RMI R2R Project Submission to the Regional Scientific and Technical Committee Meeting, Nadi, Fiji

1. Brief Project Background

The RMI STAR R2R Project will participate in the Regional Scientific and Technical Committee meeting that will be held in Denarau, Nadi, Fiji from 15-17 February 2021, and will present on the work that the project is currently and have conducted in the five island pilot sites: Mejit, Likiep, Aur, Wotho and Ebon, and at the national level, including the challenges that the project is facing in delivering results based on project outputs and outcomes.

The RMI STAR R2R Project is a five-year project (2017-2022) and into its fourth year of implementation at a total $3,927,981 from the GEF fund. The project is implemented by UNDP through its Direct Implementation Modality (DIM), with project team based both in RMI and UNDP Pacific Office, Suva, Fiji.

1.1 Project Objective

The RMI has a strong dependence on natural resources and biodiversity not only for food and income but it also forms the basis of its culture and way of life. The project aims to support operationalizing the Reimaanlok: National Conservation Plan to sustain atoll biodiversity and livelihoods by building community and ecosystem resilience to threats and degrading influences through integrated management of terrestrial and coastal resources.

The project intervention has been organized into three components under which three outcomes are expected.

Component 1: Expanding and Sustaining RMI Protected Area Network.

Outcome 1: Conservation areas delineated, declared, and efforts sustained in five priority outer islands to meet Reimaanlok targets and contributing to the Micronesia Challenge and Aichi targets.

Component 2: Improved Governance for Integrated Atoll Management

Outcome 2: Supportive policies, institutions, and communities in place to ensure successful implementation of the Reimaanlok vision

Component 3: Knowledge Management

Outcome 3: Accessible data and information systems and improved linkages and collaboration with regional initiatives, including the Pacific R2R Program, to support adaptive management of the biodiversity in RMI

1.2 Project Partners:

The Climate Change Directorate is the GEF Operational Focal Point who is also secretariat to the Coastal Management Advisory Council (CMAC) who is the legal arm that leads the implementation of the Reimaanlok. Responsible partners to the project include Marshall Islands Marine Resources Authority (MIMRA), Marshall Island Conservation Society (MICS), International Organization for Migration (IOM), The Pacific Community (SPC), College of the Marshall Islands (CMI), Historic Preservation Office (HPO) and Jojikum Youth Group.

2. Project Update:

The below described in detail the achievements of the project based on activities delivered under the various outputs and outcomes under the three main components, above.

Component 1: Expanding and Sustaining RMI Protected Area Network.

This component focuses on implementation of RMI's commitment to its protected area network (PAN) to protect both nearshore marine and terrestrial areas by undertaking terrestrial survey, nearshore marine ecosystems, formulating and updating management plans and contribute to sustainable financing mechanisms for biodiversity conservation.

The following activities are involved in delivering activities under the outcome:

a) Marine Survey:

MICS and MIMRA conducted marine survey in Likiep and Mejit atolls. Analysis of benthic data ongoing with the assistance of the University of Guam's and MIMRA using CoralNet software to analyze benthic data. The software will increase the processing speed of benthic data allowing MICS to provide a state of reef report in fraction of time.

b) Terrestrial Survey

MICS led the terrestrial mapping in partnership with the University of Hawaii Hilo Spatial Data and Analysis Lab (SDAV) led by Dr. Ryan Perroy using drones. Aerial images collected on four sites, namely Aur (176ha), Mejit (257ha), Likiep (186.83ha and Ebon (303ha). covering a total area of 922.83ha already surveyed.

With the support of Dr. Perroy, the survey enabled the use of tree counting software and Orthomosaics to deliver high-quality outcome of the survey where targeted trees, especially fruit bearing trees can be explicitly mapped and counted, with more than 85% certainty.

The below demonstrated results of the terrestrial mapping undertaken on Likiep Melang village. Using relevant software, the aerial mapping predicted the number of coconut trees with 80-85% certainty. The same is anticipated to be achieved for the remaining sites.

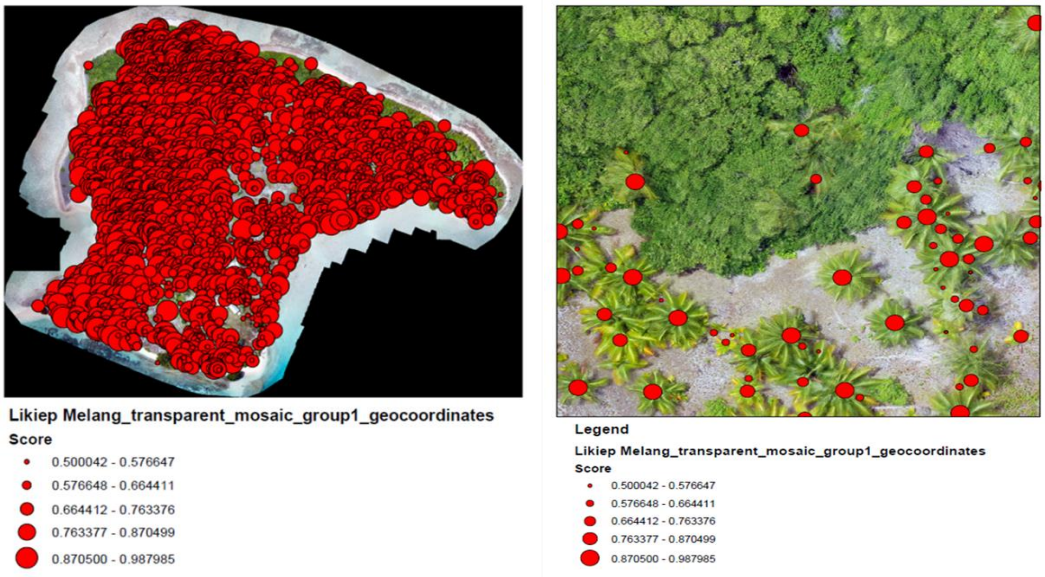


Figure 1 and 2: Terrestrial mapping result in Likiep Melang Village.

c) Flood Risk Assessment

C.1 Geodetic Survey

To inform the communities of their vulnerabilities to sea level rise and coastal inundation, the project conducted flood risk assessments for four sites. This work involves measuring ground control points at various points to ascertain the difference in the elevation. Results obtain from the geodetic survey will be used to develop a detailed digital elevation maps that will demonstrate wave action and impact at the different established points.

Figure 3 & 4: Dept. of Lands and Survey Team conducting Geodetic Survey on Likiep atoll to establish ground control points

C.2 Tide Gauges

In addition to the geodetic survey, tide gauges are deployed to the project sites, and placed at strategic points to measure wave actions over pre-determined time, usually 3 months. The data will complement the geodetic survey data by increasing level of accuracy.

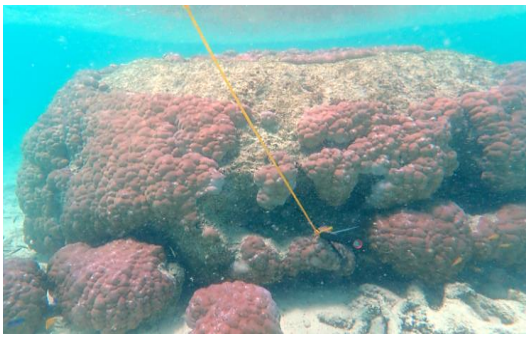


Figure 5 & 6: Tide gauges deployed to measure wave actions.

MICS is working with the United States Geographical Survey (USGS) and University of Hawaii Sea Grant to analyze the data and to develop a model that will best represents the vulnerability of communities due to the continuous sea water intrusion and sea level rise.

d) Socio-Economic/LEAP Survey

IOM conducted socio-economic survey and extended further this assessment by conducting a Local Early Action Planning (LEAP) exercise to help determine key actions to take to improve health and resilience of natural and social resources and reduce vulnerability to climate change. IOM conducted these assessments in Likiep and Aur. The other remaining sites was done by MIMRA.

Figure 7&8: Community mapping in the Likiep community.

The LEAP exercise is an opportunity for the community to map out risks and document procedures that can be used to guide community actions to address existing threats and potential impacts from climate change.

e) Traditional Knowledge/Cultural Survey:

In collaboration with the Historic Preservation Office (HPO) conducted cultural survey to document historic, pre-historic and traditional sites located in the five atolls and to educate the inhabitants on the importance of protecting and preserving the identified sites. Traditional knowledge and practices related to natural resource management resources are documented.

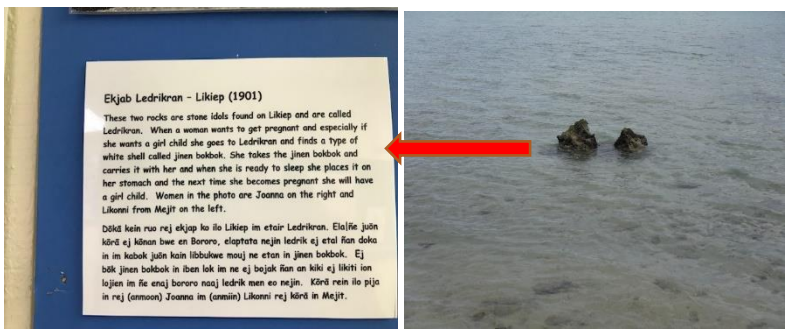


Figure 9&10: significant pre-historic site in Likiep.

f) Implementation of Intervention to support Community livelihood.

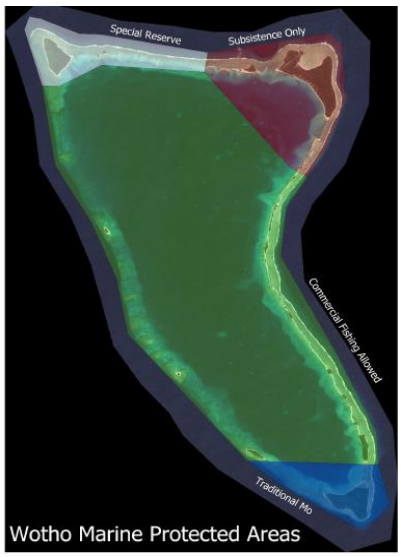
Studies conducted on each atoll by the partners to ascertain the most feasible intervention that will support livelihood of the local communities. This is done in consultation with the local communities. Currently IOM is working with the Ebon communities to develop the Virgin Coconut Oil business, a business intervention that the community identified as a sustainable venture given the availability of raw materials that will be able to sustain the business. Similar work is done in Likiep and Mejit by MICS.

g) Sustainable Financing to Support Conservation.

The sustainable financing mechanism will ensure adequate funding support is provided for conservation effort in the RMI. Numerous initiatives undertaken in the past to establish this tool in the RMI, and with the support of the Chief Technical Advisor is take stock of these stocks and provide recommendations on feasible tool for RMI.

h) Management Plan and Demarcation of Marine and Terrestrial Protected Areas.

With MICS, the management of Wotho atoll has been drafted and is in the final phase of review before the management plans and ordinance finalized. Through community consultations, marine protected areas demarcated.



Proposed Demarcation of marine protected areas for Wotho Atoll.

Component 2: Improved Governance for Integrated Atoll Management

This component focusses on strengthening the enabling conditions realizing effective governance required for integrated atoll/island management. The project is working with MIMRA to operationalize the established PAN Office.

Component 3: Knowledge Management

a) National Spatial Analytic Facility (NSAF)

The NSAF is an existing facility to reposit all Reimaanlok data obtained from the R2R work in the five sites. Working with the College of the Marshall Islands, the facility was upgraded to an on-site facility which is currently operational.

b) Agroforestry Certificate

The agroforestry curriculum was developed by the College of the Marshall Islands to enhance skills in agroforestry for targeted group from the five sites. The development of the course curriculum was successfully accomplished by getting approval of five courses with 15 credits from CMI Course Curriculum Committee. The courses were taught in two modules with participants from five outer island atolls (Lae, Ebon, Mejit, Namu and Wotho), Majuro local farmers and CMI students. The schedule started from May 4th 2020 till May 28th 2020 for first module completing AGF 101 and AGF 103. The second module started from August 4th till September 3rd which concluded with courses AGF 102, AGF 104 and AGF 105. Eleven students (8 male and 3 female) graduated with certificate of accomplishment for coursework in Graduation ceremony.

c) Traditional Knowledge in the RMI

Jojikum Youth Group worked with youth from Ebon to document traditional knowledge and practices as part of revitalizing traditional knowledge and practices exclusive to RMI. The outcome of this activity will be documented and shared in the public domain.

3. Implementation Forecast for 2021:

It is envisaged that all surveys will be completed in 2021 and all community management plans and demarcation of marine and terrestrial protected areas.

New inclusion to the project activities, as approved by the Project Board to implement any food security related interventions that will enhance food security and sustainability in the outer island community.

The project is currently working with the Ministry of Natural Resources to organize the intervention in the five outer islands.

4. Challenges

a) Inability to travel to the country due to Covid-19. Project experts are not able to travel to support partners in the field work. Covid also prevents partners from travelling into the country, e.g. SPC was not able to travel to conduct hydrogeological assessment in one of the project sites to date.
b) Lack of qualified personnel in country to support the implementation. Attempts from the PMU to recruit individual from the RMI on certain project positions is quite difficult. e.g. recruit local consultant to lead community consultation and drafting of management plan did not happen as no application received.
c) Transportation to the outer island is always a problem due to inconsistent schedules and non-availability of transport.
d) Outbreak of Dengue Fever in the RMI (before Covid-19) halted implementation for six months because of travel restriction between Majuro and the outer islands.
e) Poor connectivity in the outer islands makes it difficult to be in constant communication with the site coordinators to assess progress of work at the ground level.

5. Lessons Learnt

a) Covid changes usual way of doing business, although very challenging, need to adapt to the new normal.
b) Absence of project personnel at the ground level affects the progress of the work. Currently no project staff on the ground as Project Manager and Admin Finance Officer are both stuck overseas, due to Covid.
c) The livelihood intervention is a separate project in itself and need more time for implementation.