

**GLOBAL CLIMATE CHANGE ALLIANCE:  
PACIFIC SMALL ISLAND STATES PROJECT**

**CONCEPT NOTE**

**PROTECTING ATOLL HABITABILITY, LAND AND INFRASTRUCTURE IN  
AILINGLAPLAP, REPUBLIC OF MARSHALL ISLANDS**

**Name of Country**      Republic of Marshall Islands (RMI)

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Environmental Planning and Policy Coordination (OEPPC)

**General Information:**

Project title:                      Protecting atoll habitability, land and infrastructure in Ailinglaplap,  
Republic of Marshall Islands

Project site(s):                    Ailinglaplap Atoll

Project Partners:                 Office of the President, OEPPC, Ministry of Internal Affairs, Ministry  
of Public Works, Environmental Protection Agency, Marshall Islands  
Marine Resources Authority, Marshall Islands Mayors Association,  
Ailinglaplap Atoll Local Government, Council, community groups,  
NGOs and Coastal Management Advisory Council.

Total Project Cost:              USD equivalent of €500,000 (approximately USD650,000)

Project Duration:                 2 years

**Project Description**

The project will assess and implement different coastal protection measures in Ailinglaplap atoll and especially on Woja Island on the south coast of the atoll. Ailinglaplap has a population of 1,729 people (3% of RMI's total population). Coastal erosion exacerbated by sea level rise is a very serious issue in RMI where maximum land elevation rarely exceeds 3m. Some assessments have been conducted for the islands in Ailinglaplap atoll and the Ministry of Public Works and OEPPC have prioritised Woja Island as high priority for coastal protection. Here coastal erosion is seriously jeopardising copra production as well as community access to the school, dispensary and other community services. The project will include a feasibility study which will assess and design different soft and hard coastal engineering measures such as beach recharge (moving sand from an accreting area to an eroding area); coastal vegetation planting and rock revetments. Once the feasibility study is completed, appropriate measures will be identified and implemented. The project will adopt a consultative and participatory process with all sectors of civil society, including women and youth, and especially involving the communities living in the affected area and in the rest of the atoll. The project is consistent with RMI's Climate Change Roadmap (2010); RMI National Climate Change Policy Framework (2011); RMI's Joint National Action Plan (JNAP) for Climate Change Adaptation and Disaster Risk Management; Strategic Development Plan Framework 2003-2018 (Vision 2018); and RMI's intention for all atoll local governments to develop action plans tailored towards the achievement of the national vision.

### **Background and Justification :**

RMI has 34 atolls and the maximum elevation rarely exceeds 3m. Ailinglaplap atoll lies approximately 150 miles southeast of Kwajalein in the Ralik Chain, and 150 miles west of Majuro. Ailinglaplap atoll has the third largest land area in the Marshall Islands with 5.7 square miles (8.1% of the total land area of 70.1 square miles). The 2011 census population for Ailinglaplap was 1,729 (3.2% of RMI's 53,158 residents). The atoll has a semi-continuous reef rim enclosing a lagoon. Approximately 100 vegetated reef islands are located on the atoll reef rim. Five of these islands contain villages.

Coastal erosion, exacerbated by sea level rise is a very serious concern for all the islands of RMI. As recently as June 2013 there was serious flooding in RMI as a result of large swell waves generated by a storm system in the southwest Pacific which coincided with high spring tides.

In October 2010 the Cabinet endorsed the RMI Climate Change Roadmap, and government agencies were asked to submit climate change projects for prioritization. The Ministry of Public Works presented infrastructure improvement needs, costs and location maps for shoreline protection and rehabilitation of roads, causeways and airstrips on six atolls. The total cost for nine priority projects was USD81.09 million (based on an estimate of USD1,750 - 2,100 per lineal foot for rock revetments). Two of these priority projects were in Ailinglaplap: USD9.45 million for the Airok-Jabwan-Buoj roads and causeway; and USD1.26 million for the ocean and lagoon side of the Woja road and causeway.

The OEPPC conducted a vulnerability survey in January-February 2013, and identified the Woja road and causeway as the focus area for the GCCA: PSIS climate change adaptation project in RMI. The communities there have constructed a 'temporary fix' but this is at risk and the erosion is jeopardising copra production as well as access to the school, dispensary and other community services.

### **Project Cost and Budget :**

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

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

Criteria	How does the proposed project adhere to the criterion?
1. <i>Feasibility</i> : Is the proposed project feasible taking into account: Time frame of GCCA: PSIS project, Available budget, National human resources, Previous track record with project implementation.	The project can be undertaken within the GCCA: PSIS project time frame and budget of EUR 500,000, based on the initial assessments that have already been conducted.  The Ministry of Public Works and the OEPPC have already conducted assessments and this site has been prioritised by the government.
2. <i>Cost</i> : Does the project require minimal resources	The project will require minimal resources and costs will be determined during the feasibility study; low cost soft

	engineering methods will also be considered in the feasibility study.
3. <i>Consistency</i> : Does the project support the country's climate change adaptation policy and planning	The project is consistent with RMI's Climate Change Roadmap (2010); RMI National Climate Change Policy Framework (2011); RMI's Joint National Action Plan (JNAP) for Climate Change Adaptation and Disaster Risk Management; Strategic Development Plan Framework 2003-2018 (Vision 2018); and RMI's intention for all atoll local governments to develop action plans tailored towards the achievement of the national vision.
4. <i>Urgency</i> : Is the project urgent or could it be delayed 10 years with minimal impact	Delay of the project would render residents and coastal infrastructure in Ailinglaplap atoll even more vulnerable to climate variability and climate change through coastal erosion, storm inundation and loss of land.
5. <i>Scientifically valid</i> : Is the project based on scientifically valid climate change projections	Most recent climate change projections indicate that sea-level in and around RMI will continue to rise over the course of the 21 <sup>st</sup> century. Relative to 1990, a rise of 3-16 cm is projected by around 2030, and 11-30 cm by around 2055 under the high emissions scenario <sup>1</sup> .
6. <i>Equity</i> : Does the project involve all sectors of society (especially community participation and gender considerations)	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	There are other coastal communities in Ailinglaplap and the other atolls of RMI that are experiencing similar issues. This project could easily be replicated in other Pacific Island Countries.
8. <i>Measurability</i> : Can the benefits of the project be measured and quantified	A M&E framework designed for this project will be used to measure the benefits. However, it is recognised that monitoring will have to extend beyond the project lifecycle to fully evaluate impacts.
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)	The project is focused on coastal zone management with visible on-the-ground elements as well as planning elements. It has strong links to food security, health and livelihoods.
10. <i>Risks</i> : Identify key risks to successful project implementation	Limited transportation to Ailinglaplap is one of the major risks to the implementation of this project.
Date of assessment	24 August 2013

<sup>1</sup> Australian Bureau of Meteorology and CSIRO, 2011; Climate change in the Pacific: Scientific Assessment and New Research Volume 1: Regional Overview. Volume 2: Country Reports.