

Adaptation

Climate Change Adaptation in Africa

WORKSHOP REPORT



Towards A Regional Strategy in Climate Change Adaptation: Sharing Knowledge on Climate Risks and Adaptation Options

Co-hosted by:
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IDRC Climate Change Adaptation in Africa program
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Workshop Agenda

EXECUTIVE SUMMARY

The Climate Change Adaptation in Africa Program (CCAA) of the International Development Research Centre and the United Nations Economic Commission for Africa (UNECA) organized a five-day workshop held in Addis Ababa 16th -20th April, aimed at supporting regional initiatives with regard to adaptation to climate change and developing the foundations of a community of practice involving key stakeholders and current CCAA project proponents.

The workshop was divided into two parts. The first part of the workshop comprising the first three days brought together policymakers and researchers to discuss the regional aspects of climate change adaptation. It included sessions on linking climate change, poverty and sustainable development, presentations of CCAA projects on water and food security and well being, improving regional cooperation and knowledge sharing to address shared challenges, and presentations of the Climate Information for Development Needs in Africa (ClimDev) Initiative, the UNDP-GEF adaptation strategy and the CCAA Program Framework. The second part, comprising the last two days focused on knowledge exchange between CCAA project partners, and briefings on key concepts relevant to CCAA.

Discussions during the first three days highlighted the challenges of knowledge sharing between stakeholders, and of bridging gaps between researchers and policy-makers. The lack of conviction amongst African policymakers as to the potential seriousness of climate change impacts was also recognized as a serious challenge. Breakout groups on regional cooperation stressed that the greatest difficulties in developing regional cooperation on adaptation lie in those areas where it is most needed, in managing transboundary issues, and especially river basins. Sharing of knowledge and information, particularly between policymakers, is a key first step in promoting such cooperation, and even this can pose a significant challenge.

The second part of the workshop introduced the CCAA framework for knowledge sharing, how to build knowledge sharing into participatory action research projects, and how to improve communication between projects and strengthen knowledge exchange networks. Short presentations were also given on participatory action research, gender analysis, and Outcome Mapping.

Key workshop recommendations included:

- the need to make research more demand-responsive,
- to support the formation and engagement of African capacity and reduce reliance on external experts,
- to develop regional climate models for Africa, to integrate adaptation into policy frameworks and conventions in other sectors,
- to support interaction between scientists and policymakers at a regional level,

- to identify potential regional level interventions that do not exclude participation by local communities,
- to make databases of adaptation success stories available to regional and national institutions, to support NAPA processes, and
- to address the issue of cost recovery for climate information.

In terms of current CCAA projects, recommendations included:

- the need to improve capacities for communicating climate change issues,
- to strengthen linkages with UNFCCC national focal points,
- to develop knowledge sharing platforms amongst CCAA project partners, and
- to strengthen capacities for mainstreaming gender through training, the formation of a gender working group, and the development of a resource guide on gender issues.

INTRODUCTION

Africa is generally acknowledged to be the continent most vulnerable to the adverse impacts of climate change, and where adaptation is most imperative. In spite of the many commonalities shared by countries in Africa and the fact that some belong to regional economic and political groupings, there is little common practice and sharing of adaptation experience. There are many reasons why a shared regional approach to adaptation makes sense. Knowledge sharing and co-operation across various regions in Africa could boost and enable institutional adaptation and assist countries in identifying and implementing regional adaptation strategies.

Regional policies on shared water, especially with regard to climate change adaptation are vital. It is worth noting that 17 countries in West Africa share 25 trans-boundary rivers and a high proportion of countries within the region tend to have a water dependency ratio of over 40%. There is little information on how river basins can cope with the magnitude of such cross-sectoral challenges. Policies are increasingly being made at the regional level with regional and sub-regional bodies gaining in importance. Examples are the Senegal River Development Organization (OVMS), the Nile Basin Initiative and the Niger Basin Development Authority, which are considered models of transboundary cooperation on river management. Another good regional intervention is the West African Economic and Monetary Union's (WAEMU) policy on access to energy services to meet the needs of the poorest populations living mainly in rural areas. Knowledge sharing and co-operation at the regional level could boost and enable institutional adaptation and assist countries in identifying and implementing regional adaptation strategies.

Several initiatives have been implemented in Africa with the aim of reducing the continent's vulnerability to the adverse impacts of climate change, with varying levels of success. The Climate Change Adaptation in Africa (CCAA) Program, a joint program of Canada's International Development Research Centre (IDRC) and the United Kingdom's Department for International Development (DFID), aims to significantly improve the capacity of African people and organizations to adapt to climate change in ways that benefit the most vulnerable members of society.

This workshop, organized jointly by CCAA and the United Nations Economic Commission for Africa (UNECA), aimed at supporting regional initiatives with regard to adaptation to climate change. It provided the opportunity to gauge the regional know-how and to assess climate science issues as well as identify institutions with the relevant competencies to develop regional models and help governments in assessing policy and market-based instruments that could help in planning and anticipating climate risks. It also aimed to put in place the foundations of a community of practice that involves key stakeholders and current CCAA project proponents.

The CCAA inception workshop intended to accomplish three tasks. First, it was to make the CCAA mandate and broad vision better known, and provide CCAA the opportunity

to explore with partners and stakeholders from across the continent what opportunities there might be for enhanced regional cooperation in developing adaptation strategies. Second, the workshop intended to position CCAA within the region and the continent as a strategic partner and make known its mandate and broad vision. Third, it was to provide the opportunity for project teams ready for funding by CCAA to come together and identify knowledge gaps they may have in common, possibilities for collaborative learning to enhance their research, and also to discuss their plans, and CCAA's expectations, on how they communicate their research findings.

To achieve these objectives, CCAA decided to look beyond its immediate traditional partners, i.e. research institutes, to engage policy makers and provide them the space to take ownership of the process and subsequent outcomes. Policy makers need to understand the philosophy behind the CCAA mandate, the imperative for adaptation and the need for working in close collaboration with scientists and vulnerable groups to improve their knowledge base in order to increase the adaptive capacity of vulnerable groups. The inception workshop acted as an entry point to start developing CCAA's engagement strategy with regional partners and to test the degree of openness for regional adaptation projects.

The five-day workshop, consisted of two parts and was designed to be very participatory. The first part (Days 1-3) brought together both policy and researchers to discuss strategies on how adaptation research can be given a regional dimension and the capacity and policy needs of regional institutions and policy makers to leverage and implement effective policies. The second part (Days 4-5) focused on CCAA researchers to strengthen their capacities to develop practical ways of sharing knowledge emanating from their projects. Creating a network of practitioners in adaptation would mean carving out a space where knowledge sharing and knowledge transfer strategies are defined. This emerging community of practice from the CCAA projects will together with resource persons and facilitators also review key methodological tools to improve the design and development of their current projects.

The workshop set out to produce the following outcomes and outputs:

Outcomes:

- Regional strategies and examples of risk sharing mechanisms are identified
- Water and food security issues on climate change adaptation are articulated within a synergistic framework
- Cross fertilization issues between CLIMDEV and CCAA are given a more operational focus
- Greater awareness on the need for sharing risks and working within regional groupings.

However, the above outcomes could not be achieved as a result of time constraints and various other logistical reasons. Nevertheless, they were flagged as issues that deserved follow-up and urgent attention

- A knowledge sharing exchange framework between stakeholders is endorsed and functional and operational modalities are formalized.
- An action plan for regional adaptation framework for climate change is defined and developed.
- A community of practice is in place and operational modalities are defined.

Outputs:

- Dissemination and outreach strategies to manage knowledge emanating from project pipeline
- Analysis of opportunities to address water and food security issues within regional context of CCAA project activities
- Analyses of the state of knowledge on addressing adaptation from a regional perspective
- Analysis of capacity deficiencies and opportunities existing within key regional institutions working on climate change adaptation
- Analysis of regional constraints that are impeding current climate change adaptation strategies

The workshop was co-chaired by Dr. Gilles Forget, Professor Shem Wandiga, Dr. Josue Dione, Professor Chris Landsberg, Dr. Madeleine Thomson, and Dr. Sami Moussa.

1 DAY 1:

1.1 Opening Session

An opening ceremony steered by Dr. Josue Dione, including addresses by:

- The Executive secretary of UNECA, Mr. Abdoulie Janneh
- Dr. Gilles Forget, IDRC Regional Director for West and Central Africa
- Professor Shem Wandiga, Chair, CCAA Advisory Board
- Dr. Fatima Denton, Program Leader, CCAA
- H.E. Yves Boulanger, Canadian Ambassador to Ethiopia
- H.E. Dr. Aberra Deressa, State Minister of Agriculture, Ethiopia.

1.2 Links between Climate Change, Poverty and Sustainable Development in Africa.

Several reports have noted the link between climate change and poverty in Africa. The IPCC Fourth Assessment Report (2007) even notes that climate change can undo the modest gains that Africa has achieved towards meeting the MDGs. The New Economic Partnership for Africa's Development (NEPAD) has noted that the severity of the environmental problems in Africa, particularly climate change, is a major contribution to the problem of poverty and dismal growth performance in the continent. Climate change affects the poor the most and is an impediment to the achievement of sustainable development. Climate change has to become an integral part of national sustainable development/poverty reduction strategies. The gravity of the threat of climate change for Africa was recognized and articulated at the Johannesburg Plan of Action of the World Summit on Sustainable Development (WSSD) in 2002. One recommended strategy for achieving sustainable development in Africa was through assisting African countries in mobilizing adequate resources for their adaptation needs relating to the adverse effects of climate change, extreme weather events and climate variability, and assist in developing national and regional climate change strategies and mitigation programs. Unfortunately, climate change is still not considered a priority among African policy makers.

This session, consisting of two parts was intended to bring researchers together with policy makers to brainstorm the links between climate change, poverty and sustainable development in Africa. The first part consisted of presentations by three scholars and the second part consisted of a discussion session led by key policy makers.

Mr. **Foday Bojang**, spoke on mechanisms for shared knowledge and risk communication in climate change adaptation. He noted that the climate change menace is real for Africa, and hence there is an urgent need for effective communication to support appropriate mitigation and adaptation. Three main issues were identified as being crucial for risk communication: good communication mechanisms, access to climate information, and an effective communication strategy. Some factors that could influence communication in climate change adaptation in Africa include, availability of policy and legal framework, differences in the way risk is perceived among various

stakeholders, particularly the media and the public, the existence of adequate infrastructure (early warning systems, access to information), the level of public awareness, and the capacity of institutions tasked with handling risks. He stressed the need to balance between modern and traditional systems of communication.

Dr. **Mohammed El Mourid** gave a presentation on “Climate Change Adaptation, Water Resource Management and Maintenance of Food Security: Regional Implications”. His presentation was from a North African perspective. The main challenges facing the region and contributing to inefficiency in agricultural production include: water scarcity, environmental degradation, low uptake of new technologies at large scale in rain fed agriculture, and global climate change and drought. All these contribute to exacerbate food insecurity in the region. Most of the countries in the region currently cannot sustain food imports and climate change will make it worse. To mitigate these adverse impacts, he recommended several measures which include making more funds available to increase irrigation in the region, development of efficient soil and water conservation techniques, particularly as ground cover destruction increases global warming, Introduction of new species that are adapted to water scarcity, and increasing the investment in science and technology by National Agricultural Research Centers and their international counterparts.

Dr. **Youba Sokona's** presentation given by Dr. **Njeri Wamukonya** reiterated that development pathways influence climate change and climate change has significant impacts on development. The main question in his opinion that needs to be addressed is: How do we ensure that the linkages between climate change, development and poverty is understood? Energy is at the source of anthropogenic causes of climate change. Despite Africa’s abundant energy resources, the continent suffers dire energy constraints. Low access to electricity especially in sub Saharan Africa is due to poor infrastructural development. Africa’s energy policies and practice have major social and environmental impacts, for example deforestation, and air pollution from biomass consumption. While adaptation and mainstreaming are the buzzwords now in climate and developmental circles, it is also important to ensure that all key players have strategies for mainstreaming adaptation in development. She noted that there is considerable potential for integrating climate change issues into development policies in Africa and regional cooperation provides opportunities of doing so.

The session ended with a discussion session initiated by policy makers. Three policy makers gave their insights on the topic. Mr. **Audace Ndayizeye** from the Nile Basin Initiative noted the importance of communication, especially concerning what institutions that are vested with the task of managing shared environmental resources across various African countries are doing about adaptation. He added that as climate change affects everybody; all of the stakeholders must be involved in adaptation. He observed that, people talk of water scarcity without paying attention to floods, which are also very destructive. He concluded that an integrated approach is important since security for one group can increase insecurity for others, depending on the approach taken to tackling regional challenges.

The major concern presented by Dr. **Sami Mousa** of the African Development Bank (AfDB) noted that the AfDB and other donors support research but want practical solutions that are also sustainable and workable with defined target markets for saleable projects. He noted that the bank has funded several research initiatives such as the multi-donor water partnership program carried that carried out studies of 12 river basins in Africa to produce a bankable project for financing. He also stated that the bank also supports technology transfer, through funding for the development of the award-winning NERICA rice.

Mr. **David Njiki Njiki** of NEPAD added that there are several adaptation initiatives being implemented but that the utility of these initiatives must be measured as it has been found that users do not easily and readily adopt new technologies. With regards to mainstreaming, policy makers ought to engage those who are implementing projects. He further noted the need to support adaptation as people are struggling against drought in many areas because of the annual declines in precipitation, which is becoming routine, not exceptional. Currently Morocco encourages farmers to use localized irrigation methods, which are showing good results as a way of reducing the losses compared to classic large-scale irrigation techniques.

Ms. **Isabella Masinde**, Executive Director of the Centre for Livelihood Opportunities Unlimited and Technologies, reiterated the fact that the natural resource base in the continent is being threatened by climate change. This has very adverse effects on the majority of the rural populations who depend on the ecosystem for their livelihoods. Climate change is not about the future as its adverse impacts are already being felt and policy makers need to be aware of this. However, the gap between research and policy is a barrier to effective implementation of adaptation strategies. Science can provide a good entry point to addressing climate change issues in the continent, if it is linked to addressing and supporting local community needs. In addressing community needs and developing adaptation policies, it is important to take a renewed look at community assets and other types of social capital that would enhance the capabilities and skills sets of vulnerable groups and make them more resilient to the adverse impacts of climate change. It is also important to identify and understand their current adaptive strategies with the view to improving on them with additional knowledge provided by science. All these would require financial resources that are not readily available. It is therefore important to put in place strong and efficient financial mechanisms and schemes that could increase the adaptation options of the poor to strengthen their resilience. Adaptation should not be seen in isolation but within the context of achieving integrated and sustainable development.

In a discussion that followed, participants made the following contributions:

- Climate Change scenarios from Africa need to be improved, as to-date most work depends on global models.
- To improve the relationship between scientists and policymakers, one needs to ask whether science is perceived as useful and demand responsive. Research should engage with potential end users, as it is only through such links that the

research can be framed appropriately. Secondly, one must identify who takes care of associated risks when farmers adopt new technologies.

- Africa's energy crisis requires homegrown solutions but currently, Africa relies on external experts.
- Adaptation frameworks need to account for other conventions and frameworks. In certain cases, officials are desk officers to 12 different conventions, and there is a need to capitalize on potential synergies, as all the conventions have strong links with climate change.
- Many African-wide initiatives have gathered a lot of data on impacts of climate change in Africa that could be used by policy makers. The challenge has been how to interact with policy makers particularly at the regional level, to have base their policies on these results of sound scientific research. However, opportunities do exist for this as scientists can intervene at statutory meetings at ministerial and heads of state level. For instance, the Forum for Agricultural Research in Africa (FARA) provides an excellent opportunity for intervention in developing documents for Heads of state meeting.

1.3 Presentation of CCAA's Projects on Water Resources, Food Security and Well-Being

Climate change is expected to intensify Africa's increasingly critical water situation. There is also abundant evidence that climate change will worsen food security in the continent with consequences on health through malnutrition, hunger and starvation. In addition to the indirect impacts on health through food insecurity, climate change is expected to have a direct effect on health outcomes. More favorable environments for vector borne diseases such as mosquitoes will be created. For instance, some parts of Africa that did not suffer from a high incidence of malaria, such as the East African highlands, are now suffering from malaria epidemics. Scarce resources that could have been used for other developmental purposes are now being channeled to fight the increased disease burdens associated with climate change. All these combine to impact adversely the well being of a significant proportion of Africa's population, particularly the poor.

CCAA recognizes this link between climate change, water resources, food security and well-being and has funded some projects that address this link. Four of these CCAA-funded projects were selected to showcase the link between water resources, food security and well-being.

The first presentation was by **Kolawole Said Hounkpnou** on "Strengthening the capacity of farmers to reduce the impact of climate change on agricultural productivity to ensure food security and reduce poverty in Benin". The project aims at building capacity at local community and national levels. It also seeks to strengthen the capacity of meteorological departments to produce climate information that is useful for different users. The project has identified that potentials for adaptation in rural communities are not fully developed considering that many farmers are already trying to adapt. It therefore seeks to increase farmers' access to climate forecasts and build on local

knowledge to enhance adaptation. The project will also encourage the exchange of experiences with leaders so as to allow strengthen viable options.

The second presentation was by Professor **Daniel Barend Louw** on “Managing climate risks for agriculture and water resources development in South Africa: Quantifying the costs, benefits and risks associated with planning and management alternatives”. The main thrust of the presentation was that climate change forecasts are not being communicated effectively to water managers; neither are they being integrated into water resources policies. Expected output and outcomes of the project include capacity building, including setting up a centre of excellence to train people to disseminate climate information, and the development of a methodology to link climate change scenarios in an integrated framework for water supply and demand management. The project’s link to poverty reduction is through the fact that Western Cape contains some of South Africa’s most valuable agricultural lands. In addition, agriculture is the major source of employment. Water remains the most limiting factor for agricultural development. The project has a strong gender focus as most of the farmers are and will continue to be women. They are also among the most vulnerable groups.

The third presentation was by Dr. **A. Chriyaa** on “Climate Change adaptation mechanisms for rural communities in two contrasting ecosystems of Morocco”. The project aims at strengthening the adaptive capacity of vulnerable populations through the identification and development of appropriate technical, institutional and political adaptation options in fragile ecosystems. He stressed the importance of agriculture in Morocco, noting that about 80% of the country’s rural labor force is employed in agriculture. Reduction in rainfall is expected in the project communities. Projected increases in water needs from population and irrigation mean that there will be water stress even in good years. Outcomes of the project include evaluation of adaptation choices that have been used in the past four decades in the region, development of climate change scenarios for the region, development of mechanism to support the exchange of knowledge in the choice of specific adaptation options by stakeholders, and implementation of a program to strengthen the human capacity of principal stakeholders for the project.

Dr. **Andrew Githeko** gave the third presentation on “Transferring the malaria epidemic prediction model to East Africa”. Seventeen percent of East Africans lives in highlands where there are risks of climate driven malaria epidemics. The current approach used by governments to deal with malaria outbreaks detects epidemics at its exponential phase where interventions would be too late. A malaria model was developed by the project team in 2001 that can detect epidemics with 2-3 months lead time. The project will fine-tune the model to different ecological zones to make it regional specific. Malaria has serious economic impacts as it affects infants and pregnant mothers. The poor who happen to lack medical access are also the ones affected most. Anxiety and stress in mothers could be alleviated if the outbreaks are predicted and appropriate actions taken in time.

The presentations were followed by a discussion by policy makers from the various regions in Africa, and by participants. The summary of the discussion was that policymakers know in general that climate change is a concern, but are not convinced of the seriousness of impacts. There is the need to mobilize the entire African community to address the issues of climate change, as it constitutes a potential time bomb. The language of scientists has to change to address the socio-economic issues being addressed by policymakers. While the adoption of holistic approaches was very commendable, one must ensure the availability of appropriate information at appropriate scales. Regional cooperation was emphasized, most especially with regards to sharing climate information. While many of the speakers have argued for multidisciplinary perspectives, one should not lose sight of the importance of incorporating indigenous knowledge in climate change science.

However, it is important to note that not all indigenous adaptation practices are beneficial to the sustainable development of a local community; and not all indigenous knowledge can a priori provide the right solution for a given problem. Evaluation and validation are important aspects of the process of integrating indigenous knowledge in mainstream literature.

Participants raised pertinent issues regarding the presentations. For instance, there was a call to explore further the relationship between water scarcity and lack of infrastructure. Other non-climatic factors such as rapid urbanization increases the need for water for sanitation and other uses. This will compete with other uses such as agriculture. Adaptation to water scarcity in the agricultural sector should therefore include policies on urbanization. Other issues raised by participants on both presentations included the need to have strong broad policy frameworks defining broad adaptation strategies at the national and regional levels. Regional adaptation strategies need to be designed that are specific to each of the regions so that they are applicable and supported by regional specific research.

2 DAY 2

2.1 Towards Greater Regional Cooperation in Facing Shared Adaptation Challenges

Climate change impacts do not respect national boundaries and this call for concerted efforts to address the problems at regional levels. Regional cooperation has a huge yet under-exploited potential to build adaptive capacity and reduce climate change impacts in Africa. Regional programs can deliver strong results such as providing reliable energy, managing shared water resources and combating the spread of climate-induced diseases. Despite this awareness, support for and actual implementation of regional cooperation in tackling climate change menace in Africa is limited. CCAA would like to know what is going on where and how it can provide support. The aim of the second day was to explore the opportunities and challenges to regional cooperation in implementing adaptation strategies in Africa. The day started with an interactive panel discussion on key regional issues of importance to shared adaptation, by

representatives of key regional institutions in Africa. Representatives from 5 regional institutions spoke on food security, water resources, energy policy, land degradation, livelihoods and on regional initiatives to develop climate adaptation for West Africa.

The key issues that were raised from the presentations were that:

- Regional cooperation is very important, as it is needed to pull resources together efficiently. The needs are such that no country can shoulder the burden alone, and regional cooperation could bring about sense of coherence. Climate change knows no borders and certain problems such as locust control, exploitation of underground water and development and management of transboundary rivers would require supra-national and regional approaches.
- There is the need to think strategically, and to explore avenues for the equitable sharing of the benefits of regional cooperation as well as reducing collective risks.
- It is important to note that for research to be useful to demand it has to address the needs of certain demand-led groups, the private sector and vulnerable groups.
- Strategies for influencing the regional process and putting in place the relevant infrastructure for adaptation policies would differ depending on the context, region and geographical attributes. In North Africa for instance, it would mean identifying key leaders throughout the regions that could champion adaptation work and convey key message to their fellow decision makers
- Networking can be an important criterion in building a strong advocacy base around the benefits of regional sharing, particularly over a common issue such as desertification or droughts that will enable regional partners to coalesce behind such compelling issues. This calls for the need to channel resources in network support and development to allow different institutions to share information on adaptation research, and local and regional observatory systems.
- Capacity building is equally important to build skill base and to make the necessary connections between climate change and critical sectors such as agriculture, water and energy. It should adopt an endogenous approach building on regional cadre of experts that would serve as a knowledge base and bank to advice, support and guide policy makers, the private sector and other research bodies.
- The major identified challenges to regional cooperation included:
- Identifying interventions that can be implemented at regional levels, and ensuring that this is done in a way that does not exclude the participation and involvement of local communities.
- While the regional level can have networks to support adaptation, the challenge comes in the sustainability of these networks and ensuring that their activities are action-oriented.
- Different regions have different stories to tell. In North Africa it was stressed that whilst an increasing number of institutions are working on climate (ICARDA, OSS, etc) the regional dimension of sharing adaptation knowledge and strategies to exploit common resources is not well appreciated by partners

- Yet it is obvious that a coherent regional strategy in North Africa can help address issues relating to livelihoods given the dependency of communities on natural base most of which are considered climate sensitive sectors
- It is equally important to think in terms of incentives that will make the contribution of policy makers more relevant.

2.2 Breakout session- Towards Greater Regional Cooperation in Facing shared adaptation challenges: Opportunities and constraints.

A breakout session was organized to discuss at sub-regional levels the opportunities and constraints towards achieving regional cooperation in implementing adaptation to climate change. The groups were organized representing North Africa, Western and Central Africa, Southern and Eastern Africa. The major issues raised include:

Opportunities:

- There is the possibility of creating new regional networks to support adaptation in Africa. One such network could be a network of experts in the continent to pull together the available human capacity.
- Most adaptation activities and studies take place at the local level. To develop regional policies on adaptation there is the need for scaling up these activities. Sharing of information can be a lever for vulnerability reduction and could help identify and enhance adaptation strategies.
- There is need to identify incentives that may enable people to respond to climate change. Making a connection between the impacts of climate change and the economy would make more sense to policy makers.
- Linkages between research and policy making should involve looking at what is being done, and engaging policy makers in identifying what further needs to be done.
- The need for collaboration rather than competition was emphasized, stressing the need for institutional anchoring, particularly with respect to the issue of subsidiarity. This calls for a recognition and respect of the limits of what regional initiatives can do vis-à-vis national sovereignty.
- Co-ordination is a key issue that needs to be considered in regional risk sharing of adaptation strategies. There is a whole range of services that could be integrated within this portfolio of risk sharing (meteorological services, infrastructural management, development of transboundary rivers, etc) but this would need to be properly managed.
- The climate observing system and meteorological services provide sufficient reasons for a more global, regional level intervention – costs related to these types of interventions are often more than a single nation can bear and services rendered are beneficial to a wide range of countries rather than individual nations.
- It would also be useful to bring political groupings such as ECOWAS, ECA, SADC and the Maghreb union to be more involved in adaptation research and to

use this as an additional source of knowledge to drive home the needs for adaptation risk sharing as being beneficial to developmental aspirations

- Structural changes within older institutions need to be made to reflect new environmental dynamics. A number of Africa-based institutions were created to address certain specific environmental issues, e.g. desertification, food security, deforestation etc. Whilst these issues are still relevant, the state of the environment is gradually changing with more complex dynamics relating to climate change and vulnerability. Hence, institutions are not sufficiently prepared or geared to deal with such complexities. A comprehensive study may be needed to determine what different institutions are doing and the available capacity. Based on this survey, regional institutions need to be supported to help provide products, information, support services that would facilitate the understanding and uptake of climate change adaptation strategies
- Regional discussions and conference could be an entry-point to build more awareness and concrete examples are needed to show examples of both the efficacy of action research as well as successful initiatives where a common regional front has been used as precursor to addressing environmental and developmental needs.
- CCAA should familiarize itself with existing databases and scoping exercises and explore avenues of making these available to relevant regional institutions and policy makers.

Constraints:

- The major constraint identified was in regard to trans-boundary challenges.
- How can countries collectively address issues that cut across their national boundaries?
- For regional cooperation to be sustainable policy makers must be engaged in information sharing, which is quite a considerable challenge.
- Key Questions raised by participants during the plenary include:
- What current functional mechanism do we have that can help support adaptation work and decision making?
- How do you build the capacity of environmental units, bureaucratic units and other key agents to broaden the understanding of climate change adaptation?
- How do you engage with broad ministries such as Ministries of Finance, Economic Planning, etc. to bring them in the fold so that climate change adaptation issues are not perceived as environmental issues but seen from a poverty and development standpoint?
- How do you respond to agricultural constraint and demand in water resource management? These issues have a bearing on remote sensing, early warning provisions and studies that measure impacts.
- How do you ensure that research has an impact on the ground and addresses substantive issues of development?
- How do you raise political awareness on transboundary issues as an entry point to identify adaptation projects

- What is the climate agenda of key regional institutions and are they well equipped to deal with the complexity of climate response strategies need to address variability related constraints?

3 DAY 3

3.1 Sharing Knowledge on Climate Risks and Adaptation Options

The aim of this day was to explore effective mechanisms for sharing knowledge to support regional strategies for adaptation to climate change. Information is an important resource in the fight against the adverse impacts of climate change. Limited access to information is consistently noted as an impediment to building the much-needed adaptive capacity in Africa. While there has been a flurry of research activities on climate change in Africa, their results are not reaching potential beneficiaries - policy makers and vulnerable communities. This session explored mechanisms, opportunities and constraints in sharing climate change knowledge in Africa. It began with presentations by 2 key institutions – African Development Bank and ICPAC on their experiences in sharing knowledge on adaptation. This was followed by a breakout session and capped by a presentation by CCAA on her strategies for knowledge sharing.

Dr. **Sami Moussa** of the African Development Bank noted that the Climate Information for Development Needs in Africa Initiative (ClimDev) seeks to increase Africa's resilience to climate stress. CLIMDEV represents the African Union's political support to climate change initiatives in Africa. The AU heads of states summit in January 2007 in Addis Ababa committed member states to address key issues related to climate change adaptation and endorsed an action plan requesting ADB, ECA and AU to implement the ClimDev programme. A short-term outcome of the program is to ensure that the National Adaptation Plans of Action (NAPA) are completed by the end of 2007. Completion of the NAPAs is important if donor and development agencies are to intervene in climate change adaptation issues in any country. It is worth noting that only 10 African countries have finished their NAPAS to date. Priorities on climate change at the national level will be identified from these documents since countries have prioritized their adaptation options and challenges together with annexes highlighting financial needs to carry out some of adaptations options.

Professor **Laban Ogallo** of the IGAD Centre for Prediction and Application [ICPAC] highlighted key issues that need to be considered in sharing knowledge. Some of these include:

- Type of knowledge [local/regional; climate threats/adaptation options vs. variations in user needs].
- Quality, accuracy, credibility and timeliness
- Clarity and ability of users to use the knowledge
- Knowledge generation or availability of climate information
- Data or information archive for building scenarios
- Resource constrains,

- Sharing capacity [systems for sharing]
- Ownership in terms of network of providers, sectors and systems.

He further noted that research capacity is currently weak, hence the poor quality of available knowledge. Other challenges identified include low education and awareness, lack of relevant policies and user perceptions including the role of traditional systems. The main challenge has been that of users not having access to the information. To address this, ICPAC has a number of capacity building activities including multi-sectoral forums where experts interact with users.

Participants discussed the need to address current variability in order to adapt to long-term climate change. Though the climate has been variable over time, the increasing rate at which it is changing is making it more difficult for communities to cope. Research and knowledge availability in Africa is at a crisis level. We need concerted efforts and strategies to confront these challenges. Additionally, users should not be given complicated information but such information should be presented in a language and format that makes it easily understood and useable.

A major obstacle towards sharing knowledge stemmed from the fact that many institutions sell information to cater for their operational expenses due to reduced budgetary allocation. This hinders access to climate information. Funding is needed for institutions that provide essential information like those on climate. The transfer of techniques and technologies for adaptation to end-users has cost implications that are rarely discussed. We must begin to address the question of who bears the cost of coming up with the technology. Finally, it was noted that even if the information to be presented by scientists to policy makers is correct, it takes a lot more to convince policy makers. Research is just one component; hence we need to find ways of packaging the information to have the desired impact.

3.2 Reports from breakout groups.

The break-out groups were conducted around 4 sets of questions:

- i. The types of knowledge on adaptation that need to be shared most and the various levels*
 - Climate risks and opportunities at different temporal scales (seasonal, monthly) and spatial (national, provincial).
 - Adaptation options/technologies for the various sectors
 - Indigenous knowledge
 - Information on costs of adaptation
 - Results of vulnerability/impact assessments.
 - Relevant climate policies
- ii. Mechanisms that currently exists for sharing information on climate risks and adaptation within and between the various regions of Africa*
 - Workshops/dialogues/climate outlook forums/user associations
 - Publications e.g. in journals, policy briefs, brochures and leaflets etc
 - National communications

- Field demonstrations
- Networks
- Media- electronic and print
- Side events at COP/international days [water week]

iii. Barriers that currently stand in the way of such knowledge sharing

- Lack of appropriate institutional set up to share knowledge at national and regional level. There is lack of coordination on climate change at the national level where departments do not talk with each other.
- Lack of awareness and poor communication equipment and accessibility of the information to be shared.
- Poor packaging of the information to be shared including the probabilistic information.
- Limited extension capacity
- Low literacy levels
- Expensive and limited capacity of the media to handle scientific information

iv. Capacity gaps that need to be addressed to make them more effective in informing policies:

- Train interdisciplinary team to share knowledge and harmonize actions.
- Strengthen local and participatory forms of communication like local radios, drama etc
- Borrow from climate change projects beyond Africa
- Build on on-going work among the various communities

3.3 UNDP –GEF Adaptation Strategy

Miss **Frankell-Reed** of the UNDP gave a presentation on the UNDP-GEF adaptation strategy. It was noted that UNDP-GEF evaluate the rationale for every project as well as UNDP's role in a project. The NAPAs are a priority for UNDP as they identify priority actions for Least Developed Countries- countries that need to take actions urgently. Additionally, Frankell-Reed noted that the LDC fund is yet to be utilized by Africa. The Adaptation Learning Framework [ALM] Initiative approved in 2005 will be useful for all the UN agencies in developing adaptation projects. (See www.undp.org/gef/adaptation for details). The ALM contains profiles of all countries including summary of their National Communications, and summary of the NAPAs. These are useful resources to guide project proponents on what they need to prepare.

3.4 CCAA 's Capacity Development, Knowledge Sharing and Action Research

The CCAA program identified from the discussions some of the key areas that it will work on. These tally with the needs that have been identified by participants during the workshop. Some of these are summarized below:

- **Participatory Action Research:** CCAA also needs to look beyond public policy makers and integrate the private sector into the program. It is also important that the program tests its assumptions on adaptation to avoid mal-adaptation.

- **Knowledge Sharing:** Techniques for sharing knowledge are specialized areas that need the participation of specialized groups that need to be identified and also incorporated in the Programs strategies. Public awareness and mentoring is key in dealing with climate change and should be emphasized by CCAA.
- **Education and Training:** Both policy makers and at risk groups should be educated and engaged in climate change research. The issue of Africans in the diaspora should be addressed as they form an important resource that could be harnessed to contribute to adaptation in Africa. While a lot has been placed on individual capacity strengthening, CCAA should also look towards strengthening capacity of research institutions in terms of financial and administrative aspects for effective management of research.

3.5 End of Part 1 of the Workshop

Dr. **Josue Dione** brought this first part of the workshop to a close, expressing deep appreciation and satisfaction of having been associated with this important event. He noted that the issues raised at the workshop are now in the political domain at the highest level in Africa. In the ECA conference of African Finance, Planning and Economic Development Ministers, they not only requested that the Commission starts to work on appropriate development measures on climate and development but also mandated their respective countries to start doing whatever they can on climate change. Ministers of Finance and Planning are key in taking stock of the initiatives and translating them into policies. He noted that ECA was keen on strengthening this emerging partnership aimed at contributing to adaptation and sustainable development.

Professor **Shem Wandiga** thanked participants for their contribution. He mentioned the fact that science policy|interface remains a key challenge in getting vital messages across through to policy makers. He added that CCAA will work closely with its partners to understand regional approaches and use this within the scope of its activities as part of a shared learning process. He added that the programme is very much rooted in a learning by doing approach in ways that benefit vulnerable groups.

Dr. **Fatima Denton** thanked participants for their attendance and contribution. She noted that CCAA's main mantra of capacity development is intricately linked to developing good engagement strategies with critical stakeholders, researchers, vulnerable groups, policy makers and development agents. She underscored the importance of using adaptation as an entry point for addressing old development problems such as water, energy and food security. The CCAA mandate is well rooted in participatory approaches and methods by providing the space that would allow local change agents to build, enhance and retain their capacities. Research and knowledge are key vectors that could be used to channel new information and data in order to develop effective adaptation practices. She reiterated that local action on its own is not enough as adaptation is a long-term strategy, it is equally important to rally support at regional level where key decision makers sit in large numbers in order to develop reflexes for climate adaptation. She added that action at local and regional level should be complementary. Sustainable development she added is deeply rooted in choosing a

trajectory for Africa that would not create silos between environment and development but see these as constituent parts fundamental for the process of growth and human security.

PART 2

The second part of the workshop, lasting 2 days, was devoted to strengthening the capacity of CCAA's current project proponents.

4 DAY 4

Day Four of the workshop dwelt on Knowledge Management and Risk Communication. The aim of the day was to (a) share initial CCAA plans for knowledge sharing, (b) share participants' practical experience in different areas of knowledge sharing, and (c) give participants an opportunity to identify their needs and priorities for knowledge sharing.

4.1 Overview of CCAA Framework for Knowledge Sharing

The climate change research community is disaggregated into poorly linked subgroups with insufficient sharing of knowledge, understanding and approaches. Additionally, the agendas of these groups need to be oriented to the needs of 'at risk' groups and policy makers. In developing a demand-driven approach, CCAA facilitates flows of climate adaptation knowledge generated by research or research processes for the benefit of the poor in both urban and rural areas, so they can combine this knowledge with their experiences allowing effective adaptation to climate change.

In this regard, CCAA's initial plan for knowledge sharing was presented to the CCAA project proponents. The plan addresses four important issues: Sharing knowledge with whom? Sharing knowledge for what? How should the knowledge be shared? What knowledge sharing processes should be adopted?

Regarding with whom knowledge is shared, CCAA expects knowledge to be shared not only among researchers and policy makers but also with vulnerable groups and developmental partners. Knowledge sharing should involve mutual learning between these multiple actors, recognizing that each has different knowledge needs, different ways of accessing knowledge, and each has knowledge to offer. Regarding sharing knowledge for what, the plan notes that knowledge generated by research must benefit Africa's most vulnerable, emphasis therefore should be placed on active involvement by all partners in support of practical use of knowledge, and that the knowledge generated by research should contribute to all four CCAA objectives, but especially shared learning and informed policies.

In respect of how the knowledge should be shared, CCAA will support a broad range of communication and networking activities. Plans are on to engage partners to develop an on-going communication mechanism, independent from specific research and development projects but entrenched in the fabric of core and partner organizations, which would better match the needs of Africa's 'at risk' communities, its policy makers, its researchers and other developmental partners. On the knowledge sharing process, the plan emphasizes. Participatory Action Research methodologies, which can form a platform for knowledge sharing within and between CCAA projects, and could result in

the creation of knowledge sharing networks. The plan also notes that CCAA's knowledge sharing should extend to other external stakeholders and donors, such as DFID, to develop their understanding of existing capacities and knowledge gaps, and guide their programming. It should also inform CCAA's Monitoring and Evaluation process.

Comments and questions from the floor included:

- How does one put in place mediation mechanisms for conflicting information? Conflicts between different forms of indigenous knowledge, and between indigenous knowledge and scientific knowledge can be obstacles to mutual understanding, learning and decision-making.
- Power relations are issues that need to be addressed. There is the need to foster a horizontal kind of relationships rather than vertical linkages as they reinforce existing power relations. Actions should not strengthen undesirable aspects of existing power relations. There should be ways of leveling playing fields so that at-risk groups and local communities have a say in decisions, interventions and actions. Involvement of local communities remains inadequate despite the many discussions on participatory research and bottom-up approaches.
- It is important that information is presented in a useful, understandable and respectful manner. In some cases this will require training and capacity strengthening processes so that all the partners are best able to both convey and receive information.
- Additionally, there is need to share the results with the people who provided the information. This is often not the case and communities are frequently used as laboratories to test research hypotheses, with no attempts made to go back to those communities to validate the data collected.
- CCAA can play a vital role by supporting training for knowledge sharing among researchers, policy makers and vulnerable communities, but also – critically – by creating opportunities.

4.2 Participatory Communication within Participatory Action Research

Having noted that knowledge sharing between and within CCAA's projects would be anchored on PAR, Tom Mitchell of the Institute of Development Studies gave a presentation on participatory communication and PAR. The key points of the presentation were that:

- Communicating within PAR needs knowledge brokers who can negotiate the interface between indigenous and expert knowledge.
- Communicating with at risk groups has many challenges. It is also important to recognize that differences exist within and between communities that should be taken into consideration the design of communication strategies.
- There are many ways of communicating with at risk groups, for example knowledge fairs, conferences, knowledge caravans, community/participatory video, text message, and so on, and each method has its strengths.

- Communicating with policy makers on the other hand requires condensed, credible and easily digestible information, which should be targeted at opportune moments, such as during elections as this is when action may be taken.
- It is also important to recognize the different needs of policymakers at different scales (local, national, regional, international).
- Experiential learning (e.g. field visits to project sites) should be used as much as possible.

4.3 Strengthening Communication within Projects.

Participants were divided into four regional groups (East, West/Central, South and North Africa), and discussed, 1, how project proponents planned to communicate with partners within their proposed action research projects, and, 2, identification of skills and knowledge areas they would like to strengthen in order to communicate successfully with project partners. Each group identified key skills/knowledge that they felt needed to be strengthened as a group. Some of the key needs identified by the groups were:

- Enhancing direct communication between communities and policy makers
- Ability to develop concise and clear messages
- Strengthening the feedback mechanisms between them as researchers and the vulnerable communities they worked with.
- Being able to identify some committed decision-makers and involve them in their researches. Being able to strengthen the linkages with the countries' focal points on climate change.

4.4 Knowledge Exchange Networks

The major question that was being addressed in this session was, “What makes for an effective knowledge sharing network?” The session took two parts – a presentation by Tom Mitchell based on his experience with Linking Climate Adaptation Network (LCA) project, and a breakout group discussion. His presentation made the following key points.

- It is important that the network be active, rather than simply being a library of activities.
- There are many sources of knowledge and information, but the most important thing is credibility of the source of information, and understanding what constitutes credibility to different audiences.
- The building of trust is crucial and has implications in terms of time, finance and other resources. PAR is one strategy that may be used to build trust among the different groups.
- The message and the messenger are equally important. It is important to identify leaders who can convey the message.
- Emphasis should be on experiential knowledge/examples e.g. practice and demonstration.

- Pooling of information is important. Currently, much of the information is scattered in regions, theme etc. Pooling may make it look exclusive but it should not necessarily be.
- Good information could attract the participation of people beyond the research community as seen in the case of LCA which was aimed at reaching out to the research community working on adaptation but has now attracted many development practitioners.
- Making networks solely internet-based may restrict the people who may benefit; therefore face-to-face interaction is very important.
- It is important to map existing networks to be used in determining the scope of what is to be initiated.
- An opportunity exists in the form of platform among CCAA-funded projects, which could use a mailing list to update members and monitor progress. All project team members should be included together with those having interesting ideas to bring to the network.

5.1 Gender Analysis & Participatory Action Research (PAR)

Day Five was devoted to exploring the various tools and methods for adaptation research. Ms. **Ritu Verma** began with a snapshot of gender dimensions that ought to be considered in climate change adaptation research. Her presentation also highlighted the difference between gender awareness and gender analysis, and of the development of gender analysis over time starting from 1970s to date. Issues that should be considered when conducting gender analysis include the many differences in roles and responsibilities, divisions of labor, differential access to and control over resources, and vulnerability, risk and decision-making not only between men and women, but also within gender groups. Other issues highlighted for consideration included:

- Inter- and intra-household relationships need to be looked at in detail for identification of, and ways of strengthening, adaptive capacity.
- It is important to link broader forces to local dynamics such as political, economic, historical, cultural and social relations that shape gender negotiations over resources.
- The variety of methods both qualitative and quantitative that may be used to carry out gender analysis.
- Research on gender and climate change adaptation should consider addressing areas such as indigenous systems, empowerment, equity, rights as part of the development and climate change agenda.

It was concluded all CCAA project proponents would require strengthening as far as gender aspects are concerned; that a gender-working group be formed from leading African gender researchers. In addition, the development of a resource guide on gender dimensions of adaptation to climate change was proposed as CCAA's contribution in that field.

A presentation by Stephen Tyler on PAR highlighted research issues and approaches that may be used for climate change adaptation research. Some of the approaches included impact prediction and vulnerability, disasters, sustainable livelihoods, and social learning. PAR is about learning from practice where research is structured so that all stakeholders learn. In this paradigm the role of researchers is reoriented to becoming facilitators of experiential mutual learning, and potentially all actors involved in the PAR process recognize how innovation may require them to change their behaviors.

After the two presentations, participants were divided into language-based groups with role-play instructions to bring out some of the challenges often encountered in projects with inappropriate gender and community participation approaches. The role-play exercises reiterated the need for a process to bring together different views for validation, recognizing that in every society there are socially-differentiated groups, and the need to involve local leadership, NGOs and development agents,

starting with project conceptualization. It was also seen that time slated for a project planning meeting should be decided carefully to ensure that all social groups are able to attend. Market days for example may not be appropriate for certain groups. The possibility of projects altering power relations between men and women, either positively or negatively should also be considered.

5.2 Outcome Mapping

Mr. **Kevin Kelpin** took participants through Outcome Mapping as one of the monitoring and evaluation strategies that they could use in their projects. In Outcome Mapping, the focus is on processes, outcomes and changes of behavior rather than the outputs. It was noted that monitoring needs to be useful, affordable, light in work and understandable, starting with what needs to be known rather than collecting a large set of irrelevant information. Evaluation plans are important in determining when in a project certain information will be needed. It was noted that CCAA will support project partners initially but other organizations with expertise in monitoring and evaluation will be brought on board to help the CCAA funded projects.

5.3 Closing

The workshop was brought to a close by Dr. **Fatima Denton**, Team Leader for CCAA. She thanked the participants for contributing to a useful workshop and reiterated the vision of CCAA, which can only be met with the full support of the project partners. She also noted that CCAA is a new program that is evolving, and recognizing the role that capacity building plays in the program's mandate, other capacity building activities would be implemented to support the project partners in their research.

AGENDA

DAY 1: MONDAY, APRIL 16

TIMING	ACTIVITIES	FACILITATION
INAUGURAL SESSION		
8.30 – 9.00	Registration	UNECA and CCAA
09.00-10.15	Introductions	Josué Dioné , Director, Food Security and Sustainable Development Division, UNECA
	Welcome address	Abdoulie Janneh , Executive Secretary, UNECA
	Remarks on behalf of IDRC	Gilles Forget , IDRC Regional Director for West and Central Africa
	Remarks	Shem Wandiga , Chair, CCAA Advisory Board
	Remarks	Fatima Denton , Program Leader, CCAA
	Remarks	H.E. Yves Boulanger , Canadian Ambassador to Ethiopia
	Opening address	H.E. Dr. Aberra Deressa , State Minister of Agriculture, Ethiopia
10.15 - 10.30	Tea/Coffee Break	
PLENARY SESSION 1: LINK BETWEEN CLIMATE CHANGE, POVERTY AND SUSTAINABLE DEVELOPMENT IN AFRICA (CHAIR: GILLES FORGET)		
<p>CCAA seeks to address several gaps and disconnections between science and policy through its main vantage point of research and knowledge transfer. This session is an opportunity for researchers to interact with policymakers from broad and specialized ministries on ways in which adaptation strategies can be integrated into developmental policies and plans.</p>		
10.30 - 10.50	Mechanisms for shared knowledge and risk communication in climate change adaptation	Foday Bojang , African Union Commission
10.50 - 11.10	Climate change adaptation, water resource management and maintenance of food security plus regional implications	Mohammed El Mourid , International Center for Agricultural Research in the Dry Areas (ICARDA), Tunisia.
11.10 –11.30	Interlude/burning questions	CHAIR
	Mainstreaming climate change into regional policies - opportunities and constraints	Youba Sokona , OSS Sahel, Tunisia (Presented by Dr. Njeri Wamokunye)
11.30 –13.00	Discussion initiated by policy makers	Anthony Nyong , CCAA

13.00 –14.00	Lunch	
PLENARY SESSION 2: PRESENTATION OF CCAA'S PROJECTS ON WATER RESOURCE, FOOD SECURITY AND WELL-BEING (CHAIR: SHEM WANDIGA)		
<p>CCAA will be emphasizing the need for pooling resources and making informed choices as a way of managing climate risks and spreading associated benefits and costs. Examples will be used from the program's first supported projects to underscore the need for regional adaptation strategies in Africa as well as the need for relevant outputs that will meet national and regional strategies.</p>		
14.00 - 14.15	Strengthening the capacity of farmers to reduce the impact of climate change on agricultural productivity to ensure food security and reduce poverty in Benin	Kolawole Saïd Hounkpnou Initiatives pour un Développement Intégré et Durable (IDID_ONG), (Benin)
14.15 - 14.30	Managing climate risk for agriculture and water resources development in South Africa: Quantifying the costs, benefits and risks associated with planning and management alternatives	Daniel Barend Louw University of the Free State (UOVS) Department of Agricultural Economics University of the Free State, South Africa
14.30 - 14.45	Burning Questions	CHAIR
14.45 –15.00	Climate change adaptation mechanisms for rural communities in two contrasting ecosystems of Morocco	Abdelouahid Chriyaa, Centre Aridoculture, Institut National de la Recherche Agronomique Morocco
15.00 –15.15	Transferring the malaria epidemic prediction model to end users in East Africa	Andrew Githeko Climate and Human Health Research Unit, Kenya Medical Research Institute, Kenya
15.15 –15.30	Burning questions	CHAIR
15.30 –15.45	Tea/coffee Break	
15.45 –16.45	Discussion initiated by policy makers	Guy Jobbins, CCAA
16.45 –17.00	Wrap up	Gilles Forget, IDRC
17.00 –19.00	Poster display and reception	UNECA/CCAA

DAY 2: TUESDAY, APRIL 17

TIMING	ACTIVITIES	FACILITATION
PLENARY SESSION 3: TOWARDS GREATER REGIONAL COOPERATION IN FACING SHARED ADAPTATION CHALLENGES (CHAIR: JOSUÉ DIONÉ)		
9.00 – 9.15	Recap of Day 1; overview of Day 2	Anthony Nyong
9.15 – 10.30	Interactive panel discussion on aspects of regional cooperation: <ul style="list-style-type: none"> • Food security (Hamdou, UNECA) • Water resources (Audace Ndayezeye, Nile Basin Initiative) • Land degradation (Al Hamndou Dorsouma, OSS) • Energy policy and regional dimensions (Jean Philippe Thomas, ENDA) • Regional initiative to develop climate adaptation for West Africa (Issa Martin Bikienga, 	Fatima Denton
10.30 – 10.45	Tea/Coffee Break	
10.45 – 11.00	Organization of break-out groups	Nathalie Beaulieu , CCAA
11.00 – 13.00	BREAK OUT SESSION 1: TOWARDS GREATER REGIONAL COOPERATION IN FACING SHARED ADAPTATION CHALLENGES: OPPORTUNITIES AND CONSTRAINTS	
<p>The different regions of Africa share many challenges in facing the expected impacts of climate change. This session is intended to serve as a forum for sharing information on adaptation related priorities and concerns in each of the regions; and identifying points of common challenge and opportunity, and existing initiatives that might provide the basis for enhanced collaboration within and among the regions. Using examples of water resource management and food security as key sectors where policies need to be harmonized and knowledge shared, the groups will need to break into three regional groups (North Africa, West and Central Africa, East and southern Africa) to discuss the following points and return to the plenary with their findings:</p> <ul style="list-style-type: none"> • Which key regional institutions work on climate change adaptation-related issues and how can their capacities be enhanced? • Which existing models of successful regional policies can we learn from and adapt to climate change issues in Africa? • What key priorities should be identified and actions taken to promote inter-regional cooperation on shared climate change adaptation challenges? • What concrete actions should be taken to implement a regional adaptation framework and how do we prioritize these actions? (ie, develop an action plan) 		
13.00 – 14.00	Lunch Break	

PLENARY SESSION 4: REPORTING FROM BREAK OUT GROUPS: CHAIR – CHRIS LANDSBERG, CENTRE FOR POLICY STUDIES		
14.00 – 14.30	Presentation from regional break out groups	Rapporteurs
14.30 – 15.30	Plenary discussions and questions	Chair
15.30 – 16.00	Tea and coffee break	
16.00 – 17.00	Responses from CCAA and key regional institutions	Chair
17.00 – 17.15	Wrap Up	J.C. Nkomo, CCAA

DAY 3: WEDNESDAY, APRIL 18

TIMING	ACTIVITIES	FACILITATOR
PLENARY SESSION 5: SHARING KNOWLEDGE ON CLIMATE RISKS AND ADAPTATION OPTIONS: CHAIR – MADELEINE THOMSON, IRI		
9.00 – 9.15	Recap of Day 2, overview of day's activities	Nathalie Beaulieu
9.15 – 9.30	Framing the issue	Laban Ogallo
9.30 – 10.30	Interactive panel discussion of policy makers and researchers on knowledge transfer mechanisms and risk communication strategies.	CHAIR
10.30 – 10.45	Tea/Coffee Break	
10.45 – 11.00	Organization of break out groups	Mary O'Neill, CCAA
11.00 – 13.00: BREAK OUT SESSION 2: SHARING KNOWLEDGE ON CLIMATE RISKS AND ADAPTATION OPTIONS		
<p>Both the production and use of enhanced knowledge on climate risks and successful adaptation strategies are important in reducing vulnerability. In addition to supporting research on adaptation, the CCAA intends to support greater regional knowledge sharing on adaptation (including vulnerabilities, risks, community knowledge, and examples of good practice). The program aims to facilitate the pooling of information, build capacity for data collection, and boost capacity for policy analysis. In this session, we invite three regional breakout groups (North Africa, East and southern Africa, West and Central Africa) to provide input on priorities and opportunities for enhanced knowledge sharing within Africa, using food security and water resource management as concrete examples.</p> <ul style="list-style-type: none"> • What types of knowledge on adaptation do we most need to share, and at what levels (i.e., locally, nationally, regionally, continent-wide)? • What barriers currently stand in the way of such knowledge sharing? • What mechanisms currently exist for sharing information on climate risks and adaptation options within your region, and with other regions of Africa? • How effectively do they serve regional policies on climate change adaptation? What capacity or other gaps need to be addressed to make these more effective in informing policy? • Recommend a course of action - suggest steps that can be taken to strengthen and build upon existing mechanisms to reduce climate risks and share knowledge on adaptation options. 		
13.00 – 14.00	Lunch	
PLENARY SESSION 6: BREAK OUT GROUP REPORTS (SAMI MOUSSA)		
14.00 – 14.30	Presentations of group findings	Rapporteurs

14.30 –15.30	Plenary discussion and questions	Nathalie Beaulieu
15.30 –15.45	Tea/coffee break	
15.45-16.15	Tools for adaptation screening	Jennifer Frankel-Reed, UNDP
16.15 –17.00	CCAA presentation of plans for: <ul style="list-style-type: none"> • Capacity development (J.C. Nkomo) • Knowledge sharing (Mary O’Neill/ Nathalie Beaulieu) • Action research (Guy Jobbins) 	
17.00-17.30	Wrap up and evaluation of Part 1 of workshop	Fatima Denton
18.00	Workshop dinner	UNECA

PART 2: CLOSED SESSION FOR CCAA PROJECT PROPONENTS

DAY 4: THURSDAY APRIL 19

TIMING	ACTIVITIES	FACILITATOR
9.00 – 9.15	Welcome and overview of workshop Part 2	Fatima Denton
ENHANCING OUR KNOWLEDGE IN KNOWLEDGE SHARING		
9.15 – 9.30	Goals and objectives of Day 4	Mary O’Neill / Nathalie Beulieu
10.30 – 9.45	Overview of CCAA Framework for Knowledge Sharing	Mary O’Neill
9.45 – 10.00	Burning Questions	Mary O’Neill / Nathalie Beulieu
10.00 – 10.15	BREAK	
11.15 – 10.45	Topic 1: Participatory communications within Action Research	Tom Mitchell
10.45 – 11.45	BREAKOUT SESSION 1: STRENGTHENING OUR COMMUNICATIONS WITHIN PROJECTS	
<p>Action research as supported by CCAA, is a “learning by doing” process of knowledge exchange and testing among stakeholders. Effective and participatory communications is an intrinsic part of the action research process. In four regional breakout groups, participants will share concrete examples of how, within their proposed research projects, they plan to communicate with their research partners, including policy makers and affected communities. They will report back on the skills and knowledge areas they would like to strengthen in their communication with project partners.</p>		
11.45 – 12.45	Report Backs: 10 minutes per group	Rapporteurs
12.45 – 13.45	LUNCH	
13.45 – 14.15	Topic 2: Knowledge exchange networks: Lessons from PLA and LCA	Tom Mitchell
14.15 – 15.00	BREAKOUT SESSION 2: WHAT MAKES FOR AN EFFECTIVE KNOWLEDGE SHARING NETWORK?	
<p>Knowledge exchange networks can offer the opportunity to learn from – and reflect on – shared challenges with others. This can enhance practice, particularly in innovative areas such as action research and adaptive learning. Networks can also serve to inform policies and practices, by connecting researchers with wider pool of research users.</p> <p>In four general breakout groups, participants will share examples of knowledge sharing networks that they have benefited from, and identify key elements of an effective network.</p>		
15.00 – 15.15	Tea Break	
15.15 – 16.15	Report Backs: 10 minutes per group	Rapporteurs

16.15 – 16.45	Plenary Discussion	Anthony Nyong
16.45 – 17.00	What we've heard and what it means for CCAA	Fatima Denton

DAY 5: FRIDAY APRIL 20

TIMING	ACTIVITIES	FACILITATOR
9.00 – 9.15	Welcome and review of the agenda for today	Stephen Tyler
9.15 – 9.45	Vulnerability and adaptation research: <ul style="list-style-type: none"> - Different research approaches - Methods suited to different approaches Participatory Action Research: <ul style="list-style-type: none"> - What is CCAA thinking of here? What are the implications for researchers? Challenges in the field? 	Fatima Denton
9.45 – 10.15	Gender analysis	Ritu Verma
10.45 – 11.00	Coffee break	
12.30– 13.00	Breakout group discussion Two groups: French and English	Stephen Tyler Ritu Verma Guy Jobbins Nathalie Beaulieu
13.00 – 14.00	LUNCH	
14.00 – 15.00	Evaluative thinking for development research: <ul style="list-style-type: none"> - What is CCAA's general approach? 	Kevin Kelpin
15.00 – 15.30	Questions / Discussions	Kelvin Keplin / Stephen Tyler
15.30 – 16.00	Tea/Coffee Break	
16.00 – 16.30	Any remaining questions / issues from research teams	Kevin Kelpin / Stephen Tyler
16.30 – 17.00	Wrap up – Take away message for CCAA Closing	Guy Jobbins Fatima Denton

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