

**Z.Strengthening national capacities to adapt to climate change through improving management of water variability and other climate-driven changes in Africa**

**DESA in collaboration with the ECA and the United Nations Institute for Training and Research (\$697,600)**

**Background**

131. In the economies of many African States, development is constrained by growing water stress as well as variability of water resources. Both factors are expected to increase in the near future owing to climate change. Member States have requested the strong support of the United Nations for the building of national capacities to adapt national policies and local practices to deal with climate vulnerability in water-stressed areas. The proposed project aims to respond to this request.
132. Many African economies are dependent mainly on rain-fed agriculture and livestock management and therefore exhibit high dependence on rainfall variability and high vulnerability to extreme weather events such as floods and droughts.<sup>1</sup> In those countries, events such as long droughts or long-term changes in climatic patterns have a critical impact on sustainable livelihoods of the resident population. Local water scarcity in Africa has been linked to poverty, land degradation, migration, and violent conflicts. Those difficulties are often compounded by the lack of suitable institutional structures, as well as the absence of data necessary to support evidence-based policymaking and to monitor strategy implementation.
133. Devising risk management and adaptation strategies well integrated with economic planning is critical to addressing vulnerability to weather and climate change. Many African countries are seeking improved planning tools and strengthened capacities to support livelihood strategies of their rural and urban communities. By providing the foundations for such instruments, this project will contribute to increase the likelihood of success of others' efforts for development and peace. The project will aim to bridge several gaps, concerning in particular: (a) the knowledge that Governments and other relevant stakeholders have of the impact of water scarcity and variability on the national and local economies; (b) the ways in which cross-cutting consequences of environmental or climate change, such as poverty, migrations or the organization of agricultural production systems, are taken into account and integrated into mainstream economic planning, sector development plans and investment decisions; (c) the institutional mechanisms currently in place to share and disseminate that knowledge, including to gather information on ongoing changes affecting local weather conditions and production systems (bottom-up) and conversely to ensure that adequate responses are given in due time to locally unsustainable trajectories (top-down).

---

<sup>1</sup> The recent World Bank Country Assistance Strategy for Ethiopia mentions that when historical rainfall patterns are incorporated into a model of the Ethiopian economy, projected GDP growth rates are reduced by 25-40 per cent. Although the figures may be different, similar considerations are also valid for many Sahelian countries that have suffered from very high variability of precipitation.

<p><b>Objective of the Organization:</b> To strengthen the capacity of African countries confronted with high water variability and stress from climate change to better integrate and adapt national and local development strategies and practices, thereby increasing the likelihood of sustainable development and peace.</p>	<p><b>Summary budget</b></p> <p>(Thousands of United States dollars)</p>		<p><b>Comment [IL1]:</b></p>
	<p><b>Relationship to the strategic framework for the period 2010-2011 and the Millennium Development Goals:</b>  DESAsubprogrammes 3 (Social policy and development), 4 (Sustainable development), 5 (Statistics) and 8 (Public administration and development management); and ECA subprogramme 2 (Food security and sustainable development); Millennium Development Goals 1, 2, 3, 4, 5, 6, 7 and 8.</p>	<p>Consultants 155.0</p> <p>Travel 115.4</p> <p>Contractual services 198.6</p> <p>Operating expenses 10.6</p> <p>Workshops <u>218.0</u></p> <p><b>Total 697.6</b></p>	

<b>Expected accomplishments of the Secretariat</b>	<b>Indicators of achievement</b>
<p>(a) Increased knowledge of the relationships between water resources variability (e.g., prolonged droughts and extreme floods) and the resilience of local/basin level/national economic systems and raising awareness of decision makers of new needs for innovative responses for improved management of water variability and other climate-driven changes within four selected water-stressed countries</p>	<p>(a) Increased number of local and national stakeholder trained on water variability-related issues and on the local and national implications on systems of production and macroeconomics, poverty and environment, as well as on migration, rural conflicts and urban planning</p>
<p>(b) Increased understanding and ability of targeted high-level policymakers and universities of African countries to develop and implement a capacity-development approach with multiplier effects for self-adaptation to water variability for each of the four African water-stressed subregions: North Africa, Sahel, Eastern Africa and Southern Africa</p>	<p>(b) More than two thirds of the national and regional participants in project activities report:</p> <p>(i) An increase in their personal understanding of response options to fill identified gaps</p> <p>(ii) An increase in understanding of the need to strengthen national institutions, including those of universities and training institutions, to integrate and adapt their development strategies and local practices</p> <p>(iii) An increase of implemented activities applying a capacity-development approach with multiplier effects for self-adaptation</p>
<p>(c) Increased awareness and cooperation among national training institutions capable of producing scalable methodologies and training material to support adaptation to higher water variability at all geographical levels</p>	<p>(c) Increased availability of project findings, scalable methodologies, training materials and increased cooperation exchanges between training institutions</p>

#### **Main activities**

134. The main activities of the project will include:

- (a) Organizing two workshops (one in French, one in English) in two participating countries each, to train staff of ministries in charge of planning/economics and of water policies and to train national experts on the project objective, validate terms of reference, and launch the project;
- (b) For each of the four pilot countries, producing four comprehensive studies dedicated to the following aspects: (i) water resources (hydro-climatology and hydrogeology); (ii) incorporation of rainfall variability into macroeconomic planning; (iii) identification of the climate shocks to local production systems, their causes, and the mitigation strategies adopted; (iv) assessment of the institutional arrangements, and experiences of various actors, in dealing with climate shocks and their consequences, at different geographical levels. In addition, two subregional studies on rainfall data and water variability;
- (c) Organizing four national validation and training workshops with the participation of national stakeholders, focused on improving/devising adequate mechanisms for two-way information-sharing on water and local development-related issues between the local and national levels;
- (d) Developing a dedicated and secure webpage on the DESAwebsite, allowing for exchanges of information between project participants;
- (e) Organizing a working meeting to: (i) define a capacity-development strategy with sustainable, multiplier effects; and (ii) identify a set of scalable methodologies and training materials (regional common needs plus specific subregional needs in capacity-building), which could be maintained and used by a self-sustainable network of national training institutions (universities or training centres);
- (f) In cooperation with the United Nations Institute for Training and Research, designing the training framework, and production of training material for each module. Two high-level training workshops for policymakers to promote the need for funding and sustaining a national and subregional network of capacities in water variability management;
- (g) Conducting a training-the-trainers session, for 16 trainees selected based on a competitive bidding process between institutions (national universities or training centres) participating in the network;
- (h) Establishing a self-sustainable network of national training institutions capable of supporting water-stressed countries to adapt to higher water variability and other climate-driven changes at all geographical levels;
- (i) Editing and translation (English to French and French to English) of training material and inclusion on the dedicated project webpage of the DESAwebsite. Monitoring and evaluation of the dissemination of the training in other countries by the education network one year after the first training of trainees.

<b>Z. Strengthening national capacities to adapt to climate change through improving management of water variability and other climate-driven changes in Africa</b>	
<b>Implementing entities:</b> DESA with ECA and UNITAR	<b>Duration:</b> 2010 – 2013
<b>Objective:</b> To strengthen the capacity of African countries confronted with high water variability and stress from climatic changes to better integrate and adapt national and local development strategies and practices, thereby increasing the likelihood of sustainable development and peace.	
<b>Summary budget</b> <i>thousands of US dollars</i>	<b>Detailed budget (US dollars)</b>
Consultants 155.0	<b>Consultants (\$155,000)</b> 155 000
Travel 115.4	<u>International consultants</u> Two international consultants for (i) consolidation of four national reports (2 countries per consultant) and design of strategic options to better deal with water variability, (ii) four missions on analysis of specific issues and specific needs of 4 sub-regions, (iii) participation to a common project working meeting on methodologies and (iv) training of trainers in four sub-regional workshops (2 workshops for each consultant) (in support of activities (a), (b) and (c). (80 days x \$400per day) + (\$39,000 for consultants travel) (\$71,000)
Contractual services 198.6	<u>National / Regional consultants</u> 16 national consultants for four studies per country and supports to four training/validation national workshops (in support of activities (a)) (16 consultants x 1.5 work months x \$3,000 per month) (\$72,000)
Operating expenses 10.6	<u>External evaluation</u> One international consultant to conduct an external evaluation of the project (in support of activity (c)) including fee and travel costs (\$12,000)
Workshops 218.0	<b>Travel of staff (\$115,400)</b> 115 400
<b>Total 697.6</b>	<u>International UN Staff</u> 12 missions by two international DESA staff (2 missions per person per year) for (i) training national staff and experts on project objectives and issues, (ii) developing a capacity building strategy with project participants, (iii) technical and training contribution to workshops (in support of activities (a), (b) and (c)) (\$8,200 per mission x 12 missions) (\$98,400)
	<u>(b) Regional staff/ other UN staff</u> 5 missions by regional/other UN staff to provide support and coordination to one working meeting (UNITAR) and to two high-level training workshops (UNITAR and ECA) (in support of activities (b) and (c). (\$3,400 per mission x 5 missions) = \$17,000

	<p><b>Contractual services (\$174,000)</b></p> <p><u>Hydro-meteorological studies</u> Two contracts with two sub-regional scientific African institutes to collect and control data and treat and analyze hydro-climatologic time-series (in support to activity (a)) (2 contracts x 10,000 per contract) (\$20,000)</p> <p><u>Project web-site</u> One contract to develop on the DESA-DSD web site a secured project web-page (in support of activity (b)) (\$10,000)</p> <p><u>Training material</u></p> <p>Contract with UNITAR to design the training framework and evaluate progress within countries (in support of activity (c)) (\$44,000)</p> <p>Two contracts to produce and edit training materials common to the four selected countries (in support of activity (c)) (2 contracts x 10,000 per contract) (\$20,000)</p> <p>Four contracts to produce and edit training materials specific to each pilot country (in support of activity (c)) (4 contracts x \$10,000 per contract) (\$40,000)</p> <p><u>Translation</u></p> <p>Translation of English documents into French in support of all activities (\$20,000) Translation of French documents into English in support of all activities (\$20,000)</p> <p>Contractual Services in support of all activities (\$24,600)</p> <p><b>Operating expenses (\$10,600)</b></p> <p><u>Communications</u> (in support of all activities) (\$6,000) <u>Supplies</u> (in support of all activities) (\$ 4,600)</p> <p><b>Seminars and Workshops (\$218,000)</b></p> <p><u>Workshops</u> 10 training workshops in four countries (in support of activities (a) and (c)). (\$900 per participant x 220 participants) (\$198,000). Local arrangements, including conference facilities and services, for regional workshops (in support of activities (a) and (c)) (\$2,000 per workshop x 10 workshops) = \$20,000</p>	<p>198 600</p> <p>10 600</p> <p>218 000</p>
--	--	---