

The CC DARE Programme in Sub-Saharan Africa: National Project Portfolio and Progress Update

CC DARE

The CC DARE programme provides demand-driven technical and financial assistance to sub-Saharan African countries that is **targeted, flexible** and **rapid**. The assistance is made available to improve the ability of sub-Saharan African countries to remove barriers and create opportunities for integrating climate change adaptation into national development planning and decision-making frameworks. The programme is designed to complement and strengthen ongoing and planned nationally based climate change adaptation and risk management. Emphasis is on small-scale, short-term (3-6 months) activities, and national institutions, NGOs, experts, and the private sector are eligible for requesting support through CC DARE.

CC DARE partner countries and projects

Since the inception of the CC DARE Programme in 2008, ten countries in Sub-Saharan Africa have become CC DARE partner countries: Benin, Ghana, Malawi, Mozambique, Rwanda, Senegal, Seychelles, Tanzania, Togo, and Uganda. As of 30th November 2009, a total of 27 national project proposals have been approved. Out of these, 5 have now completed implementation; two are in the preparation phase; while the remaining 20 projects are at various stages of implementation and are expected to be completed by June 2010.

Supporting the integration of climate change adaptation into national development

The integration of climate change adaptation activities into national development planning and decision-making processes can be facilitated and achieved through the creation of a catalytic environment. Areas in which activities may be undertaken to facilitate the creation of this catalytic environment include:

1. Awareness raising, education, and training

Awareness and understanding of the linkages between development, climate change and adaptation is a pre-requisite for support and implementation of core adaptation activities as identified in for example National

Communications and NAPAs. Awareness, education, and training on climate change lays the foundation for integrating climate change adaptation into development projects, planning and policies.

Nine of the current CC DARE projects are on awareness raising, education, and training.

2. Building capacity and supporting institutional processes for mainstreaming

Mainstreaming of climate change adaptation requires a coordinated and integrated approach with institutional structures that are capable of mobilizing different stakeholders and approaching climate change adaptation from a cross-sectoral perspective. The frameworks and processes used to develop existing and new policies, programs and projects may need to be altered so as to ensure adequate attention to climate change concerns. Furthermore, identification and prioritization of climate change adaptation options and strategies may require establishing or strengthening the skills and knowledge presently available at the country level.

The CC DARE Project is currently implementing 9 projects related to mainstreaming at national, sectoral, and local levels and to nationally prioritized capacity building activities identified in National Capacity Self Assessment (NCSA) and NAPA documents.

3. Data and technical analyses

Availability of high quality data and scientific and socio-economic analyses are required to establish a sound foundation for mainstreaming efforts and decisions.

CC DARE is currently implementing 9 national projects that improves the availability of key data and increases the scientific and socio-economic knowledge on development and climate change.

Progress of the CC DARE country projects

The previous section indicated that the 27 national projects approved under CC DARE so far are equally distributed between Awareness raising, education and training; Capacity building and institutional support, and; Data and technical analyses. The table below provides a more detailed overview of the approved projects, with each 'x' indicating a national CC DARE project.

Country	Awareness raising, education, and training	Building capacity and supporting institutional processes	Data and analyses
Benin	x	x	
Ghana		x	
Malawi	x	x x	x
Mozambique	x	x	x x
Rwanda		x	x
Senegal		x x x	
Seychelles	x x		x
Tanzania			x x
Togo	x x		
Uganda	x	x	x

In the following, the current national CC DARE project portfolio is presented by country in alphabetical order.

Benin

Two national CC DARE activities have been successfully implemented since Benin became a CC DARE partner country in November 2008.

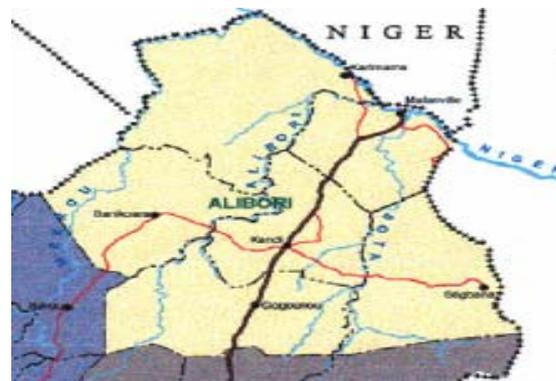


CC DARE Inception Workshop in Benin (Left to right: Danish Ambassador, Permanent Secretary of Environment Ministry, CC DARE project Coordinator and UNDP Representative)

In the Region of Alibori in northern Benin, **IDID NGO** has implemented a climate change adaptation capacity building and mainstreaming project targeting six local communities: Banikoara, Gogounou, Kandi, Malanville, Karimama, and Ségbana.

Through the project, the elected local council members and local government staff at the offices of the Mayors; technical experts in the extension services, and; managers of producer organizations and communal Centers for Agricultural Promotion

have received capacity building on climate change through 7 training workshops (with a total of 61 participants) based on 4 training modules developed for the project. The principal target groups are Mayors, Local Councilors, District Heads, Village chiefs, Opinion Leaders, Associations of Producers, Livestock breeders, Craftsmen, etc.



Alibori District of Benin where CC DARE is collaborating with local councils and extension workers on building adaptive capacity

Technical support has also been provided to the Offices of the Mayors and Local Government for the integration of climate change adaptation options in their Annual Investment and Development Plans (APIDA).

Finally, a system of risk and disaster management related to climate change has been established.

This CC DARE project has successfully replicated activities from a preceding project on the strengthening of climate change adaptation capacity of the rural actors of Benin funded by the Africa Climate Change Adaptation (ACCA) programme.



Meeting of technical APIDA staff in Kandi, Benin

The other national CC DARE project in Benin is the **CC DARE – GARDIEN NGO** project on integration of climate change impacts and adaptation strategies in the curriculum for Primary and Secondary Education. A strategy for integration of climate change concerns into primary and secondary school curricula has been developed and school teaching materials on climate change

impacts and adaptation strategies have been designed. These have been tested on selected schools, teachers and students in collaboration with and led by the Ministry of Education of Benin. The draft curriculum and teaching materials have been disseminated to stakeholders of the school education system through two sensitization seminars organized in October 2009. The next step in the process is to present the materials to the Ministry of Education for adoption and implementation. The strengths and weaknesses experienced in the consideration of climate change issues in the secondary and primary school curricula have been identified and will be published with the objective and hope that other institutions and countries will learn and replicate them in their educational systems.

Ghana

In Ghana, the [Environment Protection Agency \(EPA\)](#) and CC DARE are collaborating to finalize the National Climate Change Adaptation Strategy for presentation to Parliament and Cabinet. Development partners are required to complement the activities under the Natural Resources and Environment Governance (NREG) Programme, a joint programme supported by GoGH, NL, WB, DFID, EC, and France. The NREG programme promotes sector budget support for priority sectors including Environment, Forestry and Wildlife, and Mining.

Malawi

One of the four national CC DARE activities in Malawi focuses on tertiary education. The Department of Forestry and Horticulture under the Bunda College, an affiliate of University of Malawi, has proposed and is implementing an activity on integration of climate change adaptation in the curriculum of their Agriculture and Natural Resource programme. 5 modules on agriculture, climate change and risk management are developed based on stakeholder (rural agricultural instructors, extension service agents and farmers) consultations, and a compendium of useful resource materials and guidelines on climate change adaptation are similarly being developed. At the end of the project, a graduate (Masters Degree level) curriculum in agriculture, climate change and risk management will be running at the College with potential for replication in similar national, regional and international institutions.

The [Forest Research Institute of Malawi \(FRIM\)](#) is implementing another national project that uses participatory and action research in collaboration with climate change vulnerable communities in the Blantyre North and its catchment areas. The objective is to identify and document adaptation and management strategies that improve livelihoods

and enhance resilience to climate change. It is envisaged that the strategies will strengthen the sustainable management of natural resources, build cross-sectoral natural resource management and planning, and improve household adaptive capacity in the Blantyre North.

The two remaining national CC DARE projects in Malawi target capacity building and mainstreaming. The [National Council on Science and Technology \(NCST\)](#) is adjusting the National Science and Technology Policy of Malawi to incorporate climate change and environment issues.

Mainstreaming Climate Change Adaptation into the District Development Planning System of the Karonga District of Malawi is being implemented by the [Coordination Union for the Rehabilitation of the Environment \(CURE\)](#) NGO. The project is designed within the decentralization framework, where central government has devolved powers of disaster risk management, and environmental planning and management to district authorities. However, district authorities currently lack technical capacities to plan and implement the decentralization programme. Against this background, the project focuses on two key aspects (a) Building the technical capacities of the district and area level personnel in mainstreaming climate change in the development plans and programmes at their respective levels, and (b) Documenting and disseminating lessons learned with a view to replicate similar initiatives in other districts.

Mozambique

Four national CC DARE projects are under implementation in Mozambique. In one of these, the [Municipal Council of the city of Xai Xai](#) collaborates with CC DARE to develop strategies for effective urban planning to deal with coastal erosion and land loss in the city.



The city has been and continues to face increasingly complex challenges relating to erosion

concerns. Public and private infrastructure, housing and agricultural land are destroyed. The outskirts of the city are the most affected and this is where the municipal government encounters its major challenges. The geological characteristics of the soil seem to be sensitive to erosion, mainly along the access roads, creating therefore, functionality conflicts within the entire urban structure. Thus, this project seeks to introduce sustainable and economical techniques for erosion control and mitigation. The issue of relocation of communities within the municipality as a land, environment and natural resources management effort is looked into and included in future planning. These are all in line with the NAPA and the Vision 2025.



A second project is education and training. The Physics Department of the [Eduardo Mondlane University \(UEM\)](#) is building the capacity of lecturers from various institutions on climate change related issues and exploring interdisciplinary synergies to better address adaptation to climate change in the university curricula, through research and training. One of the aims is to create a network of high education institution (HEIs) partners across the country and identification of the technology needs and key issues to be integrated in a Masters Degree programme on disaster risk management and

adaptation to climate change. An inventory of the status of existing curricula at Public and Private Universities (PPUs) and training workshops for lecturers on disaster risk management and adaptation to climate change issues is conducted. This will enable exchange of experiences and programmes, and to share skills, strategies, and ideas in curriculum development and on climate change adaptation. At the end of the project it is objective to deliver a full master programme on disaster risk management and adaptation to climate change to be submitted to faculty of Sciences at UEM. This master programme will emphasise multidisciplinary approach towards disaster risk reduction as core element on the implementation of CCA measures.



Mozambique Coastal Flooding (MOZ NAPA, 2007)

The third project focuses on data and technical analyses. Its title is [Historical Climate INAM Database Recovery \(HCIDR\)](#) and it is implemented by the Instituto Nacional de Meteorologia (INAM). The project aims to reinforce the observing network in Mozambique, create a database with online access and rescue the historical data currently archived in hardcopies. However, the CC DARE project only covers the latter (historical data rescue). Data recovery will allow INAM to create capacity building in terms of studies in climate change scenarios and adaption (such as the INGC study on climate change - phase II, which will focus on adaptation and resilience to climate change risks), improve short and long term climate data, to develop seasonal forecasts, creating a reliable platform for climate variability and develop technologies for climatic scenarios that could in turn be used by the different sectors and development planners to design adaptation and climate proofed development strategies.

The fourth and final project in Mozambique targets [sustainable development of the Guvuro coastal zone](#) of Mozambique through the facilitation of adaptation to the derived socioeconomic impacts of climatic changes aims to introduce and promote the acceptance and implementation of Integrated Coastal Zone Management (ICZM) system as a management tool under changing climate.

pasture management techniques, restoration of the soil organic matter and carbon stocks, and rational water management as agricultural practices and technologies that would be adaptable to the changing climate. At least 20 trainers have been trained on climate change and adaptation issues who are then required to provide farming extension in the Senegal Delta. Two sites have been identified for demonstrations activities. Production and distribution of training kits on climate change adaptation technologies for agriculture are on-going.



Inception Workshop for Capacity building in Senegal River Delta, July 2009.

Senegal and CC DARE are furthermore collaborating on a third national activity concerning the [Integration of climate risks into planning documents of Directorate of National Planning of the Ministry of Finance and Economic Planning](#). CC DARE support is used to determine the impacts of climate change on the national development strategy and planning systems and to recommend a strategy for integrating climate change risks in the actual national planning system and the budget allocations process. The capacity of planning and financial officers to deal with climate change adaptation is supported through the provision of specific tools (a guide on climate risk assessment), which will allow them to integrate climate change into future planning and budget allocation processes. At the end of August 2009 discussions were held and agreements reached between the Ministry of Environment and the Ministry of Finance and Economic Planning to recruit ENDA TM – Dakar as a consultant to provide technical assistance. UNDP, Senegal, also assisted in the definition and clarifications of the role of partners in this venture. In this respect, the Climate Change Focal Point of the Ministry of Environment has requested the CC DARE project to provide technical assistance related to “tools” or “checklists” to be used for integration of climate change risks into national planning.

Seychelles

Currently, three national CC DARE projects have been approved in Seychelles. [The Ministry of Education](#) will work with CC DARE to demonstrate techniques of Rain Water Harvesting at schools as a viable climate change adaptation option. The activity, which starts implementation in early 2010, involves the collection of rain water from schools roofs to be used for domestic purposes such as the school gardening, clean ups and toilets at school level. A pilot project has already been running for more than one year, but only covered two schools. With CC DARE support, the pilot activity will be replicated and expanded to 10 more schools and new elements are added.



Tank installed at school



Belonie School at the National Science Fair Competition

The Ministry of Education will work with the members of National Climate Change Committee in executing and implementing the project. At the schools the activity will be implemented by the Eco-School Committee.

The project will intensify and expand water conservation sensitization programmes in schools for teachers and pupils. Water harvesting will be included in the school curriculum as a catalytic effort to initiate integration of climate change adaptation measures and technology. Partnerships will be built with the Water and Sewage Division of the Public Utility Cooperation in the provision of sensitization materials on water treatment and

management. It is also planned that once the project has been implemented in several schools, the Environmental Education Unit, together with the schools involved can finally submit a formal request to the Ministry of Education and other concerned ministries, such as environment and national development, for the system to be included in building codes and relevant sectoral and national development plans.

Also in Seychelles, a consortium of national institutions led by the [Environment Department](#) has requested for CC DARE support for [training of technicians and managers on climate change, water, and coastal resources](#). The training course will cover key concepts of climate change on coastal resources specific to small island states, including coastal processes, shoreline management, vulnerability assessments, impact modeling and Integrated Coastal Zone Management (ICZM). The training highlights mainstreaming of climate change adaptation into management systems (PRSP, National Development Plans).

The third national activity is the project called [Adaptation by increasing climate monitoring and climate change assessment in the Seychelles](#), implemented by the [National Meteorological Service](#) and [SIF](#). Through the project, a representative climate data collection system for effective monitoring of national, regional and global climate variability and change is established. Such a system is a pre-requisite for integrating climate change adaptation into national development frameworks. As part of the project, gaps in the meteorological data collection and climate monitoring network of Seychelles will be addressed through the procurement, installation and operationalization of automatic weather stations and the training of both meteorological and non-meteorological (volunteer observers) staff and user communities to collect data and maintain the automatic stations.

Tanzania

In Tanzania, the Department of Forest Mensuration and Management (DFMM) of [Sokoine University of Agriculture](#) in Morogoro and CC DARE are working together to improve smallholder livelihoods through woodlots management as a climate change adaptation activity in the Makete District. Baseline data and information has been gathered from around 120 households and 40 timber traders in the Mangoto, Lupila, Lupalilo and Matamba wards of the District related to silvicultural management practices; growing stocks; the contributions of smallholder woodlots to household income and poverty alleviation; the role of gender, local knowledge and land tenure; and existing marketing channels and practices for

softwood timber from smallholder woodlots. Management and marketing strategies that will aid in the planning and development of improved woodlots productivity and household income for poverty alleviation under a changing climate have been proposed. Preparation and production of guidelines for best woodlots management practices in Makete district are currently being finalized for utilization by the local population and the district extension services and other institutions, both locally and nationally.



Wege, a plant with a bulbous underground stem found in Morogoro region. When it flowers in September /October it betokens the start of *vuli* rains in October.

The other project under implementation in Tanzania is the joint [Environment Protection and Management Services, Tanzania Meteorological Agency \(TMA\)](#) and CC DARE project on the identification, documentation and dissemination of indigenous forecasting tools and skills and their integration into conventional weather forecasting operations of the TMA. A workshop for District planners, meteorologists, agricultural extension officers, civil society organizations, and local community elders on how to use indigenous forecasting and integrate climate change in planning processes at district and village levels was conducted in July in Dodoma.



Participants at the Dodoma Workshop

A Technical Paper with policy options on mainstreaming indigenous forecasting in plans and strategies to address climate change at national level in the context of NAPA has been prepared in collaboration with experts from the Tanzania Meteorological Agency.

Togo

The Government of Togo and the UN Country Office used the National Capacity Self Assessment of Togo to cooperate in the training journalists and empowering them to sensitize the population on climate change. This has been found to be inadequate and CC DARE and the Friends of the Earth – TOGO are collaborating in a project entitled ‘Renforcement des capacités techniques des organisations de la société civile togolaise et des acteurs du secteur privé sur les changements climatiques’ with the objectives of training civil society organizations (NGOs, CBOs) of Togo and the development of media materials on climate change and climate change adaptation. The journalists trained under the UNDP Project would also be used as trainers. The media materials produced would be broadcasted as activities to sensitize the general public. As agents of change close to the grass-roots level communities, the CSOs when capacitated would do the good job of sensitizing and raising the awareness of the local communities on climate change adaptation using the materials developed.

Stronger technical and institutional capacities at the Department of Village Water Supply and the communities of Kara and Savane regions of Togo for identifying, costing, prioritizing and implementing adaptation measures in water that are consistent with national development goals and priorities enshrined in the Togo NAPA.

Uganda

Three national CC DARE projects have been undertaken in Uganda: One on awareness raising; one on data, technical analysis and research, and; one on mainstreaming climate change at the sectoral level.

The Ministry of Agriculture, Animal Industries and Fisheries (MAAIF) has collaborated with CC DARE on mainstreaming climate change adaptation into the Development Strategy and Investment Plan (DSIP) of the agricultural sector as a component of the 2009 revised National Development Plan (NDP) of Uganda. The partnership achieved this task through a series of training courses; development and application of guidelines on mainstreaming climate change into sectoral development plans; and subsequent revision of the strategy and investment plan of the agriculture sector.

In the first training course eighty (80) staff involved in developing DSIP through the Thematic Working Groups, comprising staff from MAAIF, academia, semi-autonomous agencies agricultural related CSOs, were trained on climate change including skills of mainstreaming. In the second training course, more than 90 staff of the agricultural departments of Local Governments responsible for planning and implementation at local level were trained on climate change adaptation. A half-day meeting for 40 government officials from other ministries was also conducted with the objective of sharing information and experiences across relevant line ministries. The Guidelines on mainstreaming climate change concerns in the DSIP and NDP were produced by and disseminated widely. Operations guidelines for local government level actors to integrate climate change in their daily working routines (e.g. extension and advisory services and research) focusing on agricultural production departments were also produced and disseminated.

Another national activity in Uganda that has now been completed is the [NARL/NARO – CC DARE](#) project on adaptation options to cope with agricultural drought.



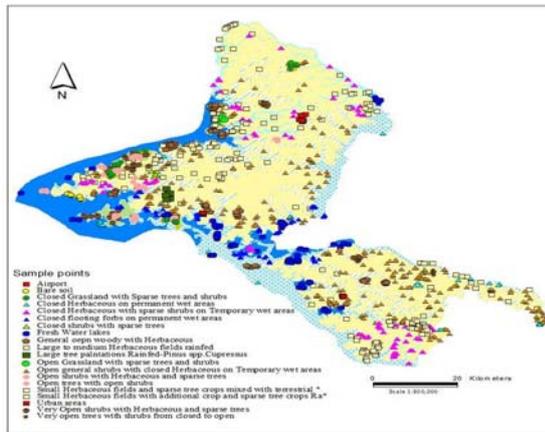
Participants at NARO Workshop, February 2009, Mbale, Uganda

The project targeted the following four integrated areas to achieve the outcome of the project: Enhanced sustainable livelihoods and food security through increased nutrient- and water-use efficiency for increased crop productivity:

- Improved scientific knowledge and information on agro-meteorological climate risks and uncertainties related to crop production to guide decision-making on crop diversification and substitution.
- Identification of current socio-economic factors, constraints, and opportunities for promoting adapted land use and management technologies in tandem with traditional knowledge and practices for coping with

agricultural drought in the southern and eastern Lake Kyoga agro-ecological zone (AEZ).

- Enhanced awareness of stakeholders on climate change and variability, agricultural drought, adapted technologies, and best practices.
- Implementation through piloting of adapted technologies (integrated nutrient management, conservation agriculture, contour bunds, etc.).



Land cover map of the Study Site (Soroti and Pallisa, Uganda) and ground-sample points.

All the information and data collected were analyzed, synthesized, packaged and disseminated using different platforms including feedback workshops and awareness creation meetings among different stakeholders (politicians, district leaders, scientific fraternity and farmers); newsprints and prime time television newscasts, and; technical reports.

Twelve model farmers were selected to host the pilot demonstration plots. The technologies that were selected for demonstration included conservation agriculture and integrated nutrient management in maize production.



Analysts take ground sample data using a GPS

The demonstrations were implemented in the first crop season of 2009, characterized by almost all the vagaries (late onset, variable amounts, a season interspersed with drought, etc.) that have come to typify the first season. In spite of these challenges, the demonstration plots stood out in vigor and greenness, and farmers managed to harvest produce, underpinning the increased resilience of farmers adopting the demonstrated technologies. An increasing number of farmers are currently adopting the demonstrated technologies.

During the national workshop and the newscasts, the project findings created considerable attention and put NARO/NARL in a trailblazing position on the issue of climate change related agro-meteorological challenges.

The timely disbursement of funds by CC DARE for implementation of national activities has been found to be a major contributing factor to the success of the project.

Based on the success of the CC DARE project, NARL/NARO have been able to secure funding for follow-up activities that will contribute towards further integrating climate change in NARO's research agenda as well as to achieving the ultimate goal of the project, i.e. sustainable livelihoods and food security through increased nutrient- and water-use efficiency for increased crop productivity. Envisaged follow-up activities include replication, up-scaling, and expansion to all agro-ecological zones across the country, and validation and calibration of crop simulation models and agro-climate zonation.

The third and final activity in Uganda is the public awareness project in which the High Commission of Meteorology under the Ministry of Water Resources in collaboration with M/S Great Lakes Film Production Company LTD and Farmers Media Link Centre in Uganda are implementing the national activity on enhancing awareness of Ugandan population to remove barriers to integration of climate change adaptation in development. The project is developing a Film Documentary, led by the Great Lake Film Production Company, and also producing media (audio, electronic and print) materials led by the Farmers Media Link Centre. After the production of the products, the Meteorological Agency in collaboration with media outlets (radio, television, journalists) would conduct awareness campaigns to sensitize and educate the population.

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