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UNDP Project Budget Revision

Country: Union of the Comoros

United Nations Development Programme
&
The Flemish Government

PIMS 4188 Comoros: Adapting water resource management in the Comoros to expected climate change.

Period covered: 2013-2014

2/10/14

Project Title: Adapting water resource management in the Comoros to expected climate change.

UNDAF Outcome(s):

Outcome 4: Ecosystem integrity is preserved and ecosystem services they provide are valued for the benefit of the population, including communities dependent on natural resources for their survival.

UNDP Strategic Plan Environment and Sustainable Development Primary Outcome:

Key Results Area: Promote climate change adaptation.

Outcome 1. Strengthened capacity of developing countries to mainstream climate change adaptation policies into national development plans.

Expected CP Outcome(s):

CP Outcome 3: Current trends in the degradation of the environment and vulnerability to natural hazards and climate are significantly reduced.

Expected CPAP Output (s):

CPAP Output 3.2: The action plan of the development of systematic, institutional and individual capacities of the management and multi-sectoral coordination of the environment is put in place.

Output 3.3: The development of management capabilities and integration for SLM in the perspective of keeping land fertile and the restoration of degraded forests or agricultural areas.

Executing Entity/Implementing Partner:

National Directorate of Environment and Forestry (NDEF) (executing agency).

Programme Period: 2013-2014 Project Title: Adapting water resource management in the Comoros to expected climate change. Award No: 00060498 Project ID: 00087432 PIMS 4188: Business Unit: COM10 Project Duration: 1 year Management Arrangement: NEX	Total budget: 150,000 Euros Allocated resources (Flemish Government): 150,000 Euros
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Agreed by (Government): **Mr. Abdou Nassur Madi**, Ministre de la Production, de l'Environnement, de l'Energie, de l'Industrie et de l'Artisanat



Date/Month/Year: 10/10/2010 P/O Dr. Abdoul Karim Nohamed

Agreed by (Executing Entity/Implementing Partner): **Mr. Aboubacar Allaoui**, Directeur National de l'Environnement et des forêts



Date/Month/Year: 7/10/13

Agreed by (UNDP): **Mr. Douglas Casson Coutts**, Représentant Résident



Date/Month/Year: 12/10/13

Adapting water resource management in the Comoros to expected climate change: 2010-2014

Proposal for additional funding: EUROS 150,000

Background

Comoros is one of the poorest countries in the world, with an estimated GDP of US\$ 450 per capita (2006). Additionally, the population density is among the highest in Africa (approximately 283 people per km²). The growth rate of the population (2.1%) surpasses the economic growth rate (2% in 2007), making it difficult for the government to provide basic social services such as drinking water and health care. Furthermore, the Comoros has high levels of poverty (55%), a chronic economic deficit and is considered a highly indebted poor country. At present, only one of the Millennium Development Goals (MDGs) is presently on-track (namely, MDG 4 "reduce child mortality").

Climate change is likely to adversely affect the Comoros by resulting in: i) changes in rainfall levels and patterns; ii) increased temperatures; iii) sea level rise (and subsequent salinization of critical coastal aquifers as a result of salt water intrusion); and iv) an increased frequency of climatic hazards (such as tropical cyclones, droughts, episodes of heavy rainfall and flooding). Exacerbating these climate change impacts are the inherent environmental vulnerabilities of the Small Island Developing States (SIDS) (including small land area, susceptibility to natural disasters, geographical isolation, limited natural resources and sensitive ecosystems) of which the Comoros is part. This, superimposed on existing anthropogenic practices (such as the quickening pace of deforestation rates for agricultural production), threatens water security, food security, economic growth and the livelihoods of communities within the Union of the Comoros.

Climate change and variability (e.g. variations in rainfall, increase in temperature, sea level rise and increased frequency in climatic hazards) have a negative impact on water supply and quality in the Comoros by reducing availability of water and dilution of contaminants (e.g. pollutants, salts and sediment). This will continue to be the case unless timely adaptation interventions are implemented. Indeed, water security and quality have been identified by the Comoros Poverty Reduction and Growth Strategy reports as among the most critical problems facing the Comoros. Additionally, a vulnerability survey undertaken during the NAPA (2006) process listed the water sector as being the second most vulnerable sector to climate change. The problem is exacerbated by inadequate water resources management including inter alia: i) limited and inadequate water supply; ii) inadequate infrastructure and insufficient water treatment and; iii) quality monitoring has resulted in poor access to potable water. Moreover, people who do have access to drinking water frequently suffer from waterborne diseases due to its poor quality.

Comorian communities, autonomous islands' governments, and the national government presently lack the technical capacity, management capacity, physical resources and financial resources to overcome or cope with water resources management in the context of worsening climatic conditions. The goal of the project is to adapt water resource management to climate change in the Comoros whilst the project objective is to reduce the risk of climate change on lives and livelihoods from impacts on water resources in the Comoros. In so doing, this project will implement the adaptation priority "increase in water supply" and contribute to the adaptation priority "improvement of water quality", identified during the National Adaptation Programme of Action (NAPA) process. The project will work on the three islands that constitute the territory of the Comoros with a focus on improving water resources management to

increase water supply and quality under changing climatic conditions. To achieve this, the following outcomes will be delivered:

1. Institutions at a national (i.e. Ma-Mwe and ANACM) and community (i.e. UCEA and UCEM) level strengthened to integrate climate change information into water resources management.
2. Water supply and water quality improved for selected pilot communities to combat impacts of climate change.
3. Awareness and knowledge of adaptation good practice increased for continued process of policy review and development.

Project outcomes are jointly supported by UNDP and UNEP as joint Implementing Agencies for the GEF. The project's total budget is 13 million US\$ over 4 years, of which 3,7 million are a GEF Grant contribution from the Least Developed Country Fund, and the remaining 9,3 million are co-financing contributions from the Comoros' national and international partners. The project results framework is attached at Annex A.

The project is currently in its inception phase, with project teams on each island recruited, and an official launch of activities sponsored by the Government of the Union in early 2012. The main priority for the 2012 annual work plan and budget is to finalize the launch of the major water infrastructure rehabilitation works in each of the three islands, including environmental assessments. Work is also underway to link with vulnerable communities in rural areas in order to initiate the project's activities targeting local use of natural resources that have an impact on water mobilization and quality.

Problem statement for Flemish support

Local communities participating in the project are currently implementing ad hoc agricultural and land use practices, with little guidance on resilience. Water sources currently used for agriculture in the three islands, are already polluted, including by improper sanitation around sources. In addition, water conservation infrastructures are severely degraded and many water reservoirs have fallen in complete dis-use. Within available resources, the project can only rehabilitate a small number of water conservation points, and cannot target issues related to sanitation, pollution or land use. This creates a gap in addressing all factors of underlying vulnerability.

The proposal

Additional support would be required for the project to address the full scope of issues at the local level, working with the targeted communities in each of the three islands. It would make a direct contribution to achieving more sustainable results under the project's expected Outcome 2: Water supply and water quality for selection pilot communities to combat impacts of climate change improved.

Specifically, the additional contribution would be used to achieve the project's targets on:

- Percentage increase in the population at each pilot site with improved delivery of water for domestic and irrigation purposes.
- Number of cases of hepatitis and typhoid fever reduced in all five pilot sites.

And the target on agricultural improvements added back into the project:

- Percentage increase in agricultural production in the pilot sites.

The project will contribute to Outcome 4.3 of the UNDP Energy and Environment Thematic Trust Fund: *National and local governments and communities have the capacities to adapt to climate change and make inclusive and sustainable environment & energy decisions benefitting in particular under-served populations.*

The proposal is a contribution to two outputs to benefit 4824 people in Anjouan, 3000 in the Bandasamlini area of Ngazidja, and 4830 in Djandro Plateau of Moheli, as follows:

- add an additional activity under Project Output 2.2: Community members trained to manage adaptive water interventions sustainably. The activity would be the introduction of local water treatment technologies, such as localized ecologically-based water purification systems. Awareness raising and community mobilization will be undertaken to promote safe use of water and sanitation among the surrounding communities, in order to reduce water contamination. Indicative budget: Euros 100,000
- to add an additional Output 2.3: Sustainable land management practiced in pilot sites. The additional contribution would be provided to support the training and support of local agricultural producers in the sustainable and resilient use of agricultural land. This will include training to be delivered through the local Centres for Agricultural Expertise (Ministry of Agriculture) and the provision of starter seeds and agricultural tools for enhanced agricultural production. Indicative budget: Euros 50,000

Indicative total budget: Euros 150,000

The Implementing Partner (IP) will be the IP for the project: National Directorate of Environment and Forests of the Ministry for Agriculture, Fishing, Environment, in charge of Energy, Industry and of Artcrafts.

Total budget and workplan

Award ID:	00060498
Project ID	00087432
Business Unit:	COM10
Project Title:	Adapting water resource management in the Comoros to expected climate change
PIMS ID	4188
Implementing Partner (Executing Agency)	UNDP-NEX / NDEF

Outcome	Responsible Party/implementing Agent	Fund ID	Donor Name	Atlas Budgetary Account Code	Atlas Budget Description	Amount (Euro)
Outcome 2: Water supply and water quality for selected pilot communities to combat impacts of climate change improved.	DNEF	62040	Flemish Gov	75700	Training and Workshops	66,363.64
				71400	Contractual Services	25,000.00
				71600	Travel	10,000.00
				74200	Audio Visual and Print Prod Costs	35,000.00
				75100	Facilities and Administration	13,636.36
TOTAL						150,000.00

Annex A: LDCF Comoros project results framework

	Indicator	Baseline	Targets	Source of verification	Risks and Assumptions
<p>Project Objective: "To reduce the risk of climate change on lives and livelihoods from impacts on water resources in the Comoros."</p>	<p>1. The percentage change in vulnerability of men and women living in the pilot sites to climate change risks on availability of clean water.</p>	<p>1. The baseline will be determined in the pilot sites in the inception phase through a VRA.</p>	<p>1a. 50% increase in the VRA score at the end of the project.</p> <p>1b. 20% increase in the VRA score mid-way through the project.</p>	<p>1. Gender-sensitive field Surveys/VRA.</p>	<p>Adaptation measures implemented in the water sector (i.e. rehabilitation/construction of infrastructure) are not found to be cost effective. (i.e. cost-recovery cannot be ensured).</p> <p>Stakeholders such as autonomous island's communities, UCEA, UCEM, NGOs and CGEs remain committed to implementing baseline activities complemented by the additionality interventions the project aims to implement.</p> <p>Pilot sites are best placed to demonstrate the benefits of measures to adapt to climate change.</p> <p>Logistical challenges slow down delivery e.g. getting supplies to islands and procuring contractors in a timely fashion.</p>
<p>Outcome 1 Institution s at a national (i.e. Ma-Mwe and ANACM) and community (i.e. UCEA and UCEM) level strengthened to integrate</p>	<p>1. Number of policy documents revised to include regulations and provisions that promote gender equitable adaptation in the water</p>	<p>1. Water Act and other relevant policies do not include regulations for application/enforcement.</p> <p>2. Policy makers and planners do not currently integrate</p>	<p>1. At least one policy document is revised by the end of the project.</p> <p>2. By the end of the</p>	<p>1. Revised policy documents and interviews with Vice-President, Secretary General and agencies concerned.</p> <p>2. Gender-</p>	<p>Availability of technical expertise and equipment for downscaling international climate data to ANACM level.</p> <p>Government remains stable and commits itself to incorporate climate change adaptation into its policy documents as a</p>

<p>climate change information into water resource management.</p>	<p>sector. 2. The number of policy-makers and planners using adjusted processes and methods to develop gender-equitable water management policies that integrate climate change projections</p>	<p>knowledge of climate change into policies related to water, agriculture or poverty reduction. Deficiencies include: a) no collection of water data, no modelling or analysis of safe yield or of available water resources is carried out. b) water quality and supply monitoring capacities are weak.</p>	<p>project, at least 10 policy makers and planners are using adjusted processes and methods to develop water management policies that integrate climate change projections.</p>	<p>sensitive surveys and interviews with Ma-Mwe, UCEA, UCEM and AFD.</p>	<p>matter of priority.</p>
<p>Outcome 2 Water supply and water quality for selection pilot communities to combat impacts of climate change improved.</p>	<p>1. Percentage increase in the population at each pilot site with improved delivery of water for domestic and agricultural purposes. 23. Number of</p>	<p>1. At present, domestic water supply is insufficient for the capital of Moroni and the present network is failing. There is no network in place at Djandro Plateau. A network exists in Lingoni-Pomoni and Nioumakélé but they are insufficient and require rehabilitation. Baseline water supply is less than 50 litres/per capita/per day and water quality does not comply with drinking water standards. 2. Crops are largely rain-fed with a very basic (and inefficient) drip irrigation system in place in Bandasamlini. 3. Poor water quality</p>	<p>1a. By the end of the project, at least 50% of the populations within each pilot site are able to access at least 50 litres per day of safe drinking water. 1b. Mid-way through the project, pilot interventions regarding the construction and rehabilitation of water supply infrastructure are at least 90%</p>	<p>1. Surveys and end of project evaluation reports. VRAs. Water distribution meters and results of quality monitoring. 2. Surveys and end of project evaluation reports; VRAs.</p>	<p>Communities do not respond positively to improved water management practices. Adaptation measures implemented in the water sector (i.e. rehabilitation/construction of infrastructure) are not found to be cost effective. (i.e. cost-recovery cannot be ensured). Communities may not adopt reforestation activities.</p>

<p>cases of hepatitis and typhoid fever reduced in all five pilot sites.</p>	<p>causes frequent cases of hepatitis and typhoid fever in the Comoros (The baseline number of cases will be determined in the pilot sites in the inception phase.)</p>	<p>completed.</p>	<p>3. Statistical data from hospitals near pilot sites and surveys conducted at pilot sites.</p>
<p>3. Percentage of land surface covered by forest tree canopy.</p>	<p>4. The extent of forest degradation at both of the reforestation pilot sites will be determined during the implementation phase.</p>	<p>2. By the end of the project, agricultural production has increased by at least 10% at these pilot sites.</p>	<p>4. Running line transects conducted every 12 months after rehabilitation through the restored area.</p>
		<p>3. By the end of the project, the number of cases of hepatitis and typhoid fever is reduced by at least 25% in the pilot sites.</p>	
		<p>4a. Mid-way through the project, at least 30ha at each of the two pilot site where reforestation will be piloted has been restored.</p>	
		<p>4b. At least 50% of alive forest</p>	

			cover by the end of the project.		
			5. All interventions will be designed and implemented using gender-sensitive planning tools.		
Outcome 3 Awareness and knowledge of adaptation good practice for continued process of policy review and development increased.	<p>1. Number of men and women (public and decision makers) aware of climate change vulnerability and adaptation responses.</p> <p>2. Number of knowledge products generated and disseminated.</p>	<p>1. At present, rural communities' understanding of climate change and its impacts is minimal. The baseline will be determined in the inception phase. A survey is needed.</p> <p>2. At present, the national policies and autonomous islands' development plans do not address climate change and adaptation.</p>	<p>1a. By the end of the project, at least 30% of the population within pilot site communities are aware of climate change impacts and adaptation options.</p> <p>1b. Mid-way through the project, at least 10% of the population within pilot site communities are aware of climate change impacts and adaptation options based on their involvement with pilot site interventions.</p>	<p>1. Gender-sensitive surveys among communities on each islands regarding climate change impacts and adaptation options.</p> <p>2. Project evaluation reports. ALM, GAN, and IW platform.</p>	<p>Pilot sites are best placed to demonstrate the benefits of measures to adapt to climate change.</p> <p>Government remains stable and commits itself to incorporate climate change adaptation into its policy documents as a matter of priority.</p> <p>Policy stakeholders are unwilling to make changes in policies within the time frame of the project.</p>

			<p>2a. By the end of the project, project lessons are distributed in hard copy (e.g. pamphlets, briefing notes, newsletters, booklets etc), electronically (e.g. via the project website), via radio broadcast and via one national and three island-level workshops.</p> <p>2b. Mid-way through the project, a project website is operational and is regularly updated with project information.</p>	
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