

Concept Note Cover Page

Country: Niue Island
Location within the country: Alofi South & Alofi North Villages

Concept focus:

Both

Project type:

Type 2 – Maximum budget is the country allocation

Total requested budget:

Duration of project:

Contact point:

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Support for PDD development:

*This section enables countries to utilise an allocation of **up to 30,000 Euro from the country allocation** for the engagement of consultant(s) or organisation(s) to assist in PPD(s) development.*

Yes, organisation to be engaged: Secretariat of the Pacific Community (SPC)

No

Undecided

Concept Note – Description (4 pages maximum)

1. Project title: “Alofi Waste water reduction project”

2. Background and rationale (max ¾ page)

Addressing sanitation and waste disposal is one of Governments major priorities. Following surveys conducted by IWRM as well as experience by the Department of Environment, it was identified that not all home in the main town of Alofi have septic tanks. This is a major problem as the main town of Alofi has a high concentration of not only households, but also tourism accommodation, general businesses, mechanical businesses, and schools. There is an important need to protect the underground water-lens which is the main source of water for the island population. Projected changes in climate for example increasing wet season and annual rainfall, increase in frequency of and intensity of rainfall; fewer but more intense cyclones, ocean acidification and rising sea levels will increase risk to the underground water. These projections will affect the water lens hence the need to reduce the risk from the different pathways caused directly and indirectly by waste from septic tanks. The different pathways to the water lens needs to be managed effectively and efficiently by providing, upgrading and managing septic tanks for households. These septic tanks will be constructed on Niue utilising infrastructure and facility constructed under the collaboration between the GEF funded Pacific Adaptation to Climate Change (PACC) Project and EU/SPC-Global Climate Change Alliance in Pacific Small Island States (GCCA;PSIS) Projects.

The problem is that not all homes in the main town (Alofi) have a current septic tank. Wastewater is drained to chasms, caves, crevices and holes behind homes. Some homes also have old cement water-tanks which are flipped over and used as septic tanks resulting in septic having a false floor where waste water is drained into the ground. This cost-cutting activity is not acceptable due to the damages made to the sanitation-truck which drains the septics where rocks and soil is also extracted damaging the pumps and hoses. Under the IWRM project implemented by the Water Division of Public Works Department, septic tanks in Alofi were identified, verified and put into a database (GPS). A single septic drainage truck services all households on the island is approximately 15 years in use on Niue where it was bought second-hand from Japan. Continuous breakdowns have been a challenge. Although majority of homes have septic tanks, those that are full are emptied with the waste dumped (open pit) at the end of the airport run-way. It is moving one problem to another area and does not address the sanitation issue. Years of dumping using this method has concentrated waste at this area, increasing vectors and exposing nearby households to potential disease carrying vermin. Seepage into the ground is unknown (pathway) with potential for increased fish poisoning cases along the coastline if drainage is not addressed. Waste from septics tanks in outer villages, tourist accommodations and the Niue Hospital are also brought down to this area for dumping.

The project CN is linked directly to the following plans and strategies for example the Niue Integrated Strategic Plan (NISP 2009-2013), Niue Waste management Plan, Joint National Action Plan (JNAP) on Climate Change Adaptation & Disaster Risk management, Niue Building Code (review), Pacific Climate Change Science Program (PCCSP) – a collaboration between the Niue DMCC, the Australian Bureau of Meteorology and the Commonwealth Scientific Industrial and Research Organization, Niue Climate Change Adaptation & Health Plan and the Niue Gender policy. This issue is a priority as it aims to protect the water lens as well as uncontrolled drainage to the coastline which will affect the marine life and contribute to the effects of Climate variability. Sewage and effluent should be managed effectively to reduce risk to human health, coastal livelihoods or damage to the natural environment.

3. Objective (s) (two to three sentences)

The Project aims to reduce the risk to the water lens by effectively managing sanitation in a programmatic approach by reducing risk to human health and coastal livelihoods.

4. Expected project outcomes (max ¼ page)

It is expected that:

Increased water security in Alofi through demonstration measures to increase resilience of the water lens against risks posed by inadequate septic tanks.

Demonstration project delivered to install septic tanks following appropriate guidelines under the Niue Building Code and to seek appropriate measures to treat wastewater.

Enhanced health from reduced risk posed from waste water with strengthened livelihoods from a safer marine ecosystem along the coastline.

Increased understanding and awareness of climate change impacts, sanitation, waste management, and water conservation.

5. Targeted outputs (max ½ page)

Identify homes and institutions without septic tanks and verify those damaged to be undertaken.

Sealed septic tanks are produced on the island

Moulded septic tanks are installed at homes in Alofi

Monitor and evaluate installations including the identification of wastewater treatment options

Replicate and upscale to other villages if funds are available.

6. Beneficiaries (max ½ page)

The main direct beneficiaries will be the general population in Alofi which the two main villages of Alofi South and Alofi North are located. Both villages that form Alofi also utilise the coastal ecosystem through subsistence fishing by fishers, reef gleaning, and leisure activities along the coastline. Fishers utilise the marine ecosystems to sustain livelihoods for families. The Alofi catchment area has 184 households with 2 schools, main hospital, businesses, government residences, tourism accommodations and is where the airport is also located. By protecting the water lens it benefits all stakeholders on the island as Alofi is where service providers are concentrated. Indirect beneficiaries include the general population located in outer villages that use the services in Alofi including patients, elderly folks housed at the only hospital and tourists located within the catchment area. Gender elements will also be captured in the PDD phase upon approval following the endorsement of the Niue Gender Policy by the Government.

7. Indicative budget (max ½ page)

Item(based on 2 year implementation of Project)	Indicative budget in Euros
Output 1: Identify homes & institutions without septic tanks and verify those damaged to be undertaken	10,000
Output 2: Sealed septic tanks are produced on the island	250,000
Output 3: Moulded septic tanks are installed	
Output 4: Monitor and evaluate installations including options for waste water treatment	
<i>Other budget items as required</i>	
Project Management Unit (Administrative, operational costs)	100,000
Monitoring and evaluation	
Communication and visibility	40,000

Co-financing; Global Environment facility (GEF) Ridge to Reef Initiative (To be confirmed)	NZD\$0.00
Co-financing; Australian Government (To be confirmed)	NZD\$ 0.00
Co-financing; NZ-Aid (To be confirmed)	NZD\$ 0.00
Co-financing; Government of Niue (moulding facility, PMU office space)	NZD\$ 200,000
TOTAL (co-finance not included)	€ 400,000

8. Project management (max ½ page)

The lead national agency will be the Department of Environment under the Ministry of Natural Resources in collaboration with the Water Division of the Public Works Department under the Ministry for Infrastructure. Both agencies will implement the Project. It is expected the implementing partner will be the Secretariat of the Pacific Community (SPC) who will draw on the technical and operational experience from the appropriate divisions within the CROP agency.

The proposed steering structure will have the Director General for Infrastructure as chairperson of a 5 member technical committee who will oversee the project. These members will be drawn from the Department of Environment, Public Works Department, Treasury, Alofi South Village Council, Alofi North Village Council. The secretariat will be the Project manager. The Chairperson will report to the Secretary of Government who will report to the appropriate Minister.

Current Projects implemented under the Department of Environment in which will soon be ending include the Pacific Adaptation to Climate Change (PACC) Projects which involves the demonstration of rainwater harvesting systems for homes on Niue in collaboration with the Global Climate Change Alliance in Pacific Small island States (GCCA;PSIS) Project. Under the Public Works Department the most recent project implemented is the Integrated Water Resource management (IWRM) Project.

The Project Management unit within the agencies involved will be responsible for reporting operational, administrative and financial in close collaboration with Treasury departments who handles all fund disbursements. It is expected the Project coordinator will have two support staff (Technical implementation and financial/support role) to manage the project.

9. Complementarity and replicability (max ¼ page)

The proposed project complements the PACC (2009-2014 national/regional), GCCA;PSIS (national/regional) and IWRM (national/regional) Projects that have been implemented as it builds upon information, data, outcomes and experience that have already been collected. Community consultations from all the projects have identified issues directly and indirectly linked with the current project proposal. It also brings together similar project management structures from the mentioned projects. It is envisioned that upon successful implementation of the current project it will be replicated and upscaled to other villages. The long-term strategy is to plan, develop and construct a waste water treatment facility under in an overall programme that will treat all waste instead of moving one problem to another area. Under GEF-5 Ridge to Reef Initiative, pollution reduction is a component that has potential to enhance activities proposed beyond the life of the current proposed project.

10. Sustainability and risks (max ¼ page)

As an programmatic approach to deal with waste management the Government of Niue is actively seeking funds to address not only waste water but also solid waste. Under the Ridge to Reef initiative funded by the Global Environment facility (GEF) pollution reduction has also been identified as a funding opportunity which is expected to commence mid-way through this initiative and continue beyond the 2 years expected for this project. Certainty is need on when this project will commence to address funding requirements. Other operational risks include the availability of heavy machinery at the demonstration level to avoid project conflicts. These risks need to be addressed early with the multiple developments projects being implemented in parallel on the island including capacity to avoid confrontation with other projects, agencies, community developments. It is important to guarantee funding for activities (including replication and up-scaling) in the overall programme to avoid funding conflicts.

11. Timeline for planned measures (max ¼ page)

		Year 0-2014	Year 01-2015				Year 02 2016			
		QRT 04	QRT 01	QRT 02	QRT 03	QRT 04	QRT 01	QRT 02	QRT 03	QRT 04
Item(based on 2 year implementation of Project)	Indicative budget in Euros									
Output 1: Verify homes without septic tanks and those damaged to be conducted	10,000									
Output 2: Sealed septic tanks are produced on the island (procure mold)	250,000									
Output 3: Moulded septic tanks are installed										
Output 4: Monitor and evaluate installations including developing options for waste water treatment										
Output 5: Replicate and upscale to other villages if funds are available.										
<i>Other budget items as required</i>										
Project Management Unit (Administrative, operational costs)	100,000	Operational, Project Design & costings								
Monitoring and evaluation										
Communication and visibility	40,000									
Co-financing; Global Environment facility (GEF) Ridge to Reef Initiative (To be confirmed)	NZD\$ 0.00									
Co-financing; Australian Government (To be confirmed)	NZD\$ 0.00									
Co-financing; NZ-Aid (To be confirmed)	NZD\$ 0.00									
Co-financing; Government of Niue (moulding facility, PMU office space)	NZD\$ 200,000									
TOTAL (co-finance not included)	400,000									

12. Stakeholder engagement in concept note development (maximum three sentences)

The key stakeholders consulted are the Department of Environment (MoNR), Water Division of PWD (Mol), Department of Health, and Ministry of Infrastructure who will collaborate in the implementation of the Programme. The JNAP, NISP, Health Department Climate Change Adaptation & Health Plan including strategies and action plans developed were identified by stakeholders, village communities and NGO's involved during the development of these documents.