Enhancing Disaster and Climate Resilience in the Republic of Marshall Islands through Improved Disaster Preparedness and Infrastructure (Project#: 00115304)

Annual Progress Report
December 2023

Emergency Operation Center in Ebeye under construction

PROJECT BRIEF

Project Title	Enhancing Disaster and Climate Resilience in the Republic of the Marshall Islands through Improved Disaster Preparedness and Infrastructure (EDCR RMI)
Delivery date:	22 January 2024
Project ID:	00115304
Contributing Outcome (UNDAF/CPD, RPD or GPD):	Multi Country Programme Document (MCPD) 2023-2027 • Cooperation Framework Outcome involving UNDP #1: By 2027, people, communities and institutions are more empowered and resilient to face diverse shocks and stresses, especially related to climate variability impacts and ecosystems and biodiversity are better protected, managed and restored. • Related Strategic Plan Outcome: Resilience built to respond to systemic uncertainty and risk • Output 1.2: Governance systems are risk-informed to manage and finance disasters and shocks
Implementing Partner:	UNDP
Responsible Parties:	National Weather Service Office (NWSO), Ministry of Works, Infrastructure & Utilities (MoWIU)
Award ID Start Date:	31 March 2019
Award ID End date:	31 March 2024
Total Project Budget (Award ID):	USD 7,400,000
Beneficiary Country:	Republic of the Marshall Islands
Period of the Report:	1 April 2019 to 31 December 2023

Brief Description

The project aims to improve the capacity for preparedness and mitigation of the Republic of the Marshall Islands (RMI) to man-made, geo-physical, climate related hazards and enhancing resilience to climate change impact, guided by the overarching Disaster Risk Management National Action Plan (DRM NAP), the National Disaster Management Plan (NDMP), the Standard Hazard Mitigation Plan and the National Climate Change Policy Framework (NCCPF). The project will respond to Outcome 1 of the UN Pacific Strategy 2018 – 2022: By 2022, people and ecosystems in the Pacific are more resilient to the impacts of climate change, climate variability and disasters; and environmental protection is strengthened. The cooperation with the Government of Japan will contribute to achieving the goals of the Sendai Framework for Disaster Risk Reduction, elimination of threat to human security and protect gains of sustainable development and in line with Japan's ODA in the RMI and its priority areas: 1) overcoming vulnerability and 2) environment and climate change.

The outcome will be achieved through two expected outputs:

1. Strengthened gender sensitive disaster communication and climate inundation monitoring systems
2. Enhanced national and state disaster responders' readiness capacity and better resources to minimize loss of lives and damages

The project will be implemented by the UNDP Pacific Office in Fiji under the UNDP Direct Implementation Modality (DIM) and as part of the Resilient and Sustainable Development team.

Overview of the Progress (April 2019 – December 2023)

The Republic of the Marshall Islands (RMI) experiences frequent natural hazards (such as tropical storms, typhoons, storm surges and droughts), which can result in human casualties, disrupt economic activity, lead to loss of livelihoods, divert fiscal resources, and undermine development priorities. Although not all disasters are caused by climate change, the country's vulnerability to climate change will heighten disaster risks because extreme weather events are likely to increase in the future. Analysis undertaken under the Pacific Catastrophe Risk Assessment and Financing Initiative indicates that RIM faces an average annual loss of more than 2% of GDP from typhoons, earthquakes, inundation and tsunamis. Typhoons are in its waters at an average four per year. Additional challenges include related ecosystem degradation, coastal erosion and food and water insecurity. Rising sea level is the biggest threat in the RMI as most of the atolls have an average highest elevation of 2m.

The project, titled "Enhancing Disaster and Climate Resilience in the Republic of the Marshall Islands through Improved Disaster Preparedness and Infrastructure" aims to improve the capacity for preparedness and mitigation of RMI to geo-physical and climate related hazards and enhancing resilience to climate change impact. The Note Verbal for this grant took place on 4 March 2019.
The project staff was on board during the 3rd quarter of 2019 and the inception workshop and the first Project board meeting were held in August 2019. The project has been affected from the impact of COVID-2019 pandemic since 2020 which resulted in significant increase in the construction cost from rapid increase in raw material and shipment cost as well as lack of skilled labours available in the country and increased lead time of supplies.

The main progress as of 31 December can be summarized as below:
Output 1:

- Strengthened pre- and post-disaster data collection capabilities by supplying aerial and submersible drones to EOC Majuro and Ebeye in October 2023. This leads to improved situational awareness, better-informed decision-making, and more targeted resource allocation for disaster response and recovery efforts. The trainings were attended by 5 men and 1 women from National Disaster Management Office (NDMO), Office of Chief Secretary, Kwajalein Atoll Development Agency (KADA) and Marshall Islands Police Department (MIPD). Other ICT equipment are under procurement.
- An agreement between National Weather Service Office (NWSO) and the Telecommunications and Social Informatics Research Program (TASI) of the University of Hawai'i UH has been concluded to supply and operate chatty beetles which can receive and send text alert messages through iridium satellite. The chatty beetles were delivered to Majuro in October 2023 with which the NWSO has delivered equipment to two atolls of Wotto and Lae.
- An agreement between NWSO and the Pacific Islands Ocean Observing System (PacIOOS) of the University of Hawai'i has concluded an agreement to supply two wave rider buoys which would provide various ocean data for weather forecasters, fishers, mariners and many other recreational and commercial ocean users to better understand prevailing ocean conditions and to make safe decisions. The buoys have been procured and calibrated, tested and delivered to RMI. A wave rider buoy program best management practices was compiled by the PacIOOS and several trainings have been held. Due to lack of available bathymetry in the original deployment location in Jaluit, PacIOOS has suggested for the alternate location of deployment in the south of Kwajalein. NWSO will verify the location for final deployment.

Output 2:

- Architectural and Engineering design of Emergency Operation Center (EOC) buildings for Majuro and Ebeye was developed remotely with the support from the Ministry of Works, Infrastructure and Utilities (MoWIU) and completed in February 2021.
- Contract of constructing EOC in Ebeye was concluded in October 2022 and the groundbreaking ceremony was held in December 2022 in order to support emergency response capacity. Approximately 60% of the work has been completed.
- The construction of EOC in Majuro was initially planned. However, this activity was cancelled as the proposal submitted for constructing two EOCs exceeded the available budget due to the sudden increase of cost affected by the COVID-19 pandemic.
- The request for changing the project activities was submitted and approved in December 2022 to supply and upgrade critical infrastructure and equipment for emergency response and preparedness instead of constructing EOC in Majuro. Among various equipment to be procured, a pick up truck has been delivered to Ebeye and furniture for the EOC was received and stored in Ebeye by November 2023. Other equipment includes back-up generators and water trucks to be supplied in Majuro and/or Ebeye.

Progress towards Project Outputs/Activities

Output 1: Strengthened gender sensitive disaster communication and climate inundation monitoring systems

#	Planned Activities	Summary of Progress
1.1	Install inundation and tsunami and multi-hazard warning redundancy and climate data conduit through Chatty Beetles in 9 locations with 3 spares	• The UNDP approached to the University of Hawai'i (UH) - Telecommunications and Social Informatics Program (TASI) program, which has provided continuous supports with the US National Oceanic and Atmospheric Administration (NOAA) in this region including RMI. • It was agreed that a Letter of Agreement (LOA) is concluded between UNDP and National Weather Service Office (NWSO) after the project found that the legal clauses of the agreement document have not been agreed upon between UNDP and UH. • TASI has not responded to the project nor NWSO despite of a number of follow-ups due to their COVID-19 response. However, the project board has decided to continue this activity. • The agreement between NWSO and TASI has been concluded in July 2022. • NWSO received seven chatty beetles from TASI in October 2023. • NWSO dispatched a mission to Wotto and Lae to supply chatty beetles in December 2023.
1.2	Provide two Wave-Riders that will support wave modelling and Realtime inundation forecasting and warning for coastal communities and long-term oceanographic measurements in strategic and vulnerable locations	• The UNDP approached to the University of Hawai'i (UH) – Pacific Islands Ocean Observing System (PacIOOS), which has provided continuous supports with the US National Oceanic and Atmospheric Administration (NOAA) in this region including RMI. • As the UH was not able to conclude a direct partnership with the UNDP, a Letter of Agreement (LOA) was concluded between UNDP and NWSO in April 2020, and later another agreement was concluded between NWSO and UH. It was decided to procure two buoys instead of three due to the budget constraint. • PacIOOS has initiated the procurement of wave rider buoys which were received by NWSO in May 2021. After the testing of the buoys, one buoy were shipped to RMI and received by NWSO in October 2021. Another spare buoy was received in RMI in April 2022. • Other necessary equipment is under procurement and information for the logistic arrangement was collected. • Wave rider buoy program best management practices was developed by the PacIOOS in Aug 2021.

		• UH conducted several capacity development trainings including acoustic release and transducer operation (Jan 2022), operation of the portable acoustic command system (PACS) deck unit equipment (Apr 2022), A brief training/introduction to the equipment (garmin chartplotter / transducer), survey methodology (May 2022). • PacIOOS and NWSO conducted a bathymetry survey after they obtained required equipment with the cooperation with Marshall Islands Marine Resource Authority (MIMRA) in June 2022. The data collected was processed and analysed by PacIOOS, however, the result didn't present a suitable location to moor the wave buoy. • Due to the absence of bathymetry in Jaluit, PacIOOS has suggested alternative location in south of Kwajalein. NWSO will verify the location for final deployment of a buoy.
1.3	Link the Northern Meteorological Offices with HF radio as per Pacific Island Communication and Infrastructure (PICI) Panel Workplan 2019	• The project board decided to cancel this activity during the 2nd board meeting in November 2019 as the NWSO has already connected with the outer Northern Pacific Island countries.
1.4	Provide appropriate and improved disaster preparedness and response communication and other equipment to GOB/EOC to ensure a fully equipped and functional Centre linking to the main communication media used in RMI by the main Ministries for baseline disaster data collection and transmission to NDMO and line Ministries and vice versa for dissemination of warnings, with software and training	• The project board decided during the 2nd board meeting in November 2019 to cancel the activity of supplying the HF/VHF radios which would be provided by another funding source (World Bank). • The project will procure only required furniture and equipment for the National Emergency Operation Center in Majuro under this activity. The list of ICT equipment with estimated cost and training was drafted. • The project board decided during the 8th board meeting in December 2021 to hold this activity due to the budget constraint foreseen. • The project board in July 2022 decided to start procurement process in July 2022, after competitive process for construction works, which resulted insufficient budget for EOC in Majuro construction. • List of items was developed, and procurements were initiated. • Aerial and submersible drones were delivered to EOC Majuro and Ebeye in September-October 2023 in addition to four smaller drones received in November 2023. The trainings were conducted by the suppliers from 3-10 October 2023, attended by 5 men and 1 woman from National Disaster Management Office (NDMO), Office of Chief Secretary, Kwajalein Atoll Development Agency (KADA) and Marshall Islands Police Department (MIPD).

		• Small items such as Personal Locator Beacons (PLBs) tablet, computers, mobile phones were arrived in Majuro by December 2023.

Output 2: Enhanced national and state disaster responders' readiness capacity and better resources to minimize loss of lives and damages

#	Planned Activities	Summary of Progress
2.1	Construct NDMO Emergency Operation Center (EOC) (including NEOC and a disaster warehouse) in Majuro that meets disaster preparedness, international and functional standards.	[Applicable both for 2.1 and 2.2] • A structural engineer hired by the UNDP has collected required information in 2019. Discussion was made with possible options for the construction. • A Letter of Agreement (LOA) with Ministry of Works, Infrastructure and Utilities (MoWIU) has been concluded in July 2020 to supervise the design and construction work. • A&E design was awarded in August 2020 after the project launched tenders twice. • The tender for construction was issued in March, closed in April 2021. • Based on the Board's decision in May 2021, the evaluation continued although the submitted bids were beyond the budget. • The tender was cancelled as none of the bidders met the required criteria. • UNDP, MoWIU and NDMO have analyzed the submitted bids via conducting an interview, collecting recent information of local construction companies, and re-assessing the market rate. • Scope of the construction was revisited, and the design document is under revision for the retendering the case. • The second tender was issued in March, and closed in May 2022 and evaluation has started. In parallel, Chief Secretary Office and the UNDP has discussed on the budgetary issue as the submitted bid was beyond the available budget and the UNDP requested to RMI Government to decide on the selection of the construction site or possibility of cost-sharing. • The cabinet of RMI endorsed as per CM/108-22 document to construct an EOC in Ebeye as this is the only option within the available budget and the Government was not able to share the cost to construct an EOC in Majuro. The project board in July 2022 further decided to proceed with construction of EOC building in Ebeye. [Applicable for 2.1 EOC Majuro and NTA data center] • Lease agreement of the EOC site was received in December 2019.
2.2	Support construction of one GOB/EOC in Ebeye including feasibility option, design and technical file preparation, and finalize construction subject to availability of funds and Government of Japan approval	

		• The project includes construction of a back-up information center (NTA data center) based on the progress report during the inception stage. The project board decided in November 2019 that the project will allocate US$110,000 for the NTA data center and the remaining would be cost shared by the NTA. • LOA with MoWIU was amended to include the design and construction of the NTA data center in October 2022. • The budget of cost-sharing the construction of NTA data center was removed from the project based on the discussion held during the Project board meetings in May and June. [Applicable for 2.2 EOC Ebeye] • The project received a lease agreement of the potential site for the EOC between Kwajalein Atoll Development Authority (KADA) in January 2020. • Old Kwajalein Atoll Local Government (KALGOV) building was demolished by Kwajalein Atoll Development Authority (KADA) in March 2021 to construct the EOC in Majuro. The final asbestos report was submitted to confirm that there is no asbestos in the old building. • The tender was awarded to Pacific International Inc (RMI) in August 2022 and the contract was concluded in October 2022. Letter of Commencement was given on 7 November 2022. • Groundbreaking ceremony was held in December 2022. • Temporary office and fencing the construction site completed in February 2023. • Materials delivery at site started from Feb. 24, 2023. • Construction activities started in March 2023. • Concreting on foundation started in May 2023. • Structure of the building (masonry walls, reinforced concrete, roofing) completed in November 2023. • Contract period extended till 31st January 2024 in October end. • Door frame, dry wall framing, insulation of walls, insulation below roof and concrete ceilings, and ceiling framing almost completed in December 2023. • Construction of ramp completed in December. • Water tank, water treatment plant and backup generator including fuel storage tank have been installed in the building in December 2023. • Louver window on ground floor installed in December 2023.

		• Down pipe and stormwater drainage connected to the city stormwater drainage in December 2023. • Roughing works of plumbing and electricity going on parallelly. • Construction is under progress with approximately 60% of the work completed.
2.3	Supply and upgrade critical infrastructure and equipment for emergency response and preparedness	• This activity was newly added after approval of changing activities by cancelling the construction of EOC in Majuro in December 2022. • Indicative activities include procurement of furniture and fixtures for Majuro/Ebeye EOCs, Back-up generators for Majuro Water and Sewer Company (MWSC), Water trucks for MWSC and Kwajalein Atoll Joint Utility Resources (KAJUR), and utility trucks for NDMO. • Furniture and a pick-up truck for Ebeye EOC were received in November 2023. • Back-up generators for MWSC and KAJUR, furniture for Majuro NDMO, water trucks, storage containers for Majuro and Ebeye were in transit.

Status on the Results Framework

EXPECTED OUTPUTS	OUTPUT INDICATORS	DATA SOURCE	BASELINE		TARGETS BY END OF THE PROJECT	PROGRESS AS OF DEC 2023
			Value	Year		
Output 1 Strengthened gender sensitive Disaster Communication and Climate and Tsunami Monitoring Systems GEN 2	1.1 # of islands with upgraded (i.e. redundancy, marine grade, energy efficient, gender sensitive) climate and tsunami early warning system installed and operational[1]	Quarterly progress Reports	0	2019	9	2 (Chatty beetles installed in Wotto and Lae)
	1.2 # of men and women with access to early warning information through the upgraded gender sensitive disaster communications, climate and tsunami early warning systems	Quarterly progress Reports	0	2019	54,705 Projection 2019 (from Census 2011)	162 people (79 men and 83 women) (Chatty beetle installed in Wotto and Lae)
Output 2 Enhanced gender sensitive National and State Disaster Preparedness capacity GEN 2	2.1 Scale (%) of upgrading of the National Emergency Operational Centre with appropriate infrastructure and equipment to facilitate information management and effective coordination	Quarterly progress Reports	0	2019	100%	74% (60% of construction work completed)
	2.2 # staff and members of the Emergency Operational Centre and Disaster Management Team have improved their capacities in information management and coordination (equipment and gender sensitive guidelines)	Quarterly progress Reports	0	2019	20 (Women=8[2])	0
	2.3 # men and women benefitted from the improved disaster preparedness in water sector [newly added in Dec 2022]	Quarterly Progress Reports	0	2022	32,398 (16,417 men and 15,981 women)[3] Majuro; 11,289 men and 11,269 women, Kwajalein: 5,128 men and 4,712 women	0

[1] The early warning system to be targeted by this project involves the National Disaster Management System, the National Weather Service, the Ebeye Emergency Operation Centre and other key counterparts. The equipment to be provided as part of the Early Warning Systems comprises VHF/HF marine grade radio and antennas, wave riders and chatty beetles. Currently, the equipment in incomplete and/or deteriorated due to deficiencies in the type of equipment.

[2] Involvement of women within the EOC and Disaster Management Team will be emphasized, expecting to achieve a 40% of women participation

[3] Estimate from Census 2021

GENDER SPECIFIFC RESULTS

As the women was under-represented in the progress meeting of A&E design for EOCs, the project has requested government counterparts to nominate women staff to participate in order to ensure meeting needs both from men and women. The design process has also taken into consideration for being gender responsive and accessibility to persons with disabilities based on the international building code as well as UNDP construction works policy. The Project has also encouraged women's participation for the training of drones during the request for nomination of participants.

PARTNERSHIP

The Project has continued working closely with the National Emergency Management Office (NEMO), and National Weather Service Office (NWSO). The project has also worked closely with the Ministry of Works, Infrastructure & Utilities (MoWIU) to request supervision of the future construction of EOCs. The Ministry of Finance is also involved in the process of managing advance fund and reporting.

The Project has established a partnership with the University of Hawai'i for the installation of wave rider buoys and supplying chatty beetles as the university has providing supports to the NWSO via NOAA.

The Project has been coordinating the World Bank's PREP II project under which some equipment related to disaster risk management are supplied. The project has also initiated coordination with IOM to procure equipment for disaster communication via FM radio.

ISSUES

The Board members decided during the 2nd board meeting in November 2019 to cancel the activity of supplying the HF/VHF radios (activity 1.4) in order to reallocate the fund to the other activities. Consequently, one of the indicators for the Project was amended as below.

Original in the Project Document	**Amended**
Indicator: **1.1** # of government departments with upgraded (i.e. redundancy, marine grade, energy efficient, gender sensitive) climate and tsunami early warning system installed and operational **Target:** 5 (NDMO, GOB/EOC Ebeye, NWSO, Ministry of Health and Ministry of Education)	**Indicator:** **1.1** # of islands with upgraded (i.e. redundancy, marine grade, energy efficient, gender sensitive) climate and tsunami early warning system installed and operational **Target:** 9

After the results of the 2nd tender of construction of EOCs, the project board decided in July 2022 to proceed with construction of EOC building only in Ebeye as this is the only option within the available budget and the Government was not able to share the cost to construct an EOC in Majuro. In November 2022, the board further agreed to request changing project activities which will contribute to the original Output 2, instead of constructing a EOC in Majuro, and received approval from the Government of Japan in December 2022.

A new activity (Activity 2.3) was added as "Supply and upgrade critical infrastructure and equipment for emergency response and preparedness" subsequently and an additional result indicator was added to capture the relevant results.

Indicator	Data Source	Baseline	Target	Data Collection Methods & Risk
2.3 # men and women benefitted from the improved disaster preparedness in water sector	Census 2021	0 (2019)	32,398 (16,417 men and 15,981 women) Majuro; 11,289 men and 11,269 women, Kwajalein: 5,128 men and 4,712 women	Delivery report

Communications and Visibility

Until December 2021, the following coverage was made.

Marshall Islands Journal

Project Inception Board Meeting

is all suspended for probation. High Court Judge Witten Philippo said the probation conditions include that Lanki "cause to be

be of good behavior during the 12-month probation period, pay a fine of $1,000 and not leave Majuro without court approval.

Climate project launched

The UNDP Pacific office, along with the RMI government, will conduct a project inception meeting and convene its first board meeting in Majuro this Friday for the $7.4 million Disaster Risk Management project, funded by Japan through its Supplementary Budget program.

Through the UNDP – Japan Partnership Fund, RMI was awarded US$7.4 million for the implementation of the Disaster Risk Management project, "Enhancing Disaster and Climate Resilience through improved Disaster Preparedness and Infrastructure," to be implemented in RMI.

The project aims to improve RMIs capacity for preparedness and mitigation to geo-physical and climate related hazards; and enhance resilience to climate change impact in order to protect lives, sustain livelihoods, preserve the environment and safeguard the economy from consequences of different hazards.

The project will be directly implemented by UNDP Pacific office in Fiji. The project inception meeting is at Marshall Islands Resort this Friday. The RMI along with FSM and Palau are recipients of the UNDP–Japan grant implemented by UNDP. The project commenced in March 2019 and will end on March 2020.

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Twitter

Inception/Inaugural Board Meetings

https://twitter.com/RESPACatUNDP/status/1164648275175071744
https://twitter.com/RESPACatUNDP/status/1160656697548922880
https://twitter.com/PaulaCirikiyas3/status/1167197403583115265
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https://twitter.com/UNDP_Pacific/status/1289006337314103297

Facebook

Inception/Board Meetings

UNDP in the Pacific
September 5, 2019

Enhancing disaster and climate resilience in the Republic of Marshall Islands, the Republic of Palau and the Federated States of Micronesia is a key objective of the new Japan-funded project implemented by the UN Development Programme.

Over 72-thousand people in RMI will benefit from the project outcomes of a strengthened disaster communication and climate and inundation monitoring system; an enhanced national disaster responder's readiness capacity; and better resources to minimise loss of lives and damages.

The Project will respond to Outcome 1 of the UN Pacific Strategy 2018 – 2022; by 2022, people and ecosystems in the Pacific are more resilient to the impacts of climate change, climate variability and disasters; and environmental protection is strengthened.

This cooperation with the Government of Japan will contribute to achieving the goals of the Sendai Framework for Disaster Risk Reduction.

#disasterresilience #Japan

UNDP in the Pacific
1 hr

The Republic of the Marshall Islands is taking a number of steps to increase safety measures during a time of disaster, protect natural ecosystems and restore community livelihoods. First through data recorded in Waverider Buoys, which is a floating recording device that provide critical data on oceanographic measurements and predict wave patterns and erosion through storm damage. Second is the construction of a new Emergency Operation Centre in Majuro and third, is getting small portable satellite terminals called Chatty Beetles that allow remote communities without access to internet and telecommunications, to send text-based alerts and messages to the main island when a disaster strikes. These developments are part of the Enhancing Disaster and Climate Resilience in RMI Project, and were part of its recent board meeting discussions. The project is being implemented by UNDP in partnership with the Government of RMI and funding from the Government of Japan.

#RMI #DisasterPreparedness #ClimateResilience Ministry of Foreign Affairs of Japan

Ebeye EOC Ground-Breaking Ceremony (Dec 2022)

UNDP Press Release: https://www.undp.org/pacific/press-releases/emergency-operation-center-ebeye-support-emergency-response-capacity-marshall-islands

RMI OCE Ebeye Facebook: https://www.facebook.com/OCS.Ebje/posts/pfbid06ENDY9bvZRW1CqxPBwG88NvtfYxr61fNWn4AhtEEwWMsPanx3HmoWmsYx56VDMYBl

UNDP FaceBook: https://www.facebook.com/UNDP.Pacific/posts/pfbid02gPJaPx25oqo7roB3Ny9Q7m9i257whwheZ5oEPhN9SRi1xPSksiz4MGwCDHTaPkQjl

UNDP Twitter: https://twitter.com/UNDP_Pacific/status/1602164033829842945
Embassy of Japan in RMI: https://www.facebook.com/permalink.php?story_fbid=pfbid02y7SYDR9jXqDBAmuCuT3qPNkN4nwB7cSbQEdYNtVaas3eXa2g3HVngAkE7HJFzaVgl&id=100064354674958

UNDP Pacific Office in Fiji
December 12, 2022 ·

The construction of the Emergency Operation Center in Ebeye has started in an effort to enhance the emergency response capacity for 🇲🇭 Marshall Islands with via UNDP's 'Enhancing Disaster and Climate Resilience' project supported by Japan - The Government of Japan 🇯🇵.
https://www.undp.org/.../emergency-operation-center-ebeye...

UNDP.ORG
Emergency Operation Center in Ebeye to support emergency response capacity in the Marshall Islands | United Nations Development Programme

在マーシャル日本国大使館 Embassy of Japan in the Republic of the Marshall Islands
December 14, 2022 ·

平成30年度補正予算UNDP経由による災害対応・防災分野支援（イバイ緊急オペレーションセンター起工式）
Support for enhancing Disaster Response Capacity in partnership with UNDP by Japan's supplementary budget in FY 2018 (Ground breaking ceremony of Emergency Operation Center in Ebeye)

On December 6, 2022, the ground breaking ceremony for the Emergency Operation Center in Ebeye was held under the Project for Enhancing Disaster and Climate Resilience in the Republic of the Marshall Islands through Improved Disaster Preparedness and Infrastructure, in partnership of UNDP, which was funded by Japan's supplementary budget for FY 2018.
The ceremony was attended by Honorable Kitlang Kabua, Minister of Foreign Affairs and Trade, Ms. Abacca Anjain- Maddison, Deputy Chief Secretary and Mr. Kevin Petrini, Deputy Resident Representative and Country Manager for the UNDP Pacific Office, as well as officials from RMI Government and UNDP, and Mr. NAKAMURA Noriyuki, First secretary from the Embassy of Japan in RMI.
This groundbreaking ceremony is one of the great progress for this project, and we would like to thank all concerned for their efforts over the years.

１２月６日、我が国の平成３０年度補正予算によるUNDPを通じた「災害対応能力及びインフラの改善を通じた災害及び気候変動への強靭性強化プロジェクト」によるイバイ島における緊急オペレーションセンターの起工式が執り行われました。
同式典には、キトラン・カブア外務・貿易大臣、アバッカ・マディソン官房副長官、ケビン・ペトリーニＵＮＤＰ大洋州事務所次長兼ミクロネシア地域担当カントリーマネージャのほか、マーシャル政府及びＵＮＤＰ関係者等が出席し、当館からは中村書記官が出席しました。
本件起工式は本プロジェクトにとって大きな進捗の一つであり、これまでの関係者のご尽力に感謝いたします。

Drone Training (Oct 2023)

UNDP FaceBook:
https://www.facebook.com/UNDP.Pacific/posts/pfbid025quSe3xNVQpjxro8erCZFwqsLrdBoK5tMFc7gfgMCpVAtfNnec6a7RBwXr6SNfeUl

UNDP X (Twitter):
https://twitter.com/UNDP_Pacific/status/1709750255695065446

Lessons Learned

- All meetings during the project planning phase should be recorded and the minutes of meeting shared with all stakeholders to confirm the agreements on project activities to avoid changes later on.
- The Project Timeframe should be decided with due consideration to the constraints in the country of implementation.
- All the project costs should be accurately budgeted in the AWP.
- UNDP's partnership with the University of Hawai'i in relation to Enhancing Disaster and Climate Resilience was not able to be realized which continues to delay the implementation of the project activities as the legal clauses of the document has not been agreed upon. As the

University of Hawai'i is one of the key partners to implement the meteorology related activities in the North Pacific, having an overarching partnership agreement instead of seeking a project-based agreement could work if the UNDP continues to work in this area.

- It is important to hold pre-bid meetings in order to ensure obtaining required documentations from the potential bidders.
- For the project implementation, it is important to assess the required information available to start the activities so that we could estimate the realistic timeline and include necessary actions to obtain information. Required bathymetry information is not available, it took extra time to identify the location of waverider buoy.
- The Australian standard was applied for the EOC building A&E design. The project agreed on the code as this would be similar to the international building code. However, the project would have negotiated to the vendor to apply international building code as this would be easier to procure materials in the RMI market.

Updated Risk Log

#	Description	Type	Impact & Probability	Countermeasures / Management response
1	Construction of GOB/EOC/Warehouse will be delayed due to local hurdles in acquiring permits and approvals	Operational (Delivery)	Likelihood: 3 Moderately likely Impact: 3 Intermediate	Strong existing and new partnerships with organisations that are on the ground and have the experience and connections. The land tenure issue was resolved both for Majuro and Ebey in January 2020. The board agreed that the current plan for Ebeye EOC would be implemented without change to minimize the possibility of further delays.
2	Funds to support the construction of one GOB/EOC in Ebeye are insufficient	Financial	Likelihood: 4 Highly likely Impact: 4 Extensive	Additional funds will be searched to complete the construction of the GOB/EOC facility There is a huge gap between the bid offers and the budget. Raw materials, shipping cost and labour cost have been increasing due to the COVID-19 pandemic. Available budget seems not feasible for the construction of 2 EOCs. The cabinet of RMI endorsed as per CM/108-22 document to construct an EOC in Ebeye as this is the only option within the available budget and the Government was not able to share the cost to construct an EOC in Majuro. The project board in July 2022 further decided to proceed with construction of EOC building in Ebeye. The project requested changing activities to supply and upgrade critical infrastructure and equipment for emergency response and preparedness which was approved by the Government of Japan in Dec 2022. The Project has requested additional fund to the Government of Japan in 2021 which was not successful. The project continues discussing with the US Embassy on the possibility of funds to construct an EOC in Majuro.

3	Natural Disasters in the North Pacific	Environmental (Natural Disasters)	Likelihood: 3 Moderately likely Impact: 3 Intermediate	Preparedness activities will need to be activated and cease project implementation in the event of warnings issues by the National Disaster Management Office (NDMO). The intention is to avoid loss of life, damage to project assets and residual unforeseen circumstances.
4	Engagement and coordination within RMI and Development Partners	Strategic (Stakeholder Relations)	Likelihood: 3 Moderately likely Impact: 3 Intermediate	Consultation space need to be very open, frank and accommodative being mindful of the parameters of the funding modality, contingencies and allow room for flexibility. The project shares monthly progress and communicate with the counterparts and development partners. As the University of Hawaii informed that it would take longer time for reviewing and proceeding the agreement, the additional activity to supply a waverider buoy and bathymetry equipment was cancelled and the fund was allocated for other activities.
5	Availability of Equipment from Suppliers	Operational (Delivery)	Likelihood: 3 Moderately likely Impact: 3 Intermediate	Mapping of preferred supplies and/or existing suppliers and internal arrangements can still be made based on best practises consistent with UNDP Procurement guidelines. UNDP keeps tracking the status of implementation timeline with the awarded vendor. Amend the construction duration longer to allow longer lead time required for importing the materials and labors.
6	Staff Turnover	Other	Likelihood: 3 Moderately likely Impact: 3 Intermediate	Need to ensure at least three to four personnel from relevant government offices are part of project discussions and implementation to ensure continuity in the event of staff turnover.
7	Logistics challenges (e.g. disease epidemic, land tenure issues)	Operational	Likelihood: 3 Moderately likely Impact: 3 Intermediate	Preparedness on preventive/containment measures and consultation with key stakeholders.

8	Inadequate early warnings system do not reach the potential affected communities	Strategic	Likelihood: 3 Moderately likely Impact: 3 Intermediate	Preparedness on preventive/containment measures and consultation with key stakeholders.
9	Population affected by human rights violations and environmental degradation	Environmental	Likelihood: 3 Moderately likely Impact: 3 Intermediate	Proper training of all partners and contractors. The Project requested to provide asbestos report before/after the demolition of the building where the potential EOC site will be constructed in Ebeye to confirm there is no negative impact from the environmental degradation.
10	Ongoing COVID-19 pandemic creates huge risk on travel, trade and supply of goods and services which affects project implementation	Environmental	Likelihood: 5 Expected Impact: 4 Extensive	Please see the detailed analysis below.

Activities (to be) affected by the COVID-19

Activity	Challenges caused (will be caused)	Mitigation Actions
Chatty Beetles/Waverider (Activity 1.1 and 1.2)	• NWSO and UH are fully engaged to COVID19 response which caused further delay of implementation. • Procurement, delivery, and installation may be delayed further due to the limited supply-chain and travel restrictions.	• The 5th board meeting held in October 2020 requested NWSO to follow up with the UH to accelerate the process. • It was agreed that NWSO would finalize the agreement by March 2022 during the 8th board meeting held in December 2021. • The agreement between NWSO and UH was concluded in June 2022. • The first COVID-19 case was announced on 8 Aug 2022 in RMI. Travel restriction to some atolls was imposed which will cause delay in dispatching mission to install

		chatty beetles. The Project will closely monitor the situation.
Construction of EOCs in Majuro and Ebeye (Activity 2.1 and 2.2)	**A&E Design: [Resolved]** • During the evaluation stage, additional time was spent to make clarification and evaluate on the risk mitigation plan caused by travel restriction. • As the design company was not be able to travel to RMI, there will be a risk of compromising the quality. **Construction:** • We experienced less interest from potential companies to participate in the tender. 3 companies mentioned that they did not participate in the tender due to the current workload, shortage of manpower and the risk during the project execution. Based on this, a detailed local construction market analysis focusing on the COVID19 impact was conducted in cooperation with MoWIU. • There was a huge gap between the bid offers and the budget. Raw materials, shipping cost and labour cost have been increasing due to the COVID-19 pandemic. Additional process of value engineering was required which took more time and cost. • For example, timber/lumber cost was increased by 300%, and other construction materials were also increased by 30-40% in average. Unavailability and frequent shortage also caused extra price increases; for instance, RMI has recently experienced shortage of cement and prices has gone up sharply. Shipment cost and lead time has also increased by around 100% compared to pre-COVID. Mandatory procedure for cargo ships quarantine entering RMI also caused additional cost increase. Shortage of labor has also affected the construction cost. Labor cost has increased by average $2-3 per hour. Due to the small population, RMI is	• Considering the travel restriction imposed, the project implemented the design work remotely without having the missions by the consulting firm to be appointed in order to expedite the implementation. • MoWIU has provided local information to the design company. • The project conducted detailed market research to target local companies and adjust the evaluation criteria. • Conduct value engineering and reduction of scope of work to meet the budget. • Adjust the contract duration based on the market research conducted.

	relying on specialist and skilled workers abroad such as Philippines, Fiji and other Pacific countries. However, it is not possible to bring new manpower from abroad and the contractors are required to retain current labor by motivating them with extra bonuses and increased salaries. • In addition, bidders were not able to meet the required contract duration because of the shortage of manpower and longer lead time for shipment. • Construction was only possible for Ebeye EOC due to the increased of the cost after two tender processes. • Construction work may be delayed further due to the limited supply-chain and travel restrictions. **Supervision: [Resolved]** • Recruitment of an engineer (international) by MoWIU was delayed due to the travel restrictions.	• The cabinet of RMI endorsed as per CM/108-22 document to construct an EOC in Ebeye as this is the only option within the available budget and the Government was not able to share the cost to construct an EOC in Majuro. The project board in July 2022 further decided to proceed with construction of EOC building in Ebeye. • Monitor the construction progress clos • Supports provided by the existing staff of MoWIU and KADA. • An engineer was recruited in March 2022.
UNDP RMI team composition	• UNDP Country Project Coordinator left an organization due to the changing work environment and COVID-19 situation at home. • Recruitment of a new person was further delayed due to the changing situation of the COVID-19 and travel restrictions (both country of origin and transit).	• UNDP held a recruitment process of Country Project Coordinator due to the travel restrictions. Instead, the project engaged a consultant as home based. • Newly recruited UNDP engineer arrived RMI in August 2021.

Financial Reporting

	Funding Sources	2019 (USD)	2020 (USD)	2021 (USD)	2022 (USD)	2023* (USD)	Total (USD)
O1- Strengthened disaster communication and climate and Tsunami monitoring systems	GOJ	46,736	238,388	53,331	9,928	421,313	769,696
O2- Enhanced national and state disaster resoibders readiness capacity and better sourced to minimise loss of lives and	GOJ	90,878	315,753	333,618	132,266	2,130,984	3,003,499
O3- Program Management Unit	GOJ	387,301	306,733	209,660	41,283	95,464	1,040,439
	UNDP (TRAC 1)				73,903		73,903
	UNDP (TRAC 2)	0	0	7,167	20		7,186
Total Expenditure		**524,915**	**860,873**	**603,776**	**257,399**	**2,647,760**	**4,894,724**
- Funded by GOJ		524,915	860,873	596,609	183,477	2,647,760	4,813,634
- Funded by UNDP		0	0	7,167	73,923	0	81,089

* Tentative figure retrieved from Quantum on 22 Jan 2024