

## Global Climate Change Alliance Plus (GCCA+) Scaling Up Pacific Adaptation Project (SUPA)

### Project Concept Note

Name of Country	Cook Islands	
Name of Lead Agency/Ministry	Climate Change Cook Islands (CCCI), Office of the Prime Minister	
<b>General Information</b>		
Project Title	Resilient Ecosystems and Environments For Climate Change (REEF-CC)	
Project Site(s)	Rarotonga and Aitutaki	
Project Duration	3 years	
Project Partners	Ministry of Marine Resources, Kōrero O Te ‘Ōrau, National Council of Women	
Indicative Project Cost	EUR 500,000	
<i>Funding modality: Indicate below your country's preference for funding arrangements for national coordinator and implementation.</i>		
Do you need a national coordinator (Yes or No)? Yes, and one Finance and Administrative Officer		
If you answered “No” above, proceed to question 3.		
1. Place a tick in the box on the right to indicate the modality for funding the national coordinator position.		
Country recruits and pays the national coordinator through a Grant Agreement with SPC	<input checked="" type="checkbox"/>	X
SPC recruits the national coordinator so he/she becomes an SPC staff based in-country	<input type="checkbox"/>	<input type="checkbox"/>
2. In which agency will the national coordinator be housed? Climate Change Cook Islands		
3. Place a tick in the box on the right to indicate the modality for funding implementation of activities.		
Country carries out procurement for all activities through a Grant Agreement with SPC (and according to SPC's procurement policies and procedures)	<input checked="" type="checkbox"/>	X
SPC carries out procurement for all activities	<input type="checkbox"/>	<input type="checkbox"/>
Blend of the above two modalities	<input type="checkbox"/>	<input type="checkbox"/>
Project Description and Link to SUPA Output 3	The Cook Islands is an ocean state with an estimated population of 14,802 people (2016). The Cook Islands produces very little greenhouse gases but faces the challenge of adapting to climate change impacts on a daily basis. Climate change related events	

	<p>occurring in the Cook Islands include increasing temperatures, increasing rainfall, sea level rise, severe droughts, intense tropical cyclones and ocean acidification.</p> <p>The project aims to build resilience of the coastal environment and coral reef and lagoon ecosystems by replicating and standardising monitoring capabilities across the Cook Islands. Building resilience requires efforts to ensure that the health of these marine ecosystems are not further undermined by impacts from anthropogenic and terrestrial based activities, in order for them to resist and adapt to the physical environmental changes expected from climate change.</p> <p>This will be achieved through the upgrading of the Aitutaki Marine Research Centre to include a laboratory and support facilities to enhance its current capacity to undertake and support research, data analysis, marine technology trials, surveys and monitoring, and training and capacity building. In addition, enhanced outreach and awareness of the public to contribute to broader education on the impacts of climate change on coral reef ecosystems.</p> <p>The upgraded facility will enhance understanding of marine ecosystems and environment so they may be sustainably managed.</p> <p>It will foster ownership and collaboration from local leaders and the community with inclusion of traditional and local knowledge as a foundation not only on marine, but more importantly as a teaching centre attracting socio-economic benefits to the island.</p> <p>Given the ongoing work on the Cook Islands Marine Park (Marae Moana), the facility will bring added value to progressing work on Marae Moana, through research, surveys, monitoring, data analysis GIS, and interpretation of data to local content.</p> <p>Resource management plan will include traditional, local and best practices values thus allowing for ecosystems to recover and build resilience to environmental stresses, slow onset events and climate change.</p>
Proposed Project Outputs	<p><b>Output 1:</b> Coastal environment and coral monitoring continued for Rarotonga, replicated to Aitutaki and other outer islands, requiring the upgrade and refurbishment of the existing marine hatchery in Aitutaki to include a laboratory and extend services to research, data analysis, education and outreach, technology transfers, GIS etc.</p> <p>Area of research includes the following:</p> <ul style="list-style-type: none"> <li>✓ Heat-tolerant coral</li> <li>✓ Continuation of coral biodiversity research</li> </ul>

	<ul style="list-style-type: none"> <li>✓ Trialling of small-scale MPA's – best practices</li> <li>✓ Establishment of localised sea surface temperature, sea level rise and acidification monitoring and reporting.</li> <li>✓ Improving the availability of marine resources for food security and ecosystem health through proper management, including aquaculture for adaptation.</li> </ul> <p><b>Output 2:</b> Climate change, ocean resilience and traditional knowledge are mainstreamed into sector policy, island plans and island implementation plan and to develop a resource management plan.</p> <p><b>Output 3:</b> Lessons learned and best practices are shared with local and international communities through case studies, workshops, media, community outreach and school programs.</p>
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General Criteria for Identification of Projects	
Criteria	How does the proposed project adhere to the criterion?
<p>1. Each country is to select <b>one</b> sector from the following list for scaling up: <i>i) Food security, ii) Water security, iii) Human health, iv) Coastal protection, v) Marine resources</i>; and the sector selected must be linked to national priorities.</p>	<p><b>Sector selected:</b> Marine resources</p> <p><b>How is this sector selection linked to national priorities:</b></p> <p>The proposed actions are aligned with the following national policies:</p> <ol style="list-style-type: none"> <li>1. Te Kaveinga Nui National Sustainable Development Plan (2016-2020) by contributing to: Goal 11: Promote sustainable land use, management of terrestrial ecosystems, and protect biodiversity (terrestrial and marine); and Goal 12: Sustainable management of oceans, lagoons and marine resources.</li> <li>2. Te Kaveinga Strategy (2019-2024) - Strategic Outcome 2: National Security and Resilience specifically Strategic Focus Area 2 – National Resilience by strengthening community resilience through climate change adaptation programmes.</li> <li>3. Cook Islands Climate Change Policy (2018-2028) - Policy Measure D: Resilient socioeconomic and ecological systems specifically by ensuring the sustainable management of natural resources.</li> <li>4. Joint National Adaptation Plan JNAP II (2016-2020) – Action 11 of Strategy 3: Promote integrated management of the coastal zones to build resilience to natural hazards and slow onset disasters including climate change, ocean acidification, coral bleaching and coastal erosion due to sea level rise.</li> <li>5. Cook Islands Climate Change Country Programme (2018-2030) – Programmatic Area 9: Ocean Management which has the following elements (i) improving information on biodiversity; (ii)</li> </ol>

	<p>improving information management systems; (iii) marine spatial planning; and (iv) build capacity for ocean management.</p> <p>6. Ministry of Marine Resources Strategic Plan 2017-2021 – Mission Statement: To drive sustainable resource management and economic development of our marine sector, with our partners, for the benefit of the people of the Cook Islands; develop frameworks for good governance, develop responsible actions by all stakeholders, support participation in the fishery management process as a key tool to drive sustainable resource management and economic development.</p> <p>Strategic Goal 1.7 Build resilience and adaptive measures to climate change impacts on the marine sector; 1. To establish targeted monitoring and research programmes to adapt and mitigate against climate change impacts. 2. Provide training for local fishers and related stakeholders to understand and recognize weather patterns contributing to the impacts of climate.</p> <p>Strategic Goal 3.3 To maintain the traditions and culture that have sustained our food supply.</p> <p>Strategic Goal 4. Ensure decisions incorporate the best scientific evidence, and the precautionary and the ecosystems approaches. 2. Implement the policy objectives of the Marae Moana Council. 3. An educated, informed and committed community; 4. Strengthen capacity and facilities of Fisheries Officers located in the Pa Enea (outer islands). 5. Use of local content in education and awareness programmes. 6. Explore ways to promote the marine sector as a career pathway for young Cook Islanders. 7 Implement technology such as Geographical Information Systems (GIS) that allows multiple-users to participate in management.</p>
<p>2. Identify the tested and effective previous measure that has elements of sustainability, and is to be scaled up in the project timeframe.</p>	<p><b>Output 1:</b> Coastal environment and coral monitoring continued for Rarotonga and replicated in Aitutaki and other outer islands.</p> <p>Coastal environment and coral monitoring is a core function of the Ministry of Marine Resources. This is a sustainable activity as there are staff already based in each of the inhabited Pa Enea (outer islands) who can help with implementation. Standardising monitoring methods and efforts, and training all staff in these methods will enable broader coverage and identification of risk areas, and where management intervention is required.</p> <p>The island of Aitutaki is one of two islands in the Cook Islands that has an established marine hatchery already in operation but with limited capacity, equipment and tools for surveying and monitoring.</p> <ul style="list-style-type: none"> <li>• Upgrading the existing establishment on Aitutaki would be part of the upscaling measure, including the refurbishment of the buildings, tanks, water tanks, installing laboratory with utensils, equipment, technology and necessary tools to carry out surveying,</li> </ul>

	<p>monitoring, research and training. This would support monitoring and research in other islands that are logistically and technically challenging to establish and maintain facilities on, and to provide a platform to continue surveys and monitoring with enhanced techniques and training, data analysis and results interpretation relevant to local context and needs for and by Cook Islanders.</p> <ul style="list-style-type: none"> <li>• Promote and increase training opportunities and engagement with schools, civil societies, academics and local communities through awareness initiatives, workshops, tours etc.</li> </ul> <p>Expansion of the centre with new technologies will encourage interest from Cook Islands students to undertake studies and research in this sector. The centre will be fully utilised as a central marine research, survey, monitoring and teaching unit in Cook Islands that will provide useful scientific data and information for informed decision making.</p> <p>Dedicated resources will be needed for the development and delivery of outreach and education materials, including communication and consultation.</p> <p>Training and research will extend to MMR staff based across all islands and fishing community and interested community members, in support of succession planning and professional development, to maximise outreach with the public and build resilience and sustainability within MMR work programs after the project.</p> <p>Effectiveness of the centre will add value to ongoing climate change initiatives, Marae Moana, the marine sector and other related disciplines.</p> <p>Ensure ongoing monitoring of the coastal environment and coral systems to enhance understanding for sustainable management of these resources and the environment.</p>
<p>3. The selected scaled up measures must have socio-economic benefits for the communities and be implemented using an evidence-based gender-sensitive and rights-based approach.</p>	<p><b>Output 1:</b> Coastal environment and coral monitoring continued for Rarotonga and replicated to Aitutaki.</p> <p>The project will not only add value to the work currently being done by the Ministry of Marine Resources, importantly, it will facilitate research, learning and gathering of relevant scientific data along with traditional knowledge required by communities and leaders to make informed decisions about their marine resources and environment.</p> <p>Additionally, local students will benefit from the application of science to their traditional and local knowledge mainly the value of studying in their own back yard.</p> <p>It will also create employment opportunities that will contribute to the</p>

	<p>socio-economic stability and benefits in the community as a teaching and learning centre including for tourists.</p> <p>Mainstreaming component of the programme will ensure gender balance across all areas with opportunities at the different aspects of the project for communities to participate, engage and be heard.</p>
4. The selected scaled up measure must fit within the scope of the SUPA budget.	The activities fit within the overall budget of EUR 500,000.
5. Recognising that maintenance of government-owned infrastructure is the responsibility of the particular government agency, provisions for maintaining the newly scaled up measure must be included in the SUPA intervention as this is essential for sustainability.	<p>Training in installation, use and maintenance will be mandatory for any equipment provided by the project.</p> <p>It is also essential that equipment procured can be quickly repaired and parts readily available within reach and project fund.</p> <p>Any infrastructure or equipment derived from this project will be added to MMR's assets and equipment registry, and maintained within MMR's operational budgets post project.</p>