

## **Global Climate Change Alliance: Pacific Small Island States Project Project Concept Note**

**Name of Country** : Republic of Nauru

**Name of Person/Agency** : Russ Kun, Secretary, Ministry of Commerce, Industry and Environment (CIE)

### **General Information:**

**Project title:** *Increasing the Rainwater Harvesting Capacity in Nauru*

**Project site(s):** *Yaren, Buada, Meneng, Anibare and Ijuw Districts*

**Project Partners:** *CIE, EU and AusAID*

**Total Project Cost:** *EUR500,000*

**Project Duration:** *2.5 years*

### **Project Description:**

Availability and access to a supply of good quality water in Nauru has been a development constraint for many years. There is a considerable body of historical information, technical advisory reports and a National Water, Health and Sanitation Plan concerning water supply and management approaches to resolve Nauru's water problems. The sustainable development strategy 2005-2025 includes a water sector goal to provide a reliable supply of water to all households and businesses with the following development milestones: refurbishment of national water storage tanks; 100 new household water tanks installed per annum; desalination plant to be operational by 2008; and water storage capacity expanded by 2015.

Nauru's water supply is derived from its groundwater aquifers, rainwater and desalination of seawater. However, the groundwater supply is highly contaminated and needs purification for use in residential homes and commercial buildings. The use of desalinated water is deemed unsustainable due to the high cost (including fuel costs) of operation and maintenance in the medium and longer terms. Rainwater harvesting is the most economically feasible and culturally accepted potable water used in Nauru. The present rainwater harvesting provides all potable water needs but due to aging roof catchments the rainwater potential is not fully met.

Nauru has requested that their GCCA: PSIS climate change adaptation project (Key Result Area 2) should focus on providing improved rainwater catchment for up to 238 households. This will involve construction of standalone water catchment structures, repairing and replacing aging roof catchments. (A detailed study of all the households was completed by SPC-SOPAC in 2008). A mechanism for a monetary contribution by each household to the cost of the improved roof catchment is being discussed as a way of promoting local ownership of the project and encouraging maintenance of the roof catchments.

The proposed project would have the following outputs:

- 1) Quality potable water for up to 238 households supplied continuously.
- 2) Strengthened resilience to the adverse impacts of climate variability and change.
- 3) Capacity for improved management of potable water strengthened.
- 4) Opportunities for replication in other districts of Nauru and/or elsewhere in the Pacific region.

An assessment of the water infrastructure relating to rainwater harvesting (catchment, transmission, and storage systems) in 2008 in the five districts showed only 75% capacity, the remaining 25% being in poor condition. In the light of this deficiency and the need for improved supply of quality potable water, additional support is being provided by AusAID for water tanks and by the European Union (EDF 9, Envelope B) for guttering and downpipes for these households. Thus this GCCA: PSIS project would complement Nauru's efforts to increase the supply of quality potable water to households on Nauru and thereby build resilience to climate variability and change.

### **Project Cost and Budget**

The cost of the project will be approximately EUR500,000 and the budget for various activities will be detailed when the project is fully developed.

### **General Criteria for Identification of Projects**

<b>Criteria</b>	<b>How does the proposed project adhere to the criterion?</b>
1. <i>Feasibility</i> : Is the proposed project feasible taking into account: Time frame of GCCA: PSIS, Available budget, National human resources, Previous track record with project implementation.	The project falls entirely within the GCCA: PSIS project time frame and the provision of EUR500, 000 will enable the supply of potable water to approximately 250 homes (20% of estimated population in 2000). Extensive studies on the water supply to households in Nauru by SPC-SOPAC provide good baseline data.
2. <i>Cost</i> : Does the project require minimal resources	Yes: The project will require minimal resources. Other components are being supported by complementary funding provided by AusAID and EDF.
3. <i>Consistency</i> : Does the project support the country's climate change adaptation policy and planning	Yes: The project is consistent with Nauru's adaptation policy framework (RONAdapt) where water sector improvement is prioritised as the highest priority.
4. <i>Urgency</i> : Is the project urgent or could it be delayed 10 years with minimal impact	Yes: Further delay of the project would make Nauru more vulnerable to climate variability and change.
5. <i>Scientifically valid</i> : Is the project based on scientifically valid climate change projections	Yes: Year-to-year variability in rainfall is a real challenge for Nauru. Rainfall varies from 500-4500 mm a year due to the influence of the El Niño Southern Oscillation (ENSO). This project will help to address the existing variability by creating more storage. However, longer term projections for 2030 and beyond show an increase in seasonal and annual rainfall and less frequent droughts, although the variability resulting from ENSO is expected to continue.
6. <i>Equity</i> : Does the project involve all sectors of society (especially community participation and gender considerations)	Yes: This project is centred on the full participation of communities, government and non-government organisations and provides opportunities for entry of gender considerations in the design and implementation of the project.
7. <i>Replication</i> : Can the project be replicated in the country or elsewhere	Yes: This project is focused on 5 of the 15 communities on Nauru and could easily be

	replicated elsewhere in Nauru and in other PICs.
8. <i>Measurability</i> : Can the benefits of the project be measured and quantified	Yes: An M&E framework will be designed for this project and used to measure the benefits.
9. <i>Scope of project</i> : Does the project activity focus on one sector and include a blend of visible (on-the-ground) activities and intangible support activities (e.g. policy development, capacity building)	Yes: The project is focused on the water sector with strong linkages to health, hygiene and livelihood. Project activities are in line with the National Water, Health and Sanitation Policy and Drought Management Strategy
Other comments	N/A
Date of assessment	May 31, 2012