

# IDRC/CCAA CAPACITY BUILDING WORKSHOP ON "INTEGRATED CLIMATE RISK ASSESSMENT"

# **WORKSHOP REPORT**



27 - 31 August 2007, Windsor Hotel, Nairobi

# IDRC/CCAA CAPACITY BUILDING WORKSHOP ON "INTEGRATED CLIMATE RISK ASSESSMENT" WORKSHOP REPORT

# **TABLE OF CONTENTS**

# Title

## Page

	Table of contents
1.0	Background
1.1	Workshop Objectives
1.2	Workshop Approach and Strategy
1.3	Opening of the Workshop
2.0	Structure of the Training Modules and Sessions
2.1	Module 1: Introduction and General Concepts on Risk Management
2.2	Module 2: Methodology and Tools for Integrated Climate Risk Management
2.3	Module 3: Adaptation Strategies to Climate Change
2.4	Module 4: Mainstreaming Climate Risk Management into Development
	Strategies
2.4.1	Field Excursion
2.4.2	Demonstration Climate Risk Management Activities at ICPAC
2.5	Module 5: Lesson Learned and Workshop Evaluation
3.0	Workshop Evaluation
3.1	Final evaluation of the workshop
3.2	Results of the Responses to the questionnaire for Participants
3.3	Proposed follow up Measures
	ANNEXES
	Annex I: WORKSHOP PROGRAMME
	Annex II: List of Participants

# 1.0 Background

According to the latest IPCC Assessment Report released in 2007(AR4), the Africa region still stands out as the most vulnerable continent. This has continued to confirm that threat of climate change is real, and Africa together with the other developing countries are expected to be hit hardest due to the current high vulnerability and low coping capacity levels. The limited adaptive capacity of Africa to climate change has been noted as key factor in continent's high vulnerability to climate change. Thus there is urgent need to strengthen the adaptive capacities of all stakeholders in Africa including researchers, policy makers, community groups, etc in order to collectively develop strategies for reducing vulnerability to the adverse impacts of climate change, and to seize the opportunities that climate change may present.

Climate Change Adaptation in Africa Programme (CCAA) of the Canada's International Development Research Centre (IDRC) aims are (a) to support research that is African-led, relevant, and that translates improved understanding into appropriate policies and action; (b) to enhance the capacity of individuals and institutions, as well as for learning, development and governance. These efforts are expected to help in creating a pool of climate change researchers and integrate the institutions in to the wider international academic community. CCAA has education and training activities that are delivered through capacity building workshops, hands-on training awards and Fellowships.

This document provides a summary of the report of the Integrated Climate Risk Assessment workshop that was aimed at providing CCAA projects proponents with foundations of the science of climate change, vulnerability and adaptation assessments and research methods. The capacity building workshop was conducted between  $27 - 31^{st}$  August 2007 in Nairobi. Details of the workshop objectives are highlighted in the next section.

# 1.1 Workshop Objectives

The main objective of the CCAA Capacity Development workshop on **Integrated Climate Risk Assessment** is to provide a basic climate change background to CCAA projects proponents by bringing together concepts and methodologies drawn from both the natural and social sciences in analysis of risk and for developing policies and response measures to manage and adapt to such risks. Integrated Climate Risk Management concept notes the difficulties in separating the boundaries between climate variability and climate change and therefore integrates the challenges associated with coping with current climate variability as well as adaptation to future changes in climate.

The workshop was conducted around six major themes: vulnerability assessment, adaptation evaluation, stakeholder analysis and engagement, climate risk assessment, sectoral impact assessment, and integrated regional assessment. The workshop also covered the science of climate change, vulnerability and adaptation assessments and research methods. The themes and emphasis of the workshop places understanding vulnerability at the center of assessment, engages stakeholders in the assessment process, and gives priority to generation and communication of information relevant to adaptation decisions of stakeholders and mainstreaming climate into development.

The IGAD Climate prediction and Applications Centre (**ICPAC**) and the Regional Centre for Agrometeorology and Hydrometeorology (**AGRHYMET**) in Niger were the coordinating institutions for the English and French components of the workshops. The Laboratory of Atmospheric and Ocean Physics at University Cheikh Anta Diop Dakar was the Lead Institution. The three institutions worked closely in order to ensure that the proponents got exposed to all French and English speaking experts and training materials.

A part from the CCAA projects proponents, the workshop was also attended by coordinators of the other CCAA workshops, experts from CCAA secretariat in Nairobi, experts from several English and French speaking countries of Africa among others. Strong support was also provided by a consultant from Canada Dr. Stephen Tyler of the Adaptive Resource Management Ltd.

# **1.2** Workshop Approach and Strategy

The overall approach of the training workshop was through an integrated action and participatory approach. The entire workshop was based on development of capacities with direct and active contribution of all the participants. This approach was generally driven by short presentations, interventions by participants, practical exercises together with demonstration and case studies.

The sessions had plenary sessions where the two groups were put together and a small break out groups where the participants shared their lessons-learnt and experiences. Common presentations were mainly given under plenary sessions and translation from English to French and French to English was made possible during these plenary sessions. Each Participant was given the opportunity to provide his/her personal and national lessons and experiences, way forward and suggestions on the specific issues being addressed. This enabled all participants to contribute as much as possible during practical exercises and case studies as well as in other sessions.

Creativity and innovation in the delivery of the workshop presentation was encouraged during the entire workshop proceedings. To ensure the originality and participatory form of the training material, contributions from participants was emphasized while sharing of experiences from the people in project teams was also encouraged. Participants were expected to contribute to the training manual that will include background reading material and the learning package. The slide presentations from the experts were also limited to a maximum of five. Each presentation was followed by comments from a group of discussants who tried to chip in the key issues of the session topic that might have been missed by the expert during their presentation. Progress evaluations were taken twice within the week while a final evaluation was done at the end of the workshop. A part from self assessment by the French and English speaking groups, the over all workshop assessment was undertaken by Dr. Stephen Tyler of Adaptive Resource Management.

# **1.3** Opening of the Workshop

The workshop was given a high level publicity. It was opened by the Permanent Secretary in the Ministry of Environment and Natural Resources, Prof James L Ole Kiyiapi. The official opening session was also addressed the Director of Kenya Met Department, who is also the Permanent Representative of Kenya to WMO, Dr Joseph Mukabana, representatives of CCAA and IDRC who included Dr. Antony Nyong, Jabavu Nkomo among others.

Prof James L Ole Kiyiapi and, Dr Joseph Mukabana both greatly appreciated and recognized the unique home grown research based solutions strategy of CCAA. They thanked IDRC/CCAA for the support that they have provided not only to Kenya but the whole of Africa to be able cope with the current climate and adapt even better to future changes in climate change.

Prof Ole Kiyiapi particularly emphasized the need to bring policy makers to be part and parcel in the climate change issues and linkages should be put in place between policy relevant research and the people at risk. Other issues mentioned in their speeches included the following:

- Need for capacity building in climate change research in order to attain the critical mass
- Strengthen the institutional framework to deal with climate change and adaptation issues
- Carry out policy relevant research
- Find solutions to adapt to the ever changing climate

The Guest of Hounour thanked IDRC for great support that they have provided to building research capacity in Africa. He noted that he is one of the products of IDRC investments in Africa since his Ph.D education was funded by IDRC. He advised the CCAA research proponents to ensure that they help Africa develop innovative solutions to the challenges of climate change that the continent is facing.

# 2.0 Structure of the Training Modules and Sessions

This section describes the structure of the workshop contents. The workshop had five (5) modules that were spread over eleven (11) sessions. A brief description of the presentations and contents for each of the modules is highlighted in the sections below.

# 2.1 Module 1: Introduction and General Concepts on Risk Management

This module focused on the general concepts of risk management with specific reference to climate risk management. The basic concepts regarding integrated climate risk management and Integrated disaster risk reduction strategies were also introduced in this module. The topics covered under this module include Workshop presentation and expectations; a presentation from CCAA; General Presentation on Concept of risk; Risk on insurance; Risk perception by stakeholders; Climate risk management; Experiences and Lessons leant from participants. These topics were spread over two sessions.

The focus for **Session 1** was to provide the participants with an overall introduction of the different concepts and methodologies of risk and climate risk management. Most locations are exposed to various types of climate hazards at the same time or at different times. These include rapid and slow onset climate hazards such as floods and droughts. It has also been observed that the society is often exposed non climate hazards including natural and human induced threats such as Earthquakes, Tsunami, forest fires, chemical pollution, etc. The basic concepts of integrated climate risk management and integrated disaster risk reduction were also addressed in this session. These concepts were drawn from both the natural and social sciences in analysis of climate risk. Under this session, the definition of Risk, its Pervasiveness and the acceptable of risky decisions was outlined. The risk associated with the most acceptable option was defined as an acceptable risk.

The session noted that the climate change risk is a function of changing climate hazards, together with the vulnerability and adaptive capacity. The session highlighted the different types of climate related Hazards that people are usually exposed to. Clear distinction was made between climate variability and change based on the available national, and regional climate information, and the results from the recent IPCC fourth assessment report.

It was noted that extremes Climate variability such floods and droughts are very common in Africa. Their frequency and magnitudes have been found to increasing due to changing climate. It was highlighted in this session that climate is closely linked with most environment resources that derive the local livelihoods and socio-economic systems including health, water resources agriculture/food security, water, hydro-energy, wildlife and tourism, among many others. Climatic variability, especially climate extremes that often lead to disasters have far reaching environmental and socio-economic impacts as is often witnessed during the periods of floods and droughts, especially in the developing countries such as Africa.

It was concluded that the society cannot run away from the climate hazards of the specific environment where they live. The only way forward for having sustainable environment and socio-economic systems is to strengthen the capacity of the society and reduce their vulnerability in order to enable them cope effectively with the current climate extremes and as well be able to adapt to the negative impacts of the future climate changes.

The focus for **Session 2** of this module was on climate change and it set the scene for this workshop. Briefly, this session examined the fundamentals of climate change which included climate change science, especially detection and attributions, with special reference to human induced causes of climate change. It also addressed issues related to the impacts, mitigation, vulnerability and adaptation. The key presentations by the experts in this session included among others:

- General presentation of climate change (detection and attribution, impacts, mitigation and adaptation)
- UNFCCC and his instruments: Millennium development goals; NAPA; the Nairobi Programme of work for Impacts, Vulnerability and adaptation; Kyoto Protocol ; National Communications; Hyogo Framework for Disaster Risk Reduction by 2015, etc
- Experiences and lessons learnt, discussions and synthesis
- General concept on climate change adaptation strategy
- Integrated climate risk management;
- Integrated disaster risk reduction strategies;
- Climate risks and vulnerability on key sectors in Africa including agriculture, health, water resources, economy, peace and security, etc.

Other critical issues in Africa that were identified during the various discussions included issues related to data and limited observations, the role of science and technology, and improved research in climate change mitigation, impacts, vulnerability and adaptation; challenges of the fast growing urbanization, shared environment resources, duplications of many climate change efforts and activities; and the disconnection between research, policy and the vulnerable communities may hinder mitigation and adaptation process in Africa.

# 2.2 Module 2: Methodology and Tools for Integrated Climate Risk Management

This module was mainly devoted to providing the methodology and tools for integrated climate risk management. The module was divided into **Three Sessions**, namely Climate Risks Evaluation Methods, Climate Risks Evaluation Tools; and some Case studies examples. The session on Climate Risks Evaluation Methods covered the following topics among others:

- Risk evaluation methods
- Impact assessment methods
- Vulnerability assessment
- Sectors: agriculture, health, water resources, economy, etc
- Experiences and lessons, discussions and synthesis

Climate change impacts, adaptations, and vulnerability draws on a wide range of physical, biological, and social science disciplines and consequently employs an enormous variety of methods and tools. Impact assessments evaluate the potential effects of one or several climate change scenarios on one or more impact domains, and compare them to some climate scenarios. The basic underlying dimensions for evaluation of risks include the identifying hazards, vulnerability, and coping capacity. The focus should also be on how Climate Change affects the livelihood of local communities at risk.

The focus for **Session 4** presented the Climate Risk Evaluation Tools. The topics covered under this session were as follows

- Socio-economic scenarios
- Global and Regional Climate Scenarios;
- Downscaling/upscaling of climate variability and change
- Data quality and duration: Data sources and limitations, Proxy climate data including paleo climate data; climate data requirement for specific sector applications
- Remote Sensing; GIS and Vulnerability mapping

The focus for **Session 5** was on Case Studies and Wrap up. This session was devoted to looking lessons and experiences of the specific including those from AGRHYMET, ICPAC as well as from the participants. The two institutions highlighted some of the activities that take place within their various institutions while the participants gave a synthesis of what they have so far learnt from the different Modules and Sessions already covered. The session was concluded by giving the participants a chance to share their experiences on vulnerability, hazards and capacity.

# 2.3 Module 3: Adaptation Strategies to Climate Change

This Module was devoted to climate change adaptation strategies. The adaptation strategies topics were covered under session 6 and included:

- General framework for climate change adaptation strategy
- Adaptation in development policies and planning
- Success Stories and Failures in Adaptation
- Discussions and synthesis from Participants

The focus for **Session 6** was to present to the participants the general concepts on climate change adaptation and various strategies available for adaptation. The participants were informed that weather and climate usually have extreme events such as the occurrences of either too much or too little rainfall and people must develop ways of coping (*Adaptation*) with these extreme variations if they are to survive in the event of climate change. Adaptation was said to be the process of improving society's ability to cope with changes in climatic conditions across time scales, from the short term (e.g., seasonal to annual) to the long term (e.g., decades to centuries).

The ultimate goal of adaptation is to develop flexible and resilient societies and economies that have the capacity to address both the challenges and the opportunities presented by changing climatic conditions. From an integrated point of view that takes into account impacts on both the natural environment and society, adaptation may also be seen as those measures that enable the natural systems and communities to cope with the adverse effects of climate variability and change.

It was noted that adaptation to climate change requires putting in place relevant policies that deal with specific adaptation issues. The possible strategies to climate change policies need therefore take into account some of the basic environment, poverty reduction, socio-economic challenges. It also requires close integration of various sector specific policies including those related to a wide spectrum of sectors such as:

- Water resource
- Energy
- Health
- Agriculture and Food security including possible production technologies (date of sowing, varietals choice, fertilizer etc)
- Tourism, Wildlife and Hotel Industry
- Economic and Industrial development
- Urbanization
- Disaster risk reduction
- Human Settlement, infrastructure development, etc.

Examples of the success stories and failures in climate risk management were presented by ICPAC and the participants

# 2.3.1 ICPAC and Integrated Climate Risk Management

ICPAC presented their experiences and lessons regarding Integrated Climate Risk Management. They noted that climate affects agriculture, water, health, energy, tourism among many others. The agricultural parameters influenced by climate include Land preparation and sowing, choice of crop, planting density, timing of fertilizer and pesticides application and harvest dates. They also noted that water is renewable resource and naturally recycles itself into liquid, solid and vapour forms. Climate change could change natural water cycle that would lead to changes in water quality and occurrences of too little or too much water resources as is sometimes evident during floods and droughts. Climate change adaptation information is essential for sustainable management of water resources. Climate must therefore be integrated into climate sensitive sectors for risk management and sustainable development. Their lessons / experiences that were presented extended over wide areas including data bases; pilot application research; capacity building, risk and hazards mapping; climate change modelling including down scaling of regional climate change scenarios; prediction and early warning among others.

For example, ICPAC highlighted the success story related to the 1999/01 La Nina drought that was forecasted in advance and an early warning issued. Although the 1999-2001 drought was most severe from historical records at several locations, the impacts were relatively less due to the use of the ICPAC information for timely interventions.

In this session, the participants were also able to share some of their experiences with regard to adaptation issues. Some of the examples are presented below:

**Experience from Nigeria**: Despite the appropriate government machinery that facilitates adaptation for contingency response to hazards. Climate hazards still pose serious threats to national development. There are also limited capacity and effective policies for adaptation within the country.

In **Tanzania**, the Ministry of Disaster Management is an authoritative body; however, the ministry is under staffed and lacks capacity to implement those adaptation strategies in place. The meteorological stations in Tanzania record only few parameters, while most stations are closed due to lack of financial support. No integrated policies exist for integrated climate risk management.

The **South African Weather Service** (SWS) provides weather and long lead climate forecasting based on a widespread network of ground, oceanic and upper air data through using ensemble models. The institute also provides assistance to the SADC member countries. Data quality has been found a serious problem, however. Swaziland Department of Meteorology and SWS have an agreement to share the data. South Africa has some capacity when compared to most African countries, but climate hazards is still a key threat to most socio-economic systems and therefore poses a major challenge to economic development.

In **Uganda**, climate information communication to the farmers is effected using 'English' media. The fact that farmers in most areas do not understand the English language is hinders the effective communication. On the other hand, Uganda has an enormous experience in using RANet for communication of climate information, from which the rest of African countries can learn. Uganda does not have an integrated climate risk management policies.

# 2.4 Module 4: Mainstreaming Climate Risk Management into Development Strategies

This Module broadly looked at Climate Risk Management and strategies of coping and adapting to these risks. The module was divided into three sessions namely **sessions 7, 8** and **9** that covered mainstreaming climate risk management in development strategies, field excursion and hands on demonstration of climate risk management activities at ICPAC. The topics covered under **Session 7** on mainstreaming of climate in risk management included:

- Mainstream climate into development
- Integrated Climate Risk Management (ICRM)
- Policy Aspects of Climate Risk Management
- Use of Indigenous knowledge (IK)
- Experience of the Maasai community

On the topic of Integrated Climate Risk Management (ICRM), close linkages between climate, environment resources, and development discussed. It was noted that climate impacts on the quality and renewability of many environment resources that derive the local livelihoods and socio-economic systems including health, water resources agriculture /food security, water, hydro-energy, wild life and tourism, among many others. Climatic variability, especially climate extremes thus often lead to disasters with far reaching environmental, and socio-economic impacts, as is often witnessed during the periods of floods and droughts, especially in the developing countries such as Africa.

Recent UNISDR assessments indicate that in the 20<sup>th</sup> century, disasters associated with climate related hazards have been estimated to be seven times as frequent as those involving non climatic factors. Hazards globally and accounted for nine times as many deaths. The economic losses associated with climatic hazards were three times higher than those associated with non climatic hazards and the number of people affected 55 times greater. These impacts affect the ability of developing countries to achieve Millennium Development Goals. Due to the multi-hazard nature of the climate risks, no single sector can manage these disasters as an entity and therefore it requires an integrated approach where various sectors work together to manage the risks.

It was noted that Climate risk management is successfully being used in the AGRHYMET centre in West Africa. The centre was created at the aftermath of the early 70's drought in the Sahel. Nine member countries :Burkina Faso, Chad, Cape Verde, The Gambia, Guinea Bissau, Mali, Mauritania, Niger, and Senegal. The AGRHYMET Centre, a specialized institution created in 1974 and contributes to a sustainable food security and a rational natural resources management. The centre has a strong National Multidisciplinary Working Group whose work among others is to gather different scientists with good abilities in agriculture, meteorology, water resources, Plant Protection, agricultural statisticians and Food nutritionists. They focus on the analysis of the rainy season to give awareness to decision makers.

Issues related to the use of Indigenous Knowledge (IK) in climate risk management was also addressed in the session. Some examples of common practice currently being used by some communities in Kenya were presented.

It was noted that some communities in Kenya monitor and predict climate variability and change through use of Plants, Animals, Birds, Insects, Stars, the moon, Wind, clouds, water sprout and lightning and Temperature. Examples were also given for other parts of Africa. Some experiences of climate change information was narrated using some of the drying rivers and swamps, Shrinking lakes or the Disappearance of plant, animal and bird species, etc. The IK presentation was followed by the participants visiting Maasai land to practically see how vulnerable community is using IK to address climate related challenges.

# 2.4.1 Field Excursion

**Session 8** was devoted to field excursion to Kajiado in Masaai Land. The idea was to expose the participants into seeing the practical ways of how a community is coping with changing climate patterns. The excursion took the participants to Maasai Land in Kajiado District of Kenya. The Maasai region visited included Oiti and Murantawua clans. The Oiti and Murantawua of the Masaai communities make up for the 13 villages in Lorngosua location, of Kajiado District that are some of the most prone communities to drought in Kenya.

The Masaai communities depend solely on livestock for their livelihoods. The main use of land is nomadic pastoralists which are seen as the most efficient method of exploiting the range lands. The extremely depleting natural resources as a result of recurrent drought that render almost impossible the problem of uplifting the standard of living of the population. These communities have found strategies for adapting to changes in climate through digging of deep boreholes to water their cattle and for domestic purposes. Both communities share one earth dam constructed some years ago through their own self-help project, which is not reliable due to its small size and the erratic rainfall patterns. They have shallow water wells, about 3-4 km away, are running dry due to changes in climate. The nearest water points are at least 10km away.

New and more vulnerable land use activities that include agriculture are now being introduced in Masaai land. Some of the community lands are also being subdivided into smaller units thus restricting their traditional nomadic way of life. These often lead to serious conflicts during droughts seasons. The two comminutes seem to indicate that the droughts are becoming more frequent.

The participants were amazed at how the Maasai communities are able to cope with the harsh climatic conditions of the area and the ever changing climate. It was an educative trip. Below are some of the pictures taken in the area during the visit to Masaai land.



Participants arriving at one of the market centres in Kajiado.



Environmental conditions in Kajiado.



Human dug wells for livestock and domestic use in Kajiado.



Posing with the Maasai community in Kajiado.

One of the big lessons learnt from the field excursion was the diversity of Indigenous Knowledge (IK) that is being used by the local community. The plenary session was conducted after the field trip. The Maasai experience was a key focus of the plenary session after the field mission. IK experiences from the other countries were also presented by some participants. The session called for the need to integrate IK with modern science, and importance on integrating IK in climate risk management activities.

# 2.4.2 Demonstration Climate Risk Management Activities at ICPAC

In **Session 9**, the participants were taken to ICPAC for the ddemonstration of various climate risk management activities that are being undertaken at the centre. The participants were also exposed to different facilities, publication and informative posters that are available at the institution as part of the demonstration on Integrated Climate Risk Management. It was agreed that ICPAC has useful facilities that should be availed for capacity building in climate risk management in Africa. ICPAC agreed to offer the existing facility to any individual, country or institution that may wish to use it. Some of the photographs taken during the visit to ICPAC are shown below.



The first photograph shows Prof. Ogallo explaining a point to one of the participants from South Africa while in the second; Dr. Stephen Tyler listens attentively to one of the Pre-COF discussions at ICPAC.



Participants touring the facilities at ICPAC.

# 2.5 Module 5: Lesson Learned and Workshop Evaluation

This Module broadly termed as lessons learned and conclusion from the workshop had two sessions or components, namely, **Session 10** that looked at the capacity gained by the various projects while **Session 11** examined the actions needed as a follow up need to this workshop.

Under **session 10**, the capacity, experience lessons learnt and benefits gained from the various CCAA funded projects were presented and discussed by the project team leaders. These projects are briefly listed below:

- Building Adaptive Capacity to Cope With Increasing Vulnerability Due To Climatic Change in Zambia and Zimbabwe. The overall objectives were to develop education, research and extension competencies to be able to create strategies that facilitate rural communities to increase their adaptive capacity to cope with risks and opportunities associated with climate change and variability.
- Managing climate Risk for Agriculture and Water Resources Development in South Africa. The project Objectives was to look at two significant problems related to adaptation to climate change in the water resources sector of African countries.
- **Transferring Malaria Epidemics Prediction Model to End-Users in East Africa.** The Objectives of the project is to build capacity in East African Countries: Kenya, Uganda and Tanzania, to use the model at operational level. The Collaborating Agencies are the Ministry of Health (MoH) and Kenya Meteorological Services (KMD).

# **3.0** Workshop Evaluation

**Session 11** was devoted to Workshop Evaluation. It was envisaged that at the end of the workshop, the participants should be able to do the following:

- Acquire new knowledge in assessment and integration of climate risk;
- Acquire new skills in climate change adaptation and ability to write better projects
- Enhance their ability to assess the quality of information and analyses on Climate change risks and concrete adaptation strategies;
- Have the ability to mainstream climate risk management and adaptation into strategic planning at macro-economic planning levels as well as at national and regional levels and for Institutions;
- Have developed a critical mass of experts in integrated climate risk management selfreliant and able to identify, analyze and assist stakeholders to manage climate related risks and anticipate climate risk extremes;

To ensure that the workshop achieved its objectives, there was a built in evaluation process at various stages of the workshop. Workshop evaluation was done during 2 sessions: mid-term session and end of the meeting. Evaluation forms were distributed to the participants and they were asked to make comments on their observations as candidly as possible. The evaluation process was to consider various items as listed below:

- Overview/General considerations
- Evaluation of the objectives of the workshop, its design and structure
- Evaluation of training material and style of presentations
- Evaluation of Interactive sessions, field trip session and facilities

The workshop managers (Lead and Collaborating Institutions) synthesized the information and gave presentations on the results of the evaluations during the plenary sessions.

# **3.1** Final evaluation of the workshop

In addition to the built in evaluation of the achievements of the workshop, a structured final evaluation was also carried out. Participants were requested to provide a feedback that would improve future workshops. They were requested to fill the questionnaire which given below. The results of their feedback are presented at the end of this section.

# Circle one response for each question, with 0 the lowest / most negative and 3 the highest / most positive rating. Thank you!

- 1. This workshop met my expectations in terms of content and learning.0123
- 2. The format of the workshop allowed me to share my knowledge and experience effectively.

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	0	1	2	3

**3.** I will be able to take away some specific ideas or suggestions for my organization to consider from this workshop.

			0	1	2	3
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**Comments:** 

What would have improved this workshop for you?

Do you have any specific suggestions for the Climate Change Adaptation in Africa program, in regards to its activities funding research, building capacity and sharing knowledge?

To which group do you belong (please circle the one that fits best)

Researcher	<b>Regional or</b>	National government	Other
	international	agency	
	organization		

Which region of Africa do you work most in:

North	West /Central	East	South
			•



# **3.2** Results of the Responses to the questionnaire for Participants

Response from participants of the climate risk management workshop

The following were some of the key issues that the participants would have **liked to see more** during the coming workshops:

- Better information in advance of the workshop
- Documentary summaries of historical situation in advance to save time in presentations
- More specific sectoral examples from different countries (risk assessment, tools application, successes and failures)
- Group exercises, work on practical examples (e.g. using software)
- Sharing of cases and relevant websites
- Examples of data treatment for application in models
- Step-by-step integrated risk assessment (with examples)
- Modeling and risk assessment for adaptation
- Scenario building
- Discussion of *processes* of adaptation and innovation with stakeholders, rather than just analytical methods
- Application of tools and methods with vulnerable groups
- Presentations oriented to the topics covered in CCAA projects
- Better explanation of the purpose, themes, issues covered in field visits
- Round-table discussions in small groups
- More translation of discussions
- Examples of agricultural adaptation in dryland farming systems

The following were some of the key issues that the participants would have **liked to see less** during the coming workshops:

- Presentations (should be shorter, fewer)
- Climate science and theory
- General background
- Science of assessment (in the context of more on *process of adaptation*)
- Discussions were dominated by a small number of people

## Individual concerns:

- Difficult location: minor shopping or variety of dining experiences impossible
- Division of groups (Francophone / Anglophone) may have missed some useful interactions
- Workshop was too long (3 days max)

# **3.3** Proposed follow up Measures

The following were some of the proposals made on the follow up measures with the participants of the workshop:

- Regular updates and information sharing (CCAA, ICPAC)
- Continuing networking with participants and info sharing: website?
- Exchange visits between projects / sites
- Documentary support for exchanging case study info
- Workshops / training / collaboration on modeling
- Workshops specifically for policy makers
- Workshops to facilitate research-policy maker interaction and awareness (national, regional, Africa)
- Workshops on decentralization / governance and CC with policy-makers
- Tutorials for risk management, scenario building and vulnerability mapping
- Opportunities to develop future joint research proposals
- Interactions with vulnerable groups on adaptation issues
- Additional funding from IDRC for detailed climate data acquisition
- Support for curriculum development
- Regional workshops
- Networking :
- Regional thematic workshops :
- climate models, scenarios (delivery, training, research)
- Field schools for vulnerability, adaptation: case studies?
- Development of learning contracts with participants (UCAD/AGRHYMET/ICPAC)?
- Need to develop communication, knowledge and public awareness strategies
- Issue of publication
- Engagement with Policy makers, local communities
- Data/methods exchanges between projects;
- Learn lessons, web site, email list, Newsletter,
- How to share information, tools, data e.t.c

# ANNEXES Annex I: WORKSHOP PROGRAMME

# IDRC/CCAA INTEGRATED CLIMATE RISK ASSESSMENT WORKSHOP NAIROBI, AUGUST 27-31 PROGRAMME

Time	Activity	Location	Facilitator
8.00-9.00	Registration		CCAA/ICPAC
9.00-10.30	Session 0: Opening Ceremony Master of Ceremony: Jabavu C. Nkomo Welcome remarks: Anthony Nyong, IDRC/CCAA Remarks on behalf of CCAA: Prof Shem Wandiga Remarks by workshop coodinator: Dr A. Gaye, UCAD Remarks by Director of Kenya Met Department, PR Kenya WMO, Dr Joseph Mukabana Guest of Honor: Permanent Secretary Ministry of Environment and Natural Resources: Pr James L Ole Kiyiapi; Invited presentation on Kenyan experience	Plenary	MC: Dr J.C. Nkomo
10.00-10.30	Group picture /Coffee Break		
10.30-13.00	Presentation of CCAA (Dr A. Nyong) workshop presentation and expectations (A. Gaye) Session 1: General concept on risk management - General presentation on Concept of risk; Risk on insurance (Prof Peter K'obonyo); - Risk perception by stakeholders (Dr M. Badolo); - Climate risk management (Prof L. Ogallo) Experiences and lessons (participants) Synthesis/report (group discussion report)	Plenary 10 mn per presentation	Chair:Prof Shem Wandiga Rapporteurs:1 French and 1 English Dr. Abdalla, Sudan
13.00-14.00	Lunch		
14.00-15.45	Session 2: Setting the scene: Climate Change context - General presentation of climate change (causes, impacts, adaptation, mitigation) - UNFCCC and his instruments: Kyoto Protocol, CDM, NAPA, National Communications (Prof. Ng'ang'a) - Experiences and lessons, discussions and synthesis	Groups	Chair: Mr. Okia Rapporteur: Dr. Kola Adebayo
15.45-16.00	Coffee/tea Break		
16.00-17.30	Session 2 (cont.) - Integrated climate risk management; (Prof. Ng'ang'a) - Vulnerability on sectors: agriculture, health, water resources, economy,(Prof. Ogallo) - Discussions Wrap up and evaluation	Groups	Chair: Mr. Okia Rapporteur: Dr. Kola Adebayo
17.30-18.00	Meeting of workshop coordinators		UCAD/AGRH/ICPAC
<b>RECEPTION I</b>	DINNER		]

# DAY 1 : Monday AUG 27, 2007

DAY 2 : TUES	DAY 28 AUG 2007		
9.00 - 9.30	Group wrap up exchanges	Groups	UCAD/AGRH/ICPAC
9.30 - 10.30	Session 3: Climate risks evaluation methods Impact assessment (Mr. Nyakwada) vulnerability assessment in context of climate (Prof. Odingo)	Groups	Chair: Ms Ekaete Cynthia Dolor, Nigeria Rapporteur: Mr. Paul Isabirye, Uganda
10.30-11.00	Coffee Break and interactions		
11.00- 13.00	Session 3 (cont.) Experiences and lessons, discussions and synthesis sectors: agriculture, health, water resources, economy,	Groups	Chair: Ms Ekaete Cynthia Dolor, Nigeria Rapporteur: Mr. Paul Isabirye, Uganda
13.00-14.00	Lunch		
14.00-15.30	Session 4: Climate Risk evaluation toolsSocio-economic scenarios (Prof. Odingo)Global and regional climate scenarios; (Dr. Oludhe)Downscaling/upscaling of climate variability and change (Dr.Oludhe)Data sources, availability and quality: climate data for specificsector (Dr. Ouma)Remote Sensing and GIS (Dr. Ouma)Vulnerability mapping (Dr. Ouma)	Groups	Chair: Dr. Daniel Barend Louw Rapporteur: Ms. Harriet Jenala Gausi
15.30-16.00	Coffee Break and interactions		
16.00-17.30	Session 5: Case studies Case studies Sectors by sectors (AGHRHYMET, ICPAC, participants) Wrap up and evaluation	Groups	Chair: Dr. Daniel Barend Louw Rapporteur: Ms. Harriet Jenala Gausi
17.30-18.00	meeting of workshop coordinators		
DAY 3 : WED	NESDAY 29 AUGUST 2007		
9.00 - 9.30	Group wrap up exchanges		
9.30 - 10.30	Session 6: Adaptation strategies General concept on climate change adaptation strategy (Prof. Odingo) Adaptation in development policies and planning (Prof. Odingo) Integrated Climate risk management (Prof. Ogallo) Success stories and failures (AGHRHYMET, ICPAC, participants) Discussions and Synthesis(AGHRHYMET, ICPAC, participants)	Groups	Chair: <b>Dr. Regis Chikowo</b> Rapporteur:
10.30-11.00	Coffee Break and interactions		
11.00- 12.00	Session 6 (cont.) Mid-term evaluation questionnaire (UCAD/AGRH/ICPAC)	Groups	Chair: <b>Dr. Stephen Tyler</b>
12.00-13.00	Lunch		
13.00-18.00	Session 7: Field Excursion	Groups	ICPAC

DAY 4: THUR	RSDAY 30 AUGUST 2007		
9.00 - 9.30	Group wrap up exchanges	Groups	
9.30 - 10.30	Session 8: MainstreamingIntegrated Climate risk management (B. SOME)Indigenous knowledge (W. Nyakwada)Presentation of policy makers (2 participants)discussionsContribution of vulnerable people representative (Major Sane)Presentation of research management person (2 participants)Public awareness and dissemination (participants)Mainstreaming climate risk in development (participants)	Plenary 10 mn presentatio ns	Chair: Mr. Bertrand Van Zyl Rapporteur: Ms. Grace Edison Ogolo
10.30-11.00	Coffee Break and interactions		
11.00- 12.30	Session 8 (cont.)		
12.30-14.00	Lunch and travel to ICPAC		
14.00-17.00	Session 9: Integrated Climate Risk Management demos (ICRM) ICRM demonstration at ICPAC	Groups	ICPAC
17.00-17.30	Wrap up	plenary	UCAD/AGRH/ICPAC
17.30-18.00	Meeting of workshop coordinators		Dr. Stephen Tyler
DAY 5 : FRID	AY 31 AUGUST 2007		
9.00 - 9.30	Group wrap up exchanges	Groups	
9.30 - 10.30	Session 10: Capacity gained and benefits by the projects CCAA Brief on funded project (CCAA) (Mr. J. C. Nkomo) presentation by project teams including follow up needs	Plenary	Chair: Mr. J. C. Nkomo Rapporteurs: Ms. Grace Edison Ogolo
10.30-11.00	Coffee Break and interactions		
11.00- 13.00	Session 11: Final evaluation of the workshop Comment/Discussions Closure of the workshops (CCAA	Plenary	UCAD/AGRH/ICPAC
13.00-14.00	Lunch		
14.00- 18.00	GROUP TOURS OF NAIROBI		

# **Annex II: List of Participants**

## Climate Change Adaptation in Africa Integrated Risk Assessment Workshop

27<sup>th</sup> – 31<sup>st</sup> August, 2007, Windsor Golf Club Nairobi, Kenya

#### 1. Mr. Habtamu Ayana

Ethiopian Institute of Agricultural Research P.O. Box 659, Nazreth/HADAMA, Ethiopia Tel: +251 911 919898 Fax: +251 221 114623 E-mail: <u>Habtamu.admassu@gmail.com</u> response@ethionet.et

## 2. Dr. Frederick P. Baijukya

Principal Research Scientist Agricultural Research Institute-Maruku, Tanzania P. O. Box 173, Bukoba, Tanzania Tel: (255) 787 188572 Telefax: (255) 28 2220282 Email: <u>Freddybai@yahoo.com</u>

## 3. Dr. Daniel Barend Louw

Senior Researcher University of the Free State (UOVS) Department of Agricultural P.O. Box 339, Bloemfontein, Free State, South Africa Code 9301 Tel: (27) 828573458/21 870 2953 Fax: (27) 21 870 2915 Email : daan@oabs.co.za

## 4. Mr. Hassan Benaouda

Institut National de la Recherche Agronomique, Maroc BP 415 Boulevard Ennasr, Rabat Tel : (212) 23 72 93 00/063636975 Fax : (212) 23 72 93 06 Email : <u>hbenaouda inra@yahoo.fr</u>

### 5. Mr. Bertrand Van Zyl

Catchment Manager Department of Water Affairs and Forestry P/Bag X16, Sanlamhof, 7532, Bellville, Western Cape Tel: (27) 82 807 3541/21 9507 213 Fax: (27) 21 950 7224 Email: vzylb@dwaf.gov.za

## 6. Dr. Eustache B. Bokonon-Ganta

Senior Lecturer University of Abomey-Calavi Department of Geography, BP 261 Abomey-Calavi Benin Tel: +229 9390 7583/ 9505 0894 Email: <u>bbkganta@yahoo.com</u>

#### 7. Ms. Ouafae Bouchouata

Engineer Ministry of Territorial Planning, Water and Environment (Maroc) Climate Change Services Rue Moulouya, App.12 Agdal Rabat, Fez Morocco Tel: (212) 64 07 43 99 Fax: (212) 37 77 62 46 Email: <u>ouafae\_enviro@yahoo.fr</u>

## 8. Dr. Regis Chikowo

University of Zimbabwe Department of Soil Science & Agricultural Engineering P.O. Box MP167 Mt. Pleasant, Harare, Zimbabwe Tel: (263) 912 431079/912 431979 Fax: (263) 4 307 304 Email: <u>rchikowo@agric.uz.ac.zw</u>

## 9. Ms Ekaete Cynthia Dolor

Program Officer The African Radio Drama Association (ARDA) Suite 20/20A, Tafawa Balewa Square P.O. Box 70141 Lagosm Nigeria Tel: +234 802 314 4199 +234 1 4705390 E-mail: ekadolor@yahoo.com

#### **10.** Ing. Krystel Dossou

Energy and Environment Program Coordinator OFEDI, Benin/Capacity strengthening in LOC for Adaptaion to climate change 04 BP 1530 Cadjehoun, Benin Tel: +229 90010162/90026728 Fax: +229 21350632 Email: krystod7@yahoo.fr

## **11.** Dr Dube Opha Pauline

University of Botswana Plot 4775, Nyerere Drive, P/Bag 0022, Gaborone, Botswana Tel: (267) 355 2513 Fax: (267) 355 2908 Email: <u>dubeop@mopipi.ub.bw</u> <u>dubemop@yahoo.com</u>

### 12. Dr. Abdalla Elshobali

Director of Research and Training The Sudan Meteorological Authority, Sudan P.O. Box 574 Khartoum, Sudan Tel: +249 8377 8838 Fax: +249 8377 1693 Email: khyar54@yahoo.com Khyar35@hotmail.com

## 13. Mr. Sunshine Mduduzi Gamedze

Swaziland Meteorology Department P.O. Box 4297, Mbabane, Swaziland Tel: (268) 604 5976/268 404 6274 Fax: (268) 404 1530 Email: <u>sunshine@swazimet.gov.sz</u>

#### 14. Dr. Girma Mamo

Ethiopian Institute of Agricultural Research (EIAR) P.O. Box 436, Adama, Nazreth, Ethiopia Tel: +251 911 809500/22 111 2186 Fax: +251221114623 Email: <u>mamo\_girma@yahoo.com</u>

#### 15. Prof. Abdoulaye Soumana Gouro

Director General CIRDES, Burkina Faso CIRDES, No. 559, rue 5-31, Angle Avenue du Gouverneur Louveau 01 BP 454 Bobo-Dioulasso, Burkina Faso Tel : (226) 76608945/2097 2638 2097 2287; Fax : (226) 2097 2320 Email : gouro@fasonet.bf

#### 16. Mr. Hounkponou Kolawolé Said

Project Manager Initiatives pour un Développement Intégré Durable (IDID\_ONG) 03 BP 92 Porto-Novo, République du Bénin Tel : +229 90 01 93 43/ + 229 20212417 Email : kolawoles79@yahoo.fr s.hounkponou@cgiar.org

## 17. Mr. Paul Isabirye

Principal Meteorologist Department of Meteorology, Ministry of Water and Environment, 10th Floor, Postel Building Yusuf Lule Road P.O. Box 7025, Kampala, Uganda Tel: +256) 722 592032/414 237690 Fax: (256) 414 251797 Email: paul.isabirye@meteo-uganda.net

#### 18. Mr. Crispin Pumulo Kapunda

Zambian Agricultural Research Institute Mochipapa Research Centre P.O. Box 630090, Choma, Tel: +260 032 225713 Email: <u>ckapunda@yahoo.com</u>

#### **19.** Dr. Kolawole Adebayo

Department of Agricultural Extension and Rural Development, University of Agriculture P.O. Box 2240, Abeokuta, Ogun, Nigeria Tel: (234) 8034046873/8034046873 Fax: (234) 39 243045 E-mail: kolawole\_adebayo@hotmail.com

#### 20. Prof. Lughano J. M. Kusiluka

Associate Professor of Veterinary Medicine Sokoine University of Agriculture P.O. Box 3021, Morogoro, Tanzania Tel: (255) 23 260 4542/754 436316 Fax: (255) 23 260 4647 <u>kusiluka@suanet.ac.tz</u> Ijmkusiluka@yahoo.com

## 21. Prof. Mohamed Lbour

Ministry of Education, Maroc 1 Rue Badrormvam, Berkane, Morocco Tel: (212) 3623 0850 Fax: (212) 3661 9693 Email: <u>o\_mani@hotmail.f</u>r

#### 22. Ms. Harriet Jenala Gausi

Ministry of Agriculture and Food Security Dedza Agriculture Development Office P.O. Box 137, Dedza, Malawi Tel: 265 1 223 344 265 1 223 488 Email: harrietgausi@yahoo.com

#### 23. Mr. Davison Masendeke

Agricultural Research and Extension Mhlahlandelela Gvt. Complex Bulawayo Airport Residential Area P.O. Box 1927 Bulawayo, Zimbabwe Tel: +263 9 884199 Fax: +263 9 67136 Email: davemas@mweb.co.zw

## 24. Mr. Ernest Tozamile Mbambalala

South African Weather Service Climate Service P/Bag X97, Pretoria 0001 Gauteng, South Africa Tel: +27 82 436 2956/12 367 6060 Fax: +27 12 367 6175 E-mail: ernest.mbambalala@weathersa.ca.za

#### 25. Mr. Pape Gora Ndiaye

Programme Officer on Fisheries, Coordinator of REPAO ENDA DIAPOL Villa No. 5 Liberte IV P.O. Box 7329 Dakar, Senegal Tel : (221) 644 34 73/221 825 27 87 Fax : (221) 825 27 99 Email : gndiaye@gmail.com

## 26. Prof. Badiane Daouda

Cheikh Anta DIOP/UCAD Senior Researcher LPAOSF/University CAD DAKAR LPAOSF/ESP BP 5085 DAKAR- FANN Senegal Tel: 221 825 93 64 Fax: 221 825 93 64 Email : dbadiane@ucad.sn

#### 27. Dr. Stephen Tyler

Adaptive Resource Management 2207 Arbutus Rd Victoria BC V8N N2 Canada Tel: 1 – (250) – 477 - 4931 Email : <u>adaptive@telus.net</u>

## 28. Dr. Johnson Nkem Ndi

Project Coordinator Center for International Forestry Research (CIFOR), Burkina Faso P.O. Box 06 BP 9478, Ouagadougou, Burkina Faso Tel: (226) 50 30 47 42 Fax: (226) 50 30 29 30 E-mail: j.nkem@cgiar.org

#### 29. Ms. Grace Edison Ogolo

Chief Environmental Science Officer Federal Ministry of Environment, Federal Capital Territory, E40 Flat 2, Karu-Site, Abuja, Nigeria Tel: +234 803 309 1345 Email: <u>ogolog@yahoo.com</u> <u>Grace.ogolo@yahoo.com</u>

## **30.** Mr. Michael Eluga Okia

Senior Entomologist Malaria Control Programme Ministry of Health P.O. Box 7272, Kampala, Uganda Tel: +256 712 482782 Fax: +256 41 231572/231584 E-mail: <u>blessedmike350@gmail.com/</u> <u>mikeokia@hotmail.co.uk</u>

#### **31.** Dr. Mohamed Qarro

Ecole Nationale Forestiere d'Ingenieurs 8 Place Sefrou Apprt No. 4 Hassane BP. 511, Tabrikt, SALE, Rabat 10000 Morocco Tel: (212) 61 21 08 54 Fax: (212) 37 86 11 49 Email: <u>garro@wanadoopro.ma</u>

## 32. Dr. Rakotondravelo Jean-Chrysostome

Chef de Department Agriculture Universite d'Antananarivo – Ecole Superieure des Sciences, Agronomiques (ESSA) BP 175, Antananarivo Tel : (261) 33 11 53799/(261) 32 04 38020 Email: jeanchrysagro@yahoo.fr

#### **33.** Mr. RANAIVONASY Jeannin

Department Eaux et Forets Ecole Superieure des Sciences Agronomiques BP 175, 101 Antananarivo Madagascar Tel: (261) 3411 16671 Email: <u>rhjeannin@yahoo.fr</u>

## 34. Dr. Fanuel Christopher Shechambo

Associate Director Institute of Resource Assessment University of Dar es Salaam University Road, P.O. Box 35097 Dar es Salaam, Tanzania Tel: +255 754 851507/ +255 22 2410144 Email: <u>fshechambo@ira.udsm.ac.tz/</u> <u>shechambo@yahoo.com</u>

#### 35. Dr. Bonaventure Some

Climatologist CILSS/Centre Regional Agrhymet B.P. 11011 Niamey Republique du Niger Tel : 227 20 31 53 16 Cell: 227 96 98 02 71 Fax : 227 20 31 54 35

## 36. Mr. James Sang

Programme Officer Division of Malaria – Ministry of Health P. O. Box 20750 – 00202 KNH Nairobi, Kenya Tel : 2716935; Fax : 2716935 Cell : 0722409226 Email : jsang@domckenya.or.ke sabghanes2001@yahoo.com

#### 37. Prof. Richard Samson Odingo

Professor of Geography ICPAC & University of Nairobi P. O. Box 30197 00100 GPO Nairobi Tel: 254 – 20 – 318262 Email: <u>odingo01@yahoo.com</u>

## 38. Dr. Christopher Oludhe

Lecturer University of Nairobi P. O. Box 30197 00100 GPO Tel : 254 – 722 866106 Fax : 254 – 20 - 4449004 Email : coludhe@uonbi.ac.ke

## **39.** Prof. Amadou Thierno Gaye

Director LPAOSF/University CAD DAKAR LPAOSF/ESP BP 5085 DAKAR- FANN Senegal Tel: 221 825 93 64 Fax: 221 825 93 64 Email: <u>atgaye@ucad.sn</u>

#### 40. Mr. Mike Morris

Social Development Advisor WWF ( ) c/o Panda House Wesfirst Park Godalming, Surrey, GU7 1XR Tel: +44 (0) 1483 412560 /7985128732 Email: mmorris@wwf.org.uk

## 41. Prof. John Ng'ang'a

Lecturer Department of Meteorology University of Nairobi P.O. Box 30197 00100 Nairobi Tel: 254 - 4449004 Email: jknganga@uonbi.ac.ke

## 42. Bonkoungou Joachim

Ingenier de rechercher INERA/CNRST INERA/CREAF Kamboirse BP 476 Ouagadougou 01 Tel: +226 5031 92 02/08 Fax : +226 5031 92 06 E-mail: joachbonk@yahoo.fr

#### 43. William Nyakwada

Deputy Director Kenya Meteorological Department P. O. Box 30259 Nairobi

## 44. Mr. Alexander L. Alusa

Consultant P. O. Box 52052 – 00200 Nairobi Tel : 254 722 526004 Email : <u>alexalusa@gmail.com</u>

#### 45. Major Stephen K. Sane

Operations Officer National Disaster Operations Centre P.O. Box 30510–00100 Nairobi Tel: + 254 20 211445 Fax: + 254 20 210077 Email: <u>sksane@ahoo.com</u>

#### 46. Mr. Stephen J. M. Njoroge

Programme Offer World Meteorological Organization P. O. Box 1395 – 00606 Nairobi Tel: +254 20 3877371 Fax: +254 20 3877373 Email: <u>snjoroge@wmo.int</u>

## 47. Dr. Mathieu Badolo

Expert Coordonnateur Centre Régional AGRHYMET BP. 11 0 11 Niamey, Niger Cell: (227) 96 97 33 56 Email: <u>m.badolo@agrhymet.ne</u> <u>m\_badolo@yahoo.fr</u>