

CONCEPT IDEA NOTE FOR CLIMATE RELATED ACTIVITIES THAT MAY BE FUNDABLE BY THE GREEN CLIMATE FUND AND OTHER FINANCIAL SOURCES

This Concept Idea Note is based upon the GCF Concept Note. It is designed to prepare any Concepts or Project Ideas with GCF financing in mind, however, can also be applicable to other financial institutions. Once the Concept Idea Note is completed please send to the CCCI office (as the GCF National Focal Point), where an assessment will be undertaken as to whether the Concept could be eligible for funding under the GCF or other financial source, or both. CCCI will then communicate the result of the assessment back to the proponent, and outline what will next happen to the Concept Idea Note, such as require more information to make a clearer assessment, the submitted Concept is GCF eligible for funding and the next steps, or a determination that outlines the Concept is not eligible for GCF funding but may get funding from another source.

Title of Concept OR Project Idea: Avatiu Western Marina Development Extension

Date of Submission: 25 October 2018

Submitted by and Contact: Bim Tou

<p>Indicate the areas for the Concept, which is based upon the CKI Country Program thematic areas</p>	<p><u>Mitigation</u>: Reduced emissions from:</p> <ul style="list-style-type: none"> <input type="checkbox"/> Energy access and power generation <input type="checkbox"/> Low emission transport <input type="checkbox"/> Buildings, cities and industries and appliances <input type="checkbox"/> Forestry and land use <p><u>Adaptation</u>: Increased resilience of:</p> <ul style="list-style-type: none"> <input type="checkbox"/> Most vulnerable people and communities <input checked="" type="checkbox"/> Health and well-being, and food and water security <input checked="" type="checkbox"/> Infrastructure and built environment <input checked="" type="checkbox"/> Ecosystem and ecosystem services
<p>Indicative total project cost</p>	<p>Amount: NZD2.8 Mil</p>

Project/Programme rationale, objectives and approach of programme/project (max 100 words)

Brief summary of the problem statement and climate rationale, objective and selected implementation approach, including the executing entity (ies) and other implementing partners.

Following the completion of the final stage 3 of the Avatiu Western Marina development in 2009/10 funded under the Asian Development Bank Cyclone Emergency Assistance Project; moorings were immediately filled by charter and subsistence fishing boat operators. Additional moorings were created by reducing mooring space allocation and this has cause concern/complaints mainly by boat operators to the safety from damages caused by space allocations in between boats despite operators using boat fenders.

Currently, Ports has 10 waiting list applications for subsistence fishing boat operators and 3 for charter boat operators after additional moorings created at the Avarua harbour following recent completion of the dredging maintenance.

In 2012 a concept design to develop the reef flat of the western marina was prepared to accommodate the projected increase in the subsistence and charter boat operators, with consideration for co-financing through Public Private Partnership (PPP), Climate Adaptation Fund plus other Overseas Development Partners without success. The concept proposed mooring capacity covers:

	Boat Lengths	Number of Moorings
1.	6.0 metres	12
2.	9.0 metres	9
3.	12.0 metres	6
	Total Proposed Moorings	27

The breakwater section to be completed is highlighted in yellow in the concept drawing below.



Context and baseline (max. 2 pages)

Please indicate how the project fits in with the country's national priorities and its full ownership of the concept. Is the project/programme directly contributing to the country's INDC/NDC or national climate strategies or other plans such as NAMAs, NAPs or equivalent? If so, please describe which priorities identified in these documents the proposed project is aiming to address and/or improve.

Describe the main root causes and barriers (social, gender, fiscal, regulatory, technological, financial, ecological, institutional, etc.) that need to be addressed.

Where relevant, and particularly for private sector project/programme, please describe the key characteristics and dynamics of the sector or market in which the project/programme will operate.

Describe the climate vulnerabilities and impacts, GHG emissions profile, and mitigation and adaptation needs that the prospective intervention is envisaged to address

Studies and observations have identified that changes in climate for the Cook Islands are manifesting in an increase in extreme events such as storm surge, floods, and cyclones. This is of significant national concern. The importance of better understanding of the risks associated with these extreme

events on vulnerable national infrastructure and communities cannot be over emphasized in order to plan and prepare for current and future changes.

The existing geographical vulnerability of the country to climate change can be improved by enhancing the country's adaptive capacity and resilience to climate change, including the impacts of extreme events. Incorporating climate change adaptation strategies into social and infrastructure programs will also strengthen capacity to avoid and manage disasters.

The main town on Rarotonga, and capital of Cook Islands, is Avarua. Lying on the north side of the island, Avarua ranges along the sea front between Avatiu and Avarua harbours. The land that Avarua lies on is very vulnerable to extreme events such as cyclones and sea surges impose the greatest climate risk.

Avatiu Port redevelopment infrastructure was completed in 2012 that included in the design to raise levels later if required due to sea level rise and cost constraints with the redevelopment work focused more on the wharf infrastructure itself and not in the rehabilitation of the outer breakwaters.

Recent years have seen an increase in both frequency and - of most concern - intensity of extreme climate events. And in order to increase mooring capacity in the western marina by developing the reef flat area proposed above, "climate proofing" needs addressing by completing the remaining 90 metres of breakwater and mitigating associated climate risks measures by strengthening resilience to climate extreme events, improve food security resilience and social and economic resilience to the marina users plus associated tourism related businesses and community.

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National Priorities

As highlighted under the CLIMAP report, as with most Pacific island states, the Cook Islands' infrastructure is ill prepared against climate-related vulnerability. The Pacific Adaptation to Climate Change (PACC) consultations noted that the geographical vulnerability of the country to climate change can be improved by initiating integrated infrastructure and social development.

Consequently, a need for 'climate proofing' the country was identified, that is, for enhancing the country's adaptive capacity and resilience to climate change, including the impacts of extreme events. The PACC report further noted that strengthening disaster management and mitigation capacity will help to ensure that future maritime infrastructure development will incorporate climate change adaptation and mitigation measures.

The Cook Islands National Sustainable Development Plan (NSDP) highlighted the importance of climate risk proofing, in particular for the Goal of "a safe secure and resilient community". The National Climate Change Country Team identified coastal zone management and associated infrastructure to be a priority for adaptation intervention in the Cook Islands. This was further reinforced by the National Environment Strategic Action Framework (NESAF) Review and

consultations for NESAF 2011-2014. The CIG is advancing with Joint Disaster Risk Management Climate Change National Action Plan and Policy development which aims to maximize the Cook Islands limited institutional capacity in mainstreaming both climate change and disaster risk management across all sectors to increase community resilience.

Consequently, the priority programme areas for this project are:

Programmatic Area 2: Coastal Protection and Restoration

As low lying islands, the entire Cook Islands is vulnerable to sea surges, sea level rise and extreme weather events. Communities have been experiencing over many years land loss, as shorelines recede into the sea, damaging infrastructure, housing, and natural habitats. This in turn results in other detrimental impacts such as salt water inundation of planting areas, threatening food security and livelihoods, increase in vector borne disease and so forth. This is particular acute on the northern group atolls. Consultations with communities have indicated that the problem is being exacerbated by the rising tides and more frequent sea surges caused by climate change. Coastal protection and restoration is essential for building resilience of both built and natural environments and for maintaining the livelihoods of communities.

Programmatic Area 4: Disaster Risk Management

The Cook Islands by virtue of its geography is extremely vulnerable to disasters and extreme climate events. While the country has in place legislative and institutional structures to enable preparedness, response and recovery, national funding for adequate preparedness is insufficient. With the lives of people at risk during disasters and extreme climate events, and the prediction that extreme events will intensify with climate change, further investment is required to build resilience and safeguard lives. Strengthening national meteorological and hydrological services is also essential for preparedness, monitoring of the climate, forecasting climatic conditions and so forth.

Programmatic Area 6: Climate Proofing Infrastructure

As all islands are vulnerable to impacts of climate change, including more severe extreme weather events, sea surges and sea level rise. It is essential that key public, private sector and domestic infrastructure are not only protected, but also constructed and developed in a manner that takes into account the mentioned impacts. Priority infrastructure requiring climate proofing are ports, airports and buildings.

The airports on all islands are close to the sea and susceptible to damage. With the exception of Rarotonga and Aitutaki, where there are airports on other islands, these are constructed from crushed coral and therefore also vulnerable to deluge conditions in addition to damage from the sea. They need to be strengthened to allow them to withstand torrent and sea surges. Strengthening of airports should also be done in parallel with protection of the coast near airports.

With the exception of Rarotonga, current harbours in the outer islands require ships to moor offshore for unloading and loading of cargo and passengers. Handling of cargo and passengers is a challenge and can be dangerous, particularly when the weather conditions are not ideal. Harbour facilities, therefore need to take into consideration the predicted worsening climate impacts. Additionally, when boats are unable to offload cargo and passengers, they drift until the weather clears, burning fuel. Improvement of harbours is also thus, a means of reducing emissions by limiting drift time for boats. Consideration should also be given to the possibility to ensure quick evacuation and safety during time of disaster.

Future infrastructure development in all islands should incorporate climate proofing in design and construction. This will equate to increased costs, which is an additional burden on either government,

the private sector or homeowners depending on the development project. The private sector and individuals require some assistance such as cheaper financing options to incentivize climate proofing infrastructure.

Overall climate proofing will ensure that infrastructure will be able to withstand the impacts of climate change, maintain connectivity, enable economic activity and build the resilience of livelihoods, people and communities.

Programmatic Area 10: Building Resilient Livelihoods of People and Communities

The Cook Islands and peoples are extremely vulnerable to the impacts of climate change and the socio-economic, infrastructure and environment pressures intensifies this vulnerability. The key characteristics of building resilience in the Cook Islands context is to ensure that the government, private sector, communities and households have the ability to adapt to changes, anticipate what might happen next and absorb shocks when they do come along. With more frequent dry periods, stronger storms, creeping sea level rise, changes in agriculture productivity and the marine environment, it is essential that families, communities and the private sector can manage and improve their ability to bounce back. It is important to build the adaptive capacity to reduce the impact of future hazards.

During private sector and community consultations for the development of the Green Climate Fund Country Programme, people have indicated that one of the hindrances to building their resilience to climate change as well as investing in mitigation is the lack of and cost of funding. Funding availability either through grants, cheaper financing and enabling policies such as tax breaks will assist people to build resilience.

Describe the main root causes and barriers (social, gender, fiscal, regulatory, technological, financial, ecological, institutional, etc.) that need to be addressed.

The main root causes and barriers for the proposed project are social, fiscal, financial, and environmental, and these can be addressed upon completion of the proposed project.

Where relevant, and particularly for private sector project/programme, please describe the key characteristics and dynamics of the sector or market in which the project/programme will operate.

Completing the breakwater and developing reef flat of the marina area for additional moorings for boat operators would potentially safeguard and increase tourism earnings, with the focus on sports fishing, increase social and economic activities to the wider Rarotonga communities from subsistence fishing operators plus increase in food security.

Tourists arrivals has shown continued growth in recent years underpinning economic growth on Rarotonga and consequently stimulating greater economic activities from tourism across a broader group of the community.

The Cook Islands Government has a stated goal of achieving tourism growth based on increased airline access and improved tourism infrastructure and to be sustainable and appealing tourism destination delivering long term economic value to the businesses and the community.

Engagement among the NDA, AE, and/or other relevant stakeholders in the country (max ½ page)

Please describe how engagement among the NDA, AE and/or other relevant stakeholders in the country has taken place and what further engagement will be undertaken as the concept is developed into a funding proposal.

Past discussion held with the relevant government Agencies to seek funding from potential Development partners including climate change adaptation financing. Public Private Partnership (PPP) financing also pursued with overseas marina consortiums to no avail until recently when the Ports received an expression of interest from local private investors in developing the reef flat of the Western Marina with priority mooring for their own maritime transport business interest.

However, this also did not materialized as the investors did not have the capital funding that they initially indicated to finance the development instead offered regular rental payments for the mooring spaces.

Ports Authority is unable to entertain any borrowings at this time due to the Avatiu Port Redevelopment borrowing commitment to the Asian Development Bank (ADB) currently outstanding at NZ\$21.3 mil.

Sustainability and replicability of the project (exit strategy) (max. 1 page)

Please explain how the project/programme sustainability will be ensured in the long run and how this will be monitored, after the project/programme is implemented with support from the GCF and other sources.

The impact of the Project will be climate proofing the marina from extreme climate events such as, sea level rises, sea surges and increase social and economic well-being of the local and business community. The Project aligns with government policy outlined in the NSDP.

The Project addresses the following strategic goals of the NSDP:

- (i) an innovative and well-managed private sector-led economy;
- (ii) Strengthened and affordable basic infrastructure, transport, and utilities to support national development.

By safeguarding operations of the existing marina operations and if funding is made available to complete the remaining breakwater of 90 metres and the proposed additional moorings to cater for 27 additional boat moorings by developing the reef flat section of the marina, the project will ensure that facilities required for private sector-led economic growth are strengthened and associated risks from operational efficiency and extreme climate events are removed.

For non-grant instruments, explain how the capital invested will be repaid and over what duration of time.

As reported above in the Engagement Section; Ports Authority is unable to entertain any commercial borrowings at the local banks to finance capital investment of the project that does not qualify for grant assistance at this time due to the Avatiu Port Redevelopment borrowing commitment to the Asian Development Bank (ADB) currently outstanding at NZ\$21.3 mil.

However, any concessional financing available from Development Partners could be appealing depending on the concessional terms and financing cost. This could be serviced from existing marina generated revenue and the potential revenue once the breakwater and additional mooring under this project is completed.

Spot Profit & Loss for the year end to 30 June 2018 for the Marina shows:

• Gross Revenue	\$70,336.00
Less: Expenses	
Depreciation	69,040.00
Electricity	1,089.00
Repairs & Maintenance	<u>2,956.00</u>
Total Expenses	73,085.00
Net Loss	<u>(\$ 2,751.00)</u>
Add: Back Depreciation	69,040.00
Available Cash Flow for Debt Servicing	\$66,289.00
Add: Potential Revenue for 27 new moorings	
From this Project	\$48,092.00
Estimated Projected Cash Flow for Debt Servicing	<u>\$114,381.00</u>

Assessed By and Date:

Bim Tou

25 October 2018

Recommendation:

For your favorable consideration