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Global Climate Change Alliance: Pacific Small Island States Individual Country Evaluation Report - Nauru

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REPORT PREPARED BY

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1. INTRODUCTION

This is one of nine individual country evaluation summary reports produced as part of the Global Climate Change Alliance: Pacific Small Island States post-project evaluation¹.

The Global Climate Change Alliance: Pacific Small Island States (GCCA: PSIS) Project is a European Union (EU) funded initiative to assist nine smaller Pacific Island states (Cook Islands, Federated States of Micronesia, Kiribati, Marshall Islands, Nauru, Niue, Palau, Tonga and Tuvalu) to adapt to climate change. The project was implemented by the Pacific Community (SPC), with an implementation period from July 2011 through to November 2016².

The overall objective of the project was to support the governments of nine small island states of the Pacific in their efforts to tackle the adverse effects of climate change.

The GCCA: PSIS project consisted of on-ground climate change adaptation activities in specific sectors – coastal protection, marine resources, health, agriculture, and freshwater; supported by mainstreaming of climate change into national and sectoral policies, plans, budgets and procedures. The project also provided technical assistance, capacity building and supported regional collaboration.

The four components and key result areas (KRA) of the project were:

1. Climate change mainstreamed into national and/or sector response strategies.
2. Well-articulated sectoral adaptation strategies that address budget support criteria.
3. National climate change adaptation projects implemented.
4. Streamlined technical assistance that supports national adaptation responses delivered by regional organisations in a collaborative manner.

The individual country evaluation report presented below is guided by responses to the key evaluation criteria provided in the original terms of reference:

- Relevance & EU Coherence
- Effectiveness
- Impact
- Efficiency
- Sustainability
- Cross-Cutting themes of gender and the environment
- Visibility

The report also provide a summary of best practices and any specific recommendations for future action or improvement.

¹ The evaluation report is presented as a full report containing all sections, as well as separate executive summary, individual country evaluation summaries and case studies.

² The project was granted a one-year extension.

2. NAURU EVALUATION REPORT

Sector for the Climate Change Adaptation Project

Water sector

Project

Expanding national water storage capacity and improving water security in Nauru

The original project design targeted the repair of household roof catchments. This was re-scoped to demolish and replace a 4 million litre national water storage tank used for storing desalinated water. Funding and time shortages resulted in the project scope being further reduced to only the demolition of the large water storage tank.

A 20-year Water and Sanitation (W&S) Master Plan (plan for water supply and sewerage infrastructure needs of Nauru for the next 20 years) was prepared and proposals prepared for approaching donors for funding.

Other activities included training in Water, Sanitation and Hygiene (WASH) and a south-south exchange visit on water quality with Kiribati.

Implementing Entity

The project was implemented by the Department of Environment under the Ministry of Commerce, Industry and Environment (CIE). The project worked with an existing water Technical Working Group (TWG) that included the Nauru Utilities Corporation (NUC) and the Department of Health. Under the original PDD, the role of the TWG was to provide guidance on water-related initiatives and the GCCA: PSIS national coordinator was to provide secretariat services to the TWG.

This arrangement was decided at the country level. Whilst this may have worked for the original roof restoration project, the change to a national water storage project should have seen the implementing entity change to NUC as the agency with the specific sector experience.

Relevance & EU Coherence

Nauru's selection of the water sector is relevant to national needs. Nauru's project also demonstrates coherence with other EU programmes, and aligns with SPC's Climate Engagement Strategy.

The National Sustainable Development Strategy 2005-2025 (NSDS, last revised in 2009) identifies priority needs for the water sector including refurbishment of national water storage tanks, installation of new household water tanks (a target of 100 per year), and expansion of water storage capacity by 2015. These water sector priorities are also identified in the National Water, Sanitation and Hygiene Policy 2012.

The provision for increased rainwater collection and storage, and increased desalination are both identified as priority actions in RONAdapt (October 2014; developed with GCCA: PSIS funding).

Projects being implemented in Nauru at the time of project design that were complementary to the original concept note included:

- 2012 AusAID Household water tank project for 250 water tanks (implementation in progress following delays³).
- EU-funded (EDF 9) procurement of guttering, with the actual installation being supported by funding from the Italian Government through the PACC project.

The selection process for households to receive roof catchment repairs in the original proposal was based on an engineering review of 317 households. The survey sought to:

- assess the roof conditions;
- identify households with a working water tank and appurtenances;
- identify the most vulnerable households and people; and
- maximise the number of beneficiaries.

Overall, the original proposal to repair roof catchments to increase household rainwater storage and use aligns with national priorities. However, there are significant environmental health and behavioural practices that hinder the uptake of household rainwater storage. The prevalence of asbestos roofs in Nauru was identified in the Roofing Assessment Final Report (2013). The cost of removing old roofs meant that there was a small reduction on the number of households benefiting from the project (The Concept Note planned for 250 households and the Project Design Document budgeted for 226 households).

The provision of desalinated water to households (delivered by tanker) is heavily subsidised, and there is therefore little financial incentive to reduce water use, or invest in household rainwater collection and maintenance of rainwater tanks. This results in a poor level of household maintenance of water tanks and associated infrastructure (e.g. roofs and guttering) as noted in the Water and Sanitation Master Plan. It can be argued, as noted by an interviewee, that selecting a project focusing on increasing national water storage from the outset would have met the more immediate needs of improving supply of water to households.

It is interesting to note that the proposed USAID-funded C-CAP project in Nauru was to build a new 4 million litre national water storage tank⁴. However, the higher than expected cost led to a revision to build a 2 million litre water tank. The GCCA project did have discussions with C-CAP in Quarter 1 of 2015 to discuss possible collaboration between the two projects but this was not successful due to procurement constraints from C-CAP's perspective.

The re-scope of the GCCA project in August 2014, from rooftop catchment to water storage, seemingly disagrees with the original concept note (June 2012) that indicated that the government needed to move away from desalinated water due to cost issues⁵. However, the 20-year Master Plan notes that desalinated water will remain an important water source for the foreseeable future⁶, which supports the need for the proposed water storage project.

³ "A water tanks project, part of an Adaptation to Climate Change program was behind schedule. DFAT provided additional support to address implementation issues. The project is now progressing." Nauru Aid Program Performance Information 2014-15. To date, no water tanks have been installed (Pers. Comm).

⁴ <http://www.pacificdisaster.net/pdnadmin/data/documents/16462.html>

⁵ "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." Nauru Concept Note, 2012

⁶ "Due to the forecast population growth and future water demand, desalination will form an important part of meeting Nauru's future water supply needs." Nauru Water and Sanitation Master Plan, November 2015

Effectiveness

Most effective in mainstreaming climate change resilience and water security

The project was effective in its mainstreaming components which will help Nauru plan for water security (W&S Master Plan) and contribute to building community resilience to the impacts of climate change (RONAdapt). The project title's reference to 'expanding national water storage capacity' was not achieved as there were significant delays and insufficient funds to rebuild a large storage tank.

The project's achievements against the revised logframe (May 2015) are presented below.

Expected result	Indicator	Indicator achieved
Overall Objective: Contribute to building resilience of communities in Nauru to the impacts of climate change	Climate variability and change incorporated into RONAdapt (Republic of Nauru Joint Climate Change Adaptation and Disaster Risk Management Plan) by 12/2014	Achieved: RONAdapt endorsed by Cabinet (October 2014).
Purpose: Improve planning for water security in Nauru	20-year Water and Sanitation Master Plan prepared by 12/15	Achieved: The Master Plan was finalised in November 2015 and three proposals have been prepared to approach donors for assistance with priority projects.
Key Result Area 1: Improvements to Nauru's national water storage designed with participation of all key stakeholders	Assessment of Nauru's water storage capacity completed by 12/14	Achieved: Feasibility and pre-design studies for the national water storage were completed in October 2014.
	Key stakeholders, including Cabinet and technical experts, involved in design process by 09/14	Achieved: Consultation with Government and the Water Technical Group, resulting in PDD being signed off by Cabinet in October 2014.
	Lessons learnt shared via video with other countries by 09/2015	Achieved: Video completed and screened in final steering committee meeting in Yap.
Key Result Area 2: Existing derelict water tank effectively and efficiently demolished	Old tank demolished and material disposed of appropriately by 12/15	Partial: Demolition has been delayed due to heavy rainfall and high winds in Jan-Feb 2016; contract with local contractor terminated in March. Demolition about 50% completed. New letter of agreement signed in March with Government of Nauru's state owned enterprise to complete demolition by 31 May 2016.
Key Result Area 3:	At least two awareness and education activities relating to	Achieved: WASH training in April 2015 for Government, NGOs and National Youth

Expected result	Indicator	Indicator achieved
Community awareness and capacity built to improve water conservation	water security and climate change conducted by 12/2015	Council. However, roll-out of the WASH training to the community did not take place due to delays and staff changeover. Attachment of CIE Officer to Environment Health Unit in Kiribati undertaken in 2 phases (December 2015 and February 2016). The report indicates the attachment provided valuable knowledge and skills in water quality monitoring in the field, and using laboratory equipment. The attachment also provided an insight into the use of SODIS in the field.

Overall, the project was most effective in its mainstreaming component, with the development of the W&S Master Plan. The demonstration project was less effective, as the project did not increase water storage due to a shortage of time and insufficient funds to build a new water storage tank. The detailed feasibility and design documents as well as the request for proposals are all available for when Nauru approaches another donor to complete the work. Similarly the engineering survey of the 317 households is available for when Nauru approaches another donor.

However, against the revised logframe, the indicator for the demolition of the old tank is still likely to be achieved, though beyond the planned timeframe. This will lay the groundwork for another project to construct the new storage tank. The increased community awareness through delivering WASH workshops to the community has not occurred, though community trainers have been trained. The attachment of a CIE Officer to Kiribati has resulted in the transfer of knowledge on the management of the Kiribati water quality monitoring programme to the CIE Unit.

Additional Activities beyond the Focus of the Water Sector

Mainstreaming activities included the finalisation of RONAdapt (Framework for Climate Change Adaptation and Disaster Risk Reduction). This had been a work in progress since 2010 and involved several different partners. Support from the GCCA: PSIS project provided for preparation of a final version, community consultations and endorsement. RONAdapt contains a list of prioritised actions for 12 sectors.

Additionally, a review of climate change mainstreaming into national plans and policies in Nauru was conducted in 2013. A subsequent assessment report of budget support readiness indicated that the likelihood that Nauru would qualify for direct budget support for climate change is medium-low given its capacity constraints.

Training in 'Proposal Preparation using the Logical Framework Approach (LFA)' was delivered to 20 people (10 men, 10 women) in January 2014. The post-training evaluation indicated that the training was successful in building capacity and motivation of Nauru government staff and community based

groups to use the LFA approach to design projects and inform the preparation of proposals. This is demonstrated by the following comment from a Nauru participant.

"Being NGO (CBO) - all learnt on this course was most useful. I have never been involved in writing up a project proposal not having the basic knowledge of how to go about it. However doing this course has certainly equipped me and empowered me to achieve more for my community. The learner guide - a great tool!"

Impact

Whilst some project impacts will not be known or proven until one or more years into the future, some noted short term impacts have been observed.

Impact greatest through mainstreaming activities

The project's impact will be greatest at the mainstreaming level, with RONAdapt and the Water and Sanitation Master Plan guiding future actions. Nauru Utilities Corporation (NUC) is looking at obtaining funds for three priority projects in the Master Plan⁷. The GCCA: PSIS project has funded the development of three draft funding proposals for the priority projects.

Though the original demonstration project (roof restoration) was not endorsed by Cabinet (despite their having been informed throughout the planning phase), a stakeholder noted that the Government of Nauru is implementing a Household Maintenance Upgrade project that builds on the original PDD. It is understood that the maintenance project will seek to replace or restore roofs, making them safe for rainwater capture and storage.

The demolition of the old large water storage tank paves the way for the building of a new tank in the future. As noted previously, USAID, through its C-CAP programme, was looking to build a new 4 million litre water storage tank adjacent to the B10 site. However, cost over-runs have led to a further revision in the scope and a household water tank project is now planned.

Efficiency

Time

The Nauru project demonstrated limited efficiency in terms of adhering to timeframes, working within budgets, and the extent of outputs for the funds expended on the demonstration project (i.e. there has been no augmentation of water supply in Nauru, and the demolition project has experienced delays). This is not due to the in-country project team's efforts, nor SPC's efforts, but rather reflects the issues of working in small remote islands countries, and in particular, the lack of expertise and availability of resources (human and material) in Nauru. This issue is common across other development projects in Nauru, from the Australian Aid household water tank project, to the proposed USAID C-CAP project (and previous projects, such as the GEF-funded PACC project).

However the original PDD for household roof catchments did not receive sign off from the Cabinet. This meant that two years' worth of project planning and design was not utilised, although the engineering assessment will be of benefit in the future.

⁷ Water Supply Works for 2025, Water Supply Command Ridge Priority Project, Water Supply Topside Priority Project

Cost

Nauru was allocated Euro 500,000 which was reduced to Euro 110,563 following the re-allocation of Euro 389,437 to three other countries. Nauru had acquitted 50% of its remaining € 146,500.00 allocation for the on-ground project by March 2016 and all remaining funds are committed which will result in 100% expenditure by the end of the project. €27,500 was allocated for national coordination and 100% of these funds were acquitted.

The proposed project to replace the decommissioned water storage tank (revised PDD endorsed October 2014) was not achieved due to two factors (i) delays caused by the Government of Nauru firmly insisting that local contractors only be utilised for the work⁸ and (2) the quotes received for the entire job (demolition and new tank) exceeded the funds available⁹. This occurred despite feasibility and preliminary design reports considering the financial and time constraints in their selection of options¹⁰. This led the Nauru Government to express a disappointment for *"CROP agencies, including SPC, for not fully taking into account Nauru's limitations and challenges in regards to its resources, biophysical make up and remoteness when planning, designing and budgeting development projects, including climate change adaptation projects"* (Trip Report April 2015). This sentiment was again expressed at the final Steering Committee Meeting (2015 Steering Committee Report). Interestingly, the proposed C-CAP project to build a 4 million litre water storage experienced the same issue of underestimation of the cost during the preliminary budgeting stage.

Accessing project funds on time from Nauru's Treasury Department was a major hurdle to project implementation. There were delays in the transfer of funds to CIE. Lack of capacity in Treasury has impacted on financial acquittals and tracking of project funds. This has impacted on SPC's ability to release further tranches. As of March 2016 this has been fully resolved.

Local contractor capacity and capability

There is limited capacity and capability in Nauru, as noted by four stakeholders interviewed and in the Preliminary Design Report prepared by CAT (September 2014)¹¹. Stakeholders consulted indicated that local companies that have the capability to deliver have very limited spare capacity at the moment. International contractors already operating in Nauru also have limited capacity as they are undertaking other work for the Australian Government, and where there is capacity, their cost is high due to their understanding and experience of obtaining required materials, and service costs for skilled staff. There was also a directive by the Secretary of CIE at the time to use a local contractor.

The CAT (2014) report identified three local contractors that could undertake the demolition and construction work. The lack of available skilled and experienced local contractors is reflected in the tendering process for the water storage demolition¹². Only one local tender was received, from a company that was not identified in the CAT report. This company's original tender response did not

⁸ The resulted in several months delay when the Request for proposals for local contractors only for the demolition aspect was advertised and reviewed

⁹ The preferred tender response for RFP15/20 for demolition and construction required an extra AUD240,000.

¹⁰ *"The two key constraints to this project are: for construction to be completed by 30 June 2015; and to be completed within the allocated budget of €400,000."* Final design report for SPC RFP14/41, October 2014.

¹¹ The Preliminary Design Report (September 2014, p14) identifies local capacity and capability as key project constraints.

¹² SPC put out two tenders- one for local contractors to demolish only (RFP14/94) and one international tender for demolition and construction (RFP15/20).

fully satisfy the requirements of the quote¹³. Further engagement between SPC and the company led to a resolution and awarding of the tender. Despite early indications that the demolition work would progress efficiently, delays occurred due to difficulty in accessing a crane¹⁴, though assurances were provided by the contractor as to the availability of equipment (e.g. Trip Reports April & July 2015). Subsequent trip reports indicated slow progress, and the November 2015 trip report indicated that the contracted demolition company had only had limited access to a crane and less than 5% of the demolition had been completed to date. Heavy rainfall in early 2016 led to further delays. The contract was terminated in early 2016 with the work approximately 50% complete, as the company was not able to access the required crane. A new contract has been awarded to a state owned enterprise, which has a crane, for completion.

Stakeholders suggested that large infrastructure projects are best undertaken by international contractors¹⁵. However, the cost associated with international contractors is generally beyond project budgets, as experienced by the GCCA: PSIS and C-CAP projects in Nauru. The Nauru Government requested at the time of the tendering process a preference to use local contractors, to which SPC agreed¹⁶. Requests to use local contractors need to include extremely stringent consideration of the capacity and capability of suitable companies.

The tender selection for the tank demolition was undertaken by four SPC staff¹⁷. Though the selection panel scrutinised the contractor's experience prior to awarding the contract, the panel may have benefited from local experience. The selection process did not involve NUC though its assets were the subject of the tender¹⁸. SPC's procurement policy allows national representatives to be voting members the procurement committee. The lack of national representation, specifically NUC, was an oversight. Though it may not have made a difference in the selection of the tenderer, it would be good practice for future projects to have such representation to provide local knowledge to SPC. Whilst NUC was not involved in the procurement process, it oversaw and signed off on the implementation of the demolition contract.

SPC undertook 15 field trips to Nauru between May 2012 and November 2015 to assist Nauru in project design and implementation, seven of which were in 2015 alone. A review of the field trip reports indicates slow progress in resolving matters at the national level. Despite demonstrating a high level of flexibility in working with Nauru to come up with an alternative project design, a lack of funds and time to implement the demolition and building of a new water storage tank meant that the project scope was reduced to simply demolition of the old storage tank. A proposal by SPC to reallocate Nauru's unspent funds (June 2015) was agreed to by the other eight countries, and

¹³ "The review of the AMWAMO BWIO CC proposal identified a number of items that did not satisfy the RFQ14/94 requirements". Bid Review Report Demolition RFP 14/94.

¹⁴ Only one suitable crane is available in Nauru, and belongs to RONPHOS, a government corporation that did not tender for the work due to capacity constraints.

¹⁵ One interviewee noted the difference in quality of infrastructure at the Regional Processing Centre, which involves international contractors, compared to Nauruan infrastructure. The international contractors present in Nauru often have limited capacity to undertake extra work.

¹⁶ A letter from SPC to Nauru Government 2 December 2014 notes that "We are happy to comply with your request to use local contractors. Having consulted with our Procurement Unit, we will need at least two and preferably three quotations from competent local contractors."

¹⁷ Noting that only one tender was received.

¹⁸ The Preliminary Design Report (CAT, 2014) notes that (p17): "NUC will inherit any national water storage asset that is provided by this project. Hence, they are a key stakeholder for design input and should be consulted for new assets' on-going O&M needs."

demonstrates a wise use of funds, as it would not have been possible to expend the project funds in Nauru in the short period of time remaining.

Staffing

The in-country project team consisted of a National Coordinator within CIE. The role of the coordinator, according to the original PDD, was to provide secretariat services to the TWG for the project, mainly be in the form of providing updates on progress and for discussing unforeseen issues that may arise during the project and which require guidance.

The national coordinator was constrained by difficulties obtaining the required acquittal information from Treasury, which impacted on funding project activities, as well as the coordinator getting paid on time.

Sustainability

RONAdapt and the W&S Master Plan have a high level of government ownership. RONAdapt has raised awareness and support for climate change adaptation across government. RONAdapt provides a blueprint and action plan for mainstreaming climate change adaptation and disaster risk management across all sectors of government in Nauru. Based on extensive consultation and support from several different regional organisations, it provides a framework for Nauru's strategic and national planning for at least the next few years.

The W&S Master Plan is guiding priority projects and investment in the next 10 and 20-year timeframes. Three funding proposals to action priority areas in the W&S Master Plan have been prepared. Nauru is now in a better position to seek funding for major infrastructure improvement of the water sector and to move away from the existing high risk situation with water supply.

CIE is now sitting under the President's Office which has increased the department's profile and support across government. This will help ensure that the benefits of the mainstreaming component are built upon in the immediate future.

The demolition of the old B10 tank provides space for the construction of a future national water storage should sufficient funding become available. The existing concrete pad may be able to be re-used, potentially reducing the cost of a future tank. The feasibility and final design studies for the construction of a new storage tank have been provided to Nauru, thereby potentially informing a new tendering process.

The WASH training and the south-south exchange with the Kiribati Environmental Health Unit have built capacity in CIE in water quality monitoring and management. Delivery of WASH training to the community will improve community-level capacity in water, sanitation and hygiene.

Cross-Cutting

Gender

The original project clearly considered gender, and vulnerability, in its project design. The original rooftop catchment project sought to prioritise vulnerable households that had a working water tank¹⁹. Appropriate selection criteria (working water tank, vulnerable households and people,

¹⁹ Vulnerability was defined as meeting one or more of the following criteria: Water access, Age, Disability, and Household gender ration. See PDD v1.

maximising number of beneficiaries) were used to identify priority households for the original household water tank project. This would lead to an estimated 226 households benefiting from the project.

Men and women were equally represented in the LFA training, whereas there were more men (14) than women (7) in the WASH training. Men and women were equally represented (10:10) in the LFA training.

Environment

The environmental impact of the roof replacement was considered, particularly relating to asbestos disposal. Extensive discussions were held with other regional organisations (SPREP, WHO) as Nauru is not part of a regional disposal strategy, nor does it have a clear national policy. It was ascertained that some contractors had been trained in the safe removal of asbestos in Australia and it was planned to use these skills in the roof refurbishment. A temporary solution to safe disposal to keep the asbestos in locked containers in Nauru's waste disposal site was devised.

The re-scoped project did not require an EIA or EMP and the request for quotation did not specify obligations for recycling materials. Rather, it noted that all scrap material was the contractor's responsibility and needed to be deposited at Nauru's waste site²⁰.

Visibility

There was appropriate EU visibility on communications materials and reports, given the limited amount of on-ground work. Communication materials produced included news articles (Cook Island News), radio (Radio New Zealand), fact sheet, and newsletters (SPREP-Climate Change Matters). A video on 'Securing Safe drinking water in Nauru' is one of nine country-specific videos in the series 'Climate Change Adaptation – the Pacific Way' that was shown extensively at regional meetings, available on YouTube, and shown on television throughout the Pacific on the Pacific Way. These featured the GCCA and EU logos.

Appropriate acknowledgement to the funding body was provided in project reports (e.g. WASH Training Guide, Engineering reports).

A national lessons learnt workshop (November 2015) was held to enable the project team and local partners to identify and document lessons learnt. A regional workshop (September 2015) involving all SPC GGCA: PSIS project teams and other development partners provided a forum to share national and regional lessons.

²⁰ "Remove and transport scrap material and deliver to the Nauru Rehabilitation Corporation (NRC) waste site on "topside" approximately 1.5km on sealed road. Provide minimum 24 hours' notice to Nauru Rehabilitation Corporation". Request for Quotation, SPC.

Best Practices & Recommendations

Best practices

1. The mainstreaming components (RONAdapt and W&S Master Plan) have a high level of national ownership as a result of extensive consultation. They pave the way for improved climate change adaptation at the national and water sector level.

Recommendations

1. Major changes in project scope should not be entertained beyond the first year of a major project.
2. Stakeholders in small, remote islands such as Nauru should design projects with realistic targets bearing in mind small island constraints (local contractor capacity and capability, and costs of international contractors). Large infrastructure projects should only be considered when there is a suitably large project budget.
3. Use the "rule of thumb" developed by the GCCA: PSIS project to realistically deliver projects in small remote islands: carefully plan schedules and budgets and then multiply by 2.