jo-Ellen Parry, IISD
	<p><i>Presentations:</i></p> <ul style="list-style-type: none"> ▪ Saleemul Huq, International Institute for Environment and Development ▪ Daniel Fieller, UK Foreign Commonwealth Office ▪ Andrew Maclean, UK Department for International Development ▪ Antonio Serra, EnviroTrade <p><i>Discussion</i></p>
Session F – Closing of Meeting	
15:00 – 15:30	Building a Community of Practice in Adaptation & Wrap Up <i>Chairs:</i> John Drexhage (IISD) and Stefan Raubenheimer (SSN)

Day Ends @ 15:30

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