Part I: Project Information

GEF ID
10862

Project Type
FSP

Type of Trust Fund
GET

CBIT/NGI
CBIT **No**
NGI **No**

Project Title
Sustainable food systems and integrated land/seascape management in the Marshall Islands

Countries
Marshall Islands

Agency(ies)
FAO

Other Executing Partner(s)
Ministry of Natural Resources and Commerce

Executing Partner Type
Government

GEF Focal Area
Multi Focal Area

Sector
Mixed & Others

Taxonomy

Focal Areas, Land Degradation, Food Security, Land Degradation Neutrality, Carbon stocks above or below ground, Land Productivity, Land Cover and Land cover change, Sustainable Land Management, Ecosystem Approach, Sustainable Agriculture, Community-Based Natural Resource Management, Income Generating Activities, Climate Change Adaptation, Climate Change, Small Island Developing States, Climate resilience, Sea-level rise, Livelihoods, Ecosystem-based Adaptation, Biodiversity, Biomes, Mangroves, Wetlands, Coral Reefs, Mainstreaming, Fisheries, Agriculture and agrobiodiversity, Coastal and Marine Protected Areas, Protected Areas and Landscapes, Influencing models, Convene multi-stakeholder alliances, Strengthen institutional capacity and decision-making, Stakeholders, Communications, Strategic Communications, Behavior change, Awareness Raising, Education, Private Sector, Individuals/Entrepreneurs, Civil Society, Academia, Community Based Organization, Non-Governmental Organization, Indigenous Peoples, Beneficiaries, Type of Engagement, Consultation, Participation, Partnership, Information Dissemination, Gender Equality, Gender Mainstreaming, Women groups, Sex-disaggregated indicators, Gender-sensitive indicators, Gender results areas, Capacity Development, Knowledge Generation and Exchange, Participation and leadership, Capacity, Knowledge and Research, Knowledge Exchange, South-South, Learning, Indicators to measure change, Knowledge Generation, Workshop, Seminar

Rio Markers

Climate Change Mitigation

Significant Objective 1

Climate Change Adaptation

Significant Objective 1

Biodiversity

Principal Objective 2

Land Degradation

Principal Objective 2

Submission Date

9/13/2021

Expected Implementation Start

7/1/2023

Expected Completion Date

12/31/2027

Duration

54In Months

Agency Fee($)

199,587.00

A. FOCAL/NON-FOCAL AREA ELEMENTS

Objectives/Programs	Focal Area Outcomes	Trust Fund	GEF Amount($)	Co-Fin Amount($)
LD-1-1	Maintain or improve flow of agro-ecosystem services to sustain food production and livelihoods through Sustainable Land Management (SLM)	GET	1,365,595.00	4,447,593.00
BD-1-1	Mainstream biodiversity across sectors as well as landscapes and seascapes through biodiversity mainstreaming in priority sectors	GET	735,318.00	2,394,857.00
		Total Project Cost($)	**2,100,913.00**	**6,842,450.00**

B. Project description summary

Project Objective

To transform food systems and integrated land/seascape management in the Marshall Islands to deliver global environmental benefits and health benefits.

Project Component	Financing Type	Expected Outcomes	Expected Outputs	Trust Fund	GEF Project Financing($)	Confirmed Co-Financing($)

Project Component	Financing Type	Expected Outcomes	Expected Outputs	Trust Fund	GEF Project Financing($)	Confirmed Co-Financing($)
1. Favourable enabling conditions for integrated environmental and agri-food system management	Technical Assistance	1.1 Considerations of integrated environmental and agri-food system management are mainstreamed into policies, strategies and planning in the RMI *Indicators:* ? Extent of mainstreaming integration of food systems and landscape/seascape management of biodiversity and ecosystems in sector policies, strategies and planning, through integration of ?land degradation neutrality? and ?food systems? in, but not limited to: i. UNCCD National	1.1.1: National Food Systems Pathway (NFSP) - Transforming the Marshall Islands Food System by 2030: Implementation Framework *Indicators:* ? National Food Systems Pathway approved by Cabinet ? Implementation Framework for the National Food Systems Pathway approved by Government 1.1.2: Atolls Food Systems Pathway Integrated Action Plans (AFSP IAP) *Indicator:* ? Number of atolls with Atolls Food System Pathway - Integrated Action Plans (AFSP-IAP) developed and endorsed by their Local Governments. 1.1.3: Multi-sector Working Group and Inter-ministerial Collaboration Toolkit for Food Systems Pathway & Integrated Landscape/ Seascape Management *Indicators:* ? Inter-Ministerial Collaboration Toolkit for the Multi-sector Working Group ? Multi-sector Working Group for Food Systems	GET	144,025.00	35,250.00

Project Component	Financing Type	Expected Outcomes	Expected Outputs	Trust Fund	GEF Project Financing($)	Confirmed Co-Financing($)
		Action Plan (NAP) ii. 5-year review of the ASP, and iii. next review of the NBSAP. ? Land Degradation Neutrality (LDN) Strategy developed with locally-relevant LDN indicators and targets as related to food systems and value-chain. *Targets:* ? The new UNCCD NAP incorporates LDN locally-relevant indicators for SDG 15.3 related to food systems and landscape/seascape approaches. ? The 5-year review of the ASP feature concepts of,	Pathway & Integrated Landscape/Seascape Management established and number of meetings held. 1.1.4: : Review and update of sector policies, strategies/action plans, and regulatory framework to ensure coherence with the NFSP *Indicators:* ? Updated UNCCD NAP aligned with the new Convention Strategic Framework feature concepts of LDN and food systems. 1.1.5: Land Degradation Neutrality (LDN) Strategy and Target Setting Program to support planning and decision making as related to the Food Systems Pathway. *Indicators:* ? Land Degradation Neutrality (LDN) Strategy developed with locally-relevant LDN indicators[1] and targets as related to food systems and value-chain. [1] In the 3 LDN categories of, and related metrics for; Land Productivity, Land			

Project Component	Financing Type	Expected Outcomes	Expected Outputs	Trust Fund	GEF Project Financing($)	Confirmed Co-Financing($)
		and actions identified to ensure, land degradation neutrality and mainstreaming of biodiversity and ecosystems through SLM practices ? Review of the NBSAP include at least one paragraph on integration of ?food system? and ?landscape/seascape approaches? ? to support conservation of BD & ES in food production systems and ensure delivery of global environmental benefits.	Cover, Soil Organic Carbon Stock.			

Project Component	Financing Type	Expected Outcomes	Expected Outputs	Trust Fund	GEF Project Financing($)	Confirmed Co-Financing($)
1. Favourable enabling conditions for integrated environmental and agri-food system management	Technical Assistance	1.2 Capacities and instruments for environmental policies, spatial planning and decision-making, in support of the integrated environmental and agri-food system management, are enhanced *Indicators:* ? Percentage increase in kilograms/amount of locally produced foods in each Atoll, in the context of their AFSP-IAPs. A functional knowledge recording and reporting system in place as a living national census for each Atoll, populated with food production	1.2.1: Atoll Food System Officer (AFSO) Program for food system natural resource base and local knowledge data recording and reporting to inform planning and decision-making *Indicators:* ? Number of Atoll Food System Officers trained and deployed to the 6 Atolls (disaggregated by gender) 1.2.2: Toolkits and training program for the enhancement of human capacities in landscape/seascape approaches and SLM practices for implementation of the National Food System Pathway and Atoll-specific Food System Pathway Action Plans *Indicators:* ? Number of new Manuals and Toolkits developed to support SLM and ecosystem restorative practices for integration of food systems and land/seascape natural resources management, made available as digital products and accessible through digital platforms. ? Number of trainers trained, number of people	GET	338,450.00	82,250.00

Project Component	Financing Type	Expected Outcomes	Expected Outputs	Trust Fund	GEF Project Financing($)	Confirmed Co-Financing($)
		and consumption-related datasets, traditional ecological knowledge and agro-ecosystem datasets relevant to locally-relevant LDN indicators *Targets:* ? Methodology on data collection institutionalized and shows 10% increase in locally produced food from baseline. ? Knowledge recording and reporting system in place linked to the LDN indicators database.	trained (disaggregated by gender, age group) and Number of Training and Farmer Field School events carried out across the 6 Atolls 1.2.3: Project Designs for Incentives for Ecosystem Services (IES) as enabling policy framework and coordination of policy instruments for strategic planning towards protection of BD and ES in Blue and Green Food Systems *Indicators:* ? Number of Incentives for Ecosystem Services Schemes project designs approved. 1.2.4: Ecosystems restorative measures to reverse loss of ES from coastal land-based contaminants affecting Food Safety *Indicators:* ? Number of sites with soil, and/or plants, and/or fish and/or runoff water tested and analysed for contamination by a reputable laboratory and recommended ecosystem restorative measures identified for inclusion in AFSP_IAPs.			

Project Component	Financing Type	Expected Outcomes	Expected Outputs	Trust Fund	GEF Project Financing($)	Confirmed Co-Financing($)
2. Enhanced sustainable food production systems in sustainably managed land/seascapes Targets: 225 ha under SLM in production systems 200 ha under improved management to benefit biodiversity 3,500 ha of marine habitat with reduced threats 5,000 farmers, fishers and other local community members have access to sustainable options (50% women, 25% youth)	Investment	2.1 Institutional and local stakeholders (including farmers, fishers and other local community members) have access to feasible and attractive options for resource management and restoration and food production that contribute to land degradation neutrality, and ecosystem conditions and services *Indicators:* ? Total areas (terrestrial and in-shore) where ecosystem restorative measures have been implemented for positive impacts on food systems, including, but not limited to:	2.1.1: Demonstration models for sustainable ?Blue? food production and consumption pathways, featuring landscape concepts, seascape management, aquaculture, sustainable harvesting of in-shore species, nature-based solutions and circular economy solutions. *Indicators:* Number of sites with soil, and/or plants, and/or fish and/or runoff water tested and analysed for contamination by a reputable laboratory and results disseminated to communities to whom those sites belong. 2.1.2: Demonstration models for sustainable ?Green? food production, featuring landscape concepts, landscape resources management, sustainable land management, integrated farming systems, nature-based solutions and circular economy solutions *Indicators:* ? Percentage increase in land area utilized for food production in terms of agriculture and agro-forestry systems ? Number of households with a piggery waste management technology	GET	769,731.00	5,321,000.00

Project Component	Financing Type	Expected Outcomes	Expected Outputs	Trust Fund	GEF Project Financing($)	Confirmed Co-Financing($)
100 ha of degraded agricultural land restored 50 ha of forest and forest land restored 34,808 tCO2 eq sequestered through improved farming practices and ecosystem restoration		coral gardens; tree plantings for coastal erosion and coastal reinforcement; and replacements of senile coconuts in agro-forestry systems *Targets:* ? At least 0.02% or 97.4ha of total 6 Atolls area covered in ecosystem restorative measures.	(biodigester, dry litter) producing biogas and organic fertiliser, contributing to greenhouse gas mitigation and reduction in nutrients load of effluent wastewater ? Number of Home Gardens of various systems established at homes, schools and by Women Groups, such as: on the ground gardens, raised-bed systems (standard, wicking, keyhole), or aquaponics. ? Number of (non-invasive) introduced exotic plants varieties and number of seedlings produced and distributed for food production. ? Number of varieties of plants, trees and crops of high cultural and medicinal values and those that are becoming rare, to be propagated and seedlings produced and distributed to communities. 2.1.3: Reviving traditional nature-based food production systems and share of food consumption from local production *Indicators:* ? Number of varieties of plants, trees and crops of high cultural and medicinal values and those that are becoming rare, to be propagated and seedlings			

Project Component	Financing Type	Expected Outcomes	Expected Outputs	Trust Fund	GEF Project Financing($)	Confirmed Co-Financing($)
			produced and distributed to communities. ? Number of demonstrations and training events on traditional food preservation techniques provided by community Elders targeting youth and schools.			

Project Component	Financing Type	Expected Outcomes	Expected Outputs	Trust Fund	GEF Project Financing($)	Confirmed Co-Financing($)
3. Favourable value-chain conditions for sustainably-produced and nutritious food	Investment	3.1 Value-chain/market conditions in the RMI favour sustainably produced and nutritious food. *Indicators:* ? Types of food import substitutions products produced and developed from local production and available in local markets. *Targets:* ? At least four (4) types of food import substitution products developed, such as breadfruit flour, preserved foods, snacks, etc.	3.1.1: Value-chain Analysis and Strategy that promote SLM to ensure no new land degradation and losses in BD&ES and implement restorative measures for supporting markets and value-chains for sustainably-produced and nutritious GREEN food *Indicators:* ? Number of Value-chain analyses and Value-chain Strategies conducted for example for, but not limited to: - handicrafts such as woven flowers by Wotje women - breadfruit flour - papaya jam - coconut virgin oil - pandanus products 3.1.2: Value-chain Analysis and Strategy that ensure no new losses in biodiversity and ecosystem services and implement restorative measures for supporting markets and value-chains for sustainably-produced and nutritious BLUE food *Indicators:* ? Number of Value-chain analyses and Value-chain Strategies conducted for	GET	435,825.00	335,500.00

Project Component	Financing Type	Expected Outcomes	Expected Outputs	Trust Fund	GEF Project Financing($)	Confirmed Co-Financing($)
			example for, but not limited to, the following Blue foods: - seaweed - fish - giant clams - aquaculture products 3.1.3: Establish and strengthen, including training (both formal and informal), value-chains for local produce and local food products markets, including import substitutes *Indicators:* Number of training events and number of people trained (disaggregated by gender, age group) on food processing and packaging and labelling of food products for markets.			

Project Component	Financing Type	Expected Outcomes	Expected Outputs	Trust Fund	GEF Project Financing($)	Confirmed Co-Financing($)
4. Knowledge management	Technical Assistance	4.1 Knowledge on options for integrated environmental and food system management is effectively managed to permit scaling elsewhere in the country, and in other atoll states and elsewhere (particularly SIDS) *Indicators:* ? Number of documented case studies in how implementation of Atoll Food Systems Pathway Integrated Action Plans, aligned with Local Resources Management Plans under the Reimaanlok Conservation Framework to meet the Micronesia Challenge, impact	4.1.1: Knowledge management system supporting sustainability, replication and scaling out of results. *Indicators:* ? A Communications Strategy and online Knowledge Management Platform ? A Project M&E Strategy developed and implemented. 4.1.2: Programme for outreach to other Pacific SIDS (on e.g. LDN, integrated landscape management, reconciling environmental and dietary considerations) *Indicators:* Number of times the case studies from the project are presented in regional and international fora such as those organized by the Local2030 Islands Network and Global Islands Partnership (GLISPA) events in international meetings.	GET	193,632.00	550,000.00

Project Component	Financing Type	Expected Outcomes	Expected Outputs	Trust Fund	GEF Project Financing($)	Confirmed Co-Financing($)
		positively on food systems *Targets:* ? At least six (6) case studies documented				
Monitoring & Evaluation	Technical Assistance	Project monitoring & evaluation	Project monitoring & evaluation is conducted regularly	GET	119,550.00	125,200.00
				Sub Total ($)	**2,001,213.00**	**6,449,200.00**

Project Management Cost (PMC)

	GET	99,700.00	393,250.00
Sub Total($)		**99,700.00**	**393,250.00**
Total Project Cost($)		**2,100,913.00**	**6,842,450.00**

Please provide justification

C. Sources of Co-financing for the Project by name and by type

Sources of Co-financing	Name of Co-financier	Type of Co-financing	Investment Mobilized	Amount($)
Recipient Country Government	Ministry of Natural Resources and Commerce	In-kind	Recurrent expenditures	207,200.00
Recipient Country Government	Ministry of Natural Resources and Commerce	Public Investment	Investment mobilized	215,000.00
Recipient Country Government	Ministry of Natural Resources and Commerce	Grant	Investment mobilized	1,900,000.00
Recipient Country Government	Marshall Islands Marine resources Authority	In-kind	Recurrent expenditures	1,940,000.00
Recipient Country Government	Ministry of Environment Climate Change Directorate	In-kind	Recurrent expenditures	40,000.00
Recipient Country Government	Ministry of Finance	In-kind	Recurrent expenditures	17,250.00
Recipient Country Government	Ministry of Culture and Internal Affairs	In-kind	Recurrent expenditures	23,000.00
Recipient Country Government	Ministry of Environment Climate Change Directorate	Grant	Investment mobilized	2,500,000.00
			Total Co-Financing($)	**6,842,450.00**

Describe how any "Investment Mobilized" was identified

- Investment has been mobilized from different ministries of the Marshall Island governments during the project preparation phase. These grants and investments are aligned with ongoing and future related initiatives of the government. - The investment mobilized co-financing from Green Climate Fund refers to GCF projects FP066 and FP112, with an estimated co-financing of USD 1.5 million and USD 1.0 million respectively, based on their respective GCF budget allocations and degree of temporal overlap with the proposed project.

D. Trust Fund Resources Requested by Agency(ies), Country(ies), Focal Area and the Programming of Funds

Agency	Trust Fund	Country	Focal Area	Programming of Funds	Amount($)	Fee($)	Total($)
FAO	GET	Marshall Islands	Land Degradation	LD STAR Allocation	1,365,595	129,732	1,495,327.00
FAO	GET	Marshall Islands	Biodiversity	BD STAR Allocation	735,318	69,855	805,173.00
			Total Grant Resources($)		**2,100,913.00**	**199,587.00**	**2,300,500.00**

E. Non Grant Instrument

NON-GRANT INSTRUMENT at CEO Endorsement

Includes Non grant instruments? **No**

Includes reflow to GEF? **No**

F. Project Preparation Grant (PPG)

PPG Required **true**

PPG Amount ($)

100,000

PPG Agency Fee ($)

9,500

Agency	Trust Fund	Country	Focal Area	Programming of Funds	Amount($)	Fee($)	Total($)
FAO	GET	Marshall Islands	Land Degradation	LD STAR Allocation	65,000	6,175	**71,175.00**
FAO	GET	Marshall Islands	Biodiversity	BD STAR Allocation	35,000	3,325	**38,325.00**
				Total Project Costs($)	**100,000.00**	**9,500.00**	**109,500.00**

Core Indicators

Indicator 3 Area of land and ecosystems under restoration

Ha (Expected at PIF)	Ha (Expected at CEO Endorsement)	Ha (Achieved at MTR)	Ha (Achieved at TE)
150.00	150.00	0.00	0.00

Indicator 3.1 Area of degraded agricultural lands under restoration

Disaggregation Type	Ha (Expected at PIF)	Ha (Expected at CEO Endorsement)	Ha (Achieved at MTR)	Ha (Achieved at TE)
Cropland	100.00	100.00		

Indicator 3.2 Area of forest and forest land under restoration

Ha (Expected at PIF)	Ha (Expected at CEO Endorsement)	Ha (Achieved at MTR)	Ha (Achieved at TE)
50.00	50.00		

Indicator 3.3 Area of natural grass and woodland under restoration

Disaggregation Type	Ha (Expected at PIF)	Ha (Expected at CEO Endorsement)	Ha (Achieved at MTR)	Ha (Achieved at TE)

Indicator 3.4 Area of wetlands (including estuaries, mangroves) under restoration

Ha (Expected at PIF)	Ha (Expected at CEO Endorsement)	Ha (Achieved at MTR)	Ha (Achieved at TE)

Indicator 4 Area of landscapes under improved practices (hectares; excluding protected areas)

Ha (Expected at PIF)	Ha (Expected at CEO Endorsement)	Ha (Achieved at MTR)	Ha (Achieved at TE)
425.00	225.00	0.00	0.00

Indicator 4.1 Area of landscapes under improved management to benefit biodiversity (hectares, qualitative assessment, non-certified)

Ha (Expected at PIF)	Ha (Expected at CEO Endorsement)	Ha (Achieved at MTR)	Ha (Achieved at TE)
200.00			

Indicator 4.2 Area of landscapes under third-party certification incorporating biodiversity considerations

Ha (Expected at PIF)	Ha (Expected at CEO Endorsement)	Ha (Achieved at MTR)	Ha (Achieved at TE)

Type/Name of Third Party Certification

Indicator 4.3 Area of landscapes under sustainable land management in production systems

Ha (Expected at PIF)	Ha (Expected at CEO Endorsement)	Ha (Achieved at MTR)	Ha (Achieved at TE)
225.00	225.00		

Indicator 4.4 Area of High Conservation Value or other forest loss avoided

Disaggregation Type	Ha (Expected at PIF)	Ha (Expected at CEO Endorsement)	Ha (Achieved at MTR)	Ha (Achieved at TE)

Indicator 4.5 Terrestrial OECMs supported

Name of the OECMs	WDPA-ID	Total Ha (Expected at PIF)	Total Ha (Expected at CEO Endorsement)	Total Ha (Achieved at MTR)	Total Ha (Achieved at TE)

Documents (Please upload document(s) that justifies the HCVF)

Title	Submitted

Indicator 5 Area of marine habitat under improved practices to benefit biodiversity (excluding protected areas)

Ha (Expected at PIF)	Ha (Expected at CEO Endorsement)	Ha (Achieved at MTR)	Ha (Achieved at TE)
	3,500.00		

Indicator 5.1 Fisheries under third-party certification incorporating biodiversity considerations

Number (Expected at PIF)	Number (Expected at CEO Endorsement)	Number (Achieved at MTR)	Number (Achieved at TE)

Type/name of the third-party certification

Indicator 5.2 Large Marine Ecosystems with reduced pollution and hypoxia

Number (Expected at PIF)	Number (Expected at CEO Endorsement)	Number (achieved at MTR)	Number (achieved at TE)
0	0	0	0

LME at PIF	LME at CEO Endorsement	LME at MTR	LME at TE

Indicator 5.3 Marine OECMs supported

Name of the OECMs	WDPA-ID	Total Ha (Expected at PIF)	Total Ha (Expected at CEO Endorsement)	Total Ha (Achieved at MTR)	Total Ha (Achieved at TE)

Indicator 6 Greenhouse Gas Emissions Mitigated

Total Target Benefit	(At PIF)	(At CEO Endorsement)	(Achieved at MTR)	(Achieved at TE)
Expected metric tons of CO?e (direct)	41777	24863	0	0
Expected metric tons of CO?e (indirect)	0	9945	0	0

Indicator 6.1 Carbon Sequestered or Emissions Avoided in the AFOLU (Agriculture, Forestry and Other Land Use) sector

Total Target Benefit	(At PIF)	(At CEO Endorsement)	(Achieved at MTR)	(Achieved at TE)
Expected metric tons of CO?e (direct)	41,777	24,863		
Expected metric tons of CO?e (indirect)		9,945		
Anticipated start year of accounting	2026	2026		
Duration of accounting	20	20		

Indicator 6.2 Emissions Avoided Outside AFOLU (Agriculture, Forestry and Other Land Use) Sector

Total Target Benefit	(At PIF)	(At CEO Endorsement)	(Achieved at MTR)	(Achieved at TE)
Expected metric tons of CO?e (direct)				
Expected metric tons of CO?e (indirect)				
Anticipated start year of accounting				
Duration of accounting				

Indicator 6.3 Energy Saved (Use this sub-indicator in addition to the sub-indicator 6.2 if applicable)

Total Target Benefit	Energy (MJ) (At PIF)	Energy (MJ) (At CEO Endorsement)	Energy (MJ) (Achieved at MTR)	Energy (MJ) (Achieved at TE)
Target Energy Saved (MJ)				

Indicator 6.4 Increase in Installed Renewable Energy Capacity per Technology (Use this sub-indicator in addition to the sub-indicator 6.2 if applicable)

Technology	Capacity (MW) (Expected at PIF)	Capacity (MW) (Expected at CEO Endorsement)	Capacity (MW) (Achieved at MTR)	Capacity (MW) (Achieved at TE)

Indicator 11 People benefiting from GEF-financed investments

	Number (Expected at PIF)	Number (Expected at CEO Endorsement)	Number (Achieved at MTR)	Number (Achieved at TE)
Female	2,500	2,500		
Male	2,500	2,500		
Total	5000	5000	0	0

Provide additional explanation on targets, other methodologies used, and other focal area specifics (i.e., Aichi targets in BD) including justification where core indicator targets are not provided

The Sub-Indicator targets are as follows: 1. 3.1: Area of agricultural land restored: 100 ha 2. 3.2: Area of forest and forest land restored: 50 ha 3. 4.1: Area of landscapes under improved management to benefit biodiversity: 200 ha 4. 4.3: Area of landscapes under sustainable land management in production systems: 225 ha 5. 5: Area of marine habitat under improved management/with reduced threats: 3,500 ha. On CI 2- The GEF R2R Project and the Reimaanlok Framework, which RMI is a part of, includes the establishment of Marine Protected Areas. The GEF 7 project will provide the tools for strengthening HR capacity for

management and enforcement of MPAs, through digital spatial planning at the Atolls level. CI 5 targets were estimated based on the approximate marine area in the six target Atolls that will benefit from reduced livestock effluent runoff, habitat rehabilitation, banning dredging and improved fisheries practices. This may include existing marine protected areas (MPAs) as part of the seascapes/ landscapes that the project will operate in. Details will be established through more detailed consultations during implementation. Site-specific environmental and social impact assessments and METT scorecards will be prepared for any MPAs that will be selected as part of the project sites. The area of OECMs (Marine and terrestrial) to be supported will be finalised during the stakeholder consultation. Core Indicator 4 targets were estimated based on the area both of the terrestrial part of the locality and the adjoining area of lagoon and oceanic shelf of the six target Atolls that will benefit from project interventions, in accordance with the integrated atoll management vision of the project which considers atolls as ?integrated land/seascapes? with biophysical and livelihood connectivity spanning their constituent parts. Indicators 3.1 and 4.3 include a total of around 325 ha of agricultural land, which is around 16% of the total area of arable land in the country. It is estimated that through scaling, the models of sustainable land management to be promoted through the project will eventually be applied over 60-80% of the country?s arable land, through co-financing by Government of RMI and associated projects. The site level interventions reflected in the 225 ha target for sub-Indicator 4.3 (Area of landscapes under sustainable land management in production systems) will involve an estimated 500-1,000 farm families farming approximately 0.5-1.0 ha per family. The overall total of 5,000 beneficiaries given under Core Indicator 11 refers to the total number of members of these farm families (with an estimated 50% women, at least 25% youth). The 150 ha target under Core Indicators 3.1 and 3.2, and the 200 ha target under Core Indicator 4.1 will contribute to Aichi Biodiversity targets 6, 7, 8, 10, 13, 14, 15 and 18 (please see Section 6 for detailed explanation). A revised EX-ACT calculation was prepared for Core Indicator 6. Total GHG mitigated is estimated at 34,808 tons CO2e (24,863 tons direct and 9,945 tons indirect).

Part II. Project Justification

1a. Project Description

1.a Project Description

1. The global environmental and/or adaptation problems, root causes and barriers that need to be addressed (systems description).

Context

The Republic of the Marshall Islands (RMI) is comprised of thirty-four (34) island groups, of which twenty-nine (29) are coral atolls and five (5) low elevation islands located in the north-central Pacific Ocean. Twenty-two (22) of the atolls and four (4) of the low elevation islands are inhabited. The total land area of the RMI is just under 181 km2 and while recognised as a Small Island Developing State (SIDS), it is by any reckoning a Large Ocean State, with an Extended Economic Zone (EEZ) that covers 2.1 million km2 of the Pacific Ocean. The islands are scattered in an archipelago consisting of two almost parallel groups, the eastern ?Ratak? (sunrise) chain and the western ?Ralik? (sunset) chain. The islands extend about 700 miles (1130 km) west to east, from 4?34?W to 14?43?E, and about 800 miles (1230 km) north to south, from 160?48?N to 172?10?S. The RMI also claimed the Wake Islands (Enenkeo) to the north, currently an American possession.

Isolated by ocean, the RMI is more than 2,000 miles (3230 km) from the nearest trading centres, Honolulu and Tokyo. Geographically, its nearest neighbours are Kiribati to the south and the Federated States of Micronesia (FSM) to the west.

The terrestrial topography is uniformly low and flat and the mean height above sea level is about 2 meters. It has very limited land-based natural resources, including nutrient-poor soils due to the young geological age of the Atolls and with scarcity of water resources makes RMI?s agricultural ecosystem one of the most challenging for crop and livestock production with limited options to increase production. Around the edges of the typical islet there is generally a small tidal ridge, most pronounced on the ocean side. On the lagoon side, this ridge is generally composed of sand and fine gravel deposits, while on the seaward side it is more commonly made up of coral limestone reef surface, overlain by cobbles.

Population:

The census of the Marshall Islands conducted on 5 April 2011 enumerated a total population of 53,158, of whom 27,243 were males and 25,915 females (up from 50,840 people in 1999 and 43,380 in 1988). Fertility rates have declined significantly in recent decades from 8.7 children per woman in 1964 to 4.1 in 2011. Whilst the overall population growth rate has declined during the period 1999-2011 to 0.4 percent per annum, urbanization due to migration from rural areas, especially the main urban centers of Majuro and Ebeye, has resulted in intense population densities and

overcrowding: the Marshall Islands is now one of the most urbanized countries in the Pacific with almost 74% of the population living either on Majuro or Ebeye[1], which are home to around 70% of the country?s population.

The high rate of population growth in the Republic has resulted in an increasingly high ratio of dependency: the median age of the national population is 20.6 years and 40% of the population is under the age of 15 years[2]. The needs of this extremely young population can be expected to strain progressively both private and public sector resources, particularly within the healthcare and education segments.

Until the signing of the Compact of Free Association (CFA) with the United States of America, almost all migration in the RMI was internal. International migration was confined to those moving to the USA for tertiary education and most of these graduates subsequently returned to the RMI, although this is now less true. The signing of the CFA gives all Micronesian citizens unrestricted access to the USA.

Gender:

Women are recognized for having a primary role in providing food, water, sanitation, and health care in their communities. Most women living in rural areas work on their household duties and sometimes engage in agriculture and/or fishery activities as supports for their male family members or for their self-consumption. They are not likely to engage in the commercial activities on their own in the sectors. However, the production of handicrafts is one of the popular activities for them and helps to generate incomes for their livelihoods by selling their products to Majuro and Ebeye. Usually men engage in commercial fisheries and women engage in fisheries activities in smaller-scale for self-consumption[3].

In 2011, only 28% of women were in paid employment, against 51% of men: unpaid household, community and family care work ? work typically done by women ? are not considered employment, or counted in the GDP. Gender gaps in employment persist across age groups in both urban and rural areas, and in 2017 there was a 10% gender pay gap overall. Although women have a key role in agricultural activities, they have limited access to and control of resources[4], and they make up only 10% of those in paid employment in the agriculture sector (against 16% in industry and 39% in the service sector).

More girls than boys attend higher levels of education, with a gender parity index of 0.99 at primary, 1.07 at secondary and 1.04 at tertiary level: this is leading to a progressive closing of the gender gap in relation to school completion. Literacy rates are higher among women and girls[5].

The land ownership inheritance system in the RMI is based on the indigenous matrilineal system. In the system, all persons born to a woman may inherit the right to cultivate and use land owned by their maternal lineages. This system is still working in the RMI and some communities have female chiefs because she is entitled to control her family?s inheritance system.

Climate:

The tropical ? hot and humid tropical climate of the Marshall Islands is heavily influenced by the north-east trade wind belt but tempered during the summer months (May through November) by the movement of the Intertropical Convergence Zone (ITCZ) across the area[6]. Temperatures are much the same throughout the country. The monthly climatology mean-temperature from 1991-2020 shows very little fluctuation throughout the year, ranging from the lowest mean of 27.60ºC in January to 28.10ºC in September[7]. Due to the long distance from north to south, rainfall varies greatly

throughout the Marshall Islands. The southern atolls, including Majuro, where long-term weather data exists have high rainfalls that average between 3,000 to 4,300 mm whereas the northern atolls receive 1,000 to 1750 mm. The northernmost atolls (Wake, Taongi and Bikar) are drier, support limited flora and fauna and have not been occupied in recent times. There are seasonal variations between the dry months of December to April, with February having an average rainfall of 158 mm, and the wet months of April to November, with October having an average rainfall of 390 mm. Droughts are relatively infrequent, other than in 1982-83 period when drought occurred in many parts of Micronesia, in association with a major shift in the El Nino-Southern Oscillation (ENSO), in early 1970[8], as well as in April 2016[9]. Major storms do not often impact the Marshall Islands, but typhoons and hurricanes frequently originate in the area, gathering strength as they move away from the equator. There were no typhoons since one in 1918 and until typhoons Zelda and Axel in 1992. In July 2015, typhoon Nangka which originated as a tropical disturbance over the Marshall Islands before embarking on its long-living journey west of the international dateline, brought strong winds that took out power in half of the capital of Majuro and several boats were sunk.

Climate change:

The RMI is amongst the world's most vulnerable countries to climate change. The long-term projections are by 2090[10]: average annual temperature to increase between 0.8?C (RCP2.6) and 3.1?C (RCP8.5); average annual rainfall to increase between 3% (RCP2.6) and 8% in Majuro and 14% in Kwajalein (RCP8.5). Current extreme rainfall events will become more frequent by 2090, between 12.5% chance to occur in any one year (RCP2.6) and 16.7% chance to occur in any one year in Majuro and 20% in Kwajalein (RCP8.5). Increase in seawater temperature and ocean acidification are also expected. The main projected future climate change impact for RMI is sea level rise because of the low elevation of its atolls and islands. Extreme sea level events are projected to become more frequent. Under the low emission scenario (RCP2.6), sea level is expected to increase by 0.41m by 2090 and by 0.65m under the high emission scenario (RCP8.5). By 2030, under a high emissions scenario, this rise in sea level is projected to be in the range of 3-16 cm. The sea-level rise combined with natural year-to-year changes will increase the impact of storm surges and coastal flooding.

The above long term projections are potentially devastating to the low-elevation atolls of the RMI. The atolls, with their characteristic beach berms and depressed interiors, are sensitive to the frequency of surges overtopping those shoreline barriers. Increased frequency of overtopping events, exceeding required recovery times, will alter terrestrial ecosystems and agroforests, and will leave islands uninhabitable well before sea level rise permanently inundates the island.[11]

Added to the challenges is regional information about climate change effects over a planning horizon measured in decades is critical to planning for adaptation strategies, but is still not precise. Rainfall, drought and sea level are strongly affected by ENSO (El Nino Southern Oscillation) processes, but climate models do not agree on how ENSO patterns will change with continued global warming. There have been several strong ENSO cycles in recent decades, so measured changes in rainfall and sea level rise in recent decades cannot necessarily be projected into the future[12].

Soils:

The RMI consists entirely of atolls and raised coralline islands and the very young geological age of these atolls is one of the general factors in the substrates and soils being very poor. As in all atolls, the young geological age of sand deposits being established on reef platforms means very minimal

soil development. Soils consist mainly of poor and overlying coral sand. What soil does exist in RMI is shallow, alkaline, coarse-textured, and lacks most nutrients required for plant growth, such as organic carbon, nitrogen, potassium, iron, and magnesium. The water holding capacity of these soils is very low, with plant nutrition dependent on the humus cycle and the retention of vegetation cover.

With few exceptions, the nutrient-poor soils is one of the main hurdles to large scale agricultural development. Moreover, salt spray resulting from turbulence at the windward reef margin is continually carried by winds across the islands. This, in combination with high evaporation rates fostered by abundant solar radiation and high average wind speeds, results in high surface salinity which further impedes the growth of plant life. Managing soil organic matter is fundamental to cropping systems in atoll soils, with vegetation density and distance from the shoreline being key factors determining their organic matter content[13].

Freshwater & Wastewater:

For the RMI as a whole, the supply of natural freshwater is severely limited. The primary source of freshwater is rain which (due to the low elevation of the atolls and islands) soaks directly into the soil and disperses into saltwater which permeates atoll subsoils. In some favourable locations some of the freshwater may accumulate in a Ghyben-Herzberg lens which floats on the saltwater below and can be accessed with wells

Sources of water in the urban centres include rainwater, groundwater, desalination and importation. In the rural atolls and islands, primary water resources are rainwater and groundwater. For the most part, fresh water resources are limited to sub-surface, Ghyben-Herzberg lenses, generally located on larger islets. Such lenses consist of fresh water ?floating? on a denser seawater layer just below the surface. Regularly replenished by rainfall, these lenses can usually be accessed by digging down one to eight feet. The water is often ?hard? or ?limey?, but it is not brackish. As these lenses are not uniformly present, most of the inhabited islands rely heavily on rainwater catchment and storage systems to help meet fresh water needs[14].

A recent assessment by the Marshall Islands Environmental Protection Authority (MIEPA) found 9 out of 10 ocean and lagoon locations in Majuro were badly polluted, often with disease-causing bacteria associated with human and animal waste[15].

Land and forest cover:

RMI has about 70% total forest cover, which includes native forest, agro-forest, and coconut plantations. Fourteen percent of land cover area is listed as barren lands, which includes coastal areas and sand spits. About twelve percent of the landscape is urban land including roads and infrastructure, mostly on Kwajalein and Majuro, and about four percent is non-forest vegetation including rangeland and agricultural lands.

Forest cover is considered to be stable, with little change in the last 25 years, but data availability and confidence are low and the stable trend is likely to change as drivers such as climate change and population growth start to make inroads towards intact forest areas. Existing information on forest condition indicates that about 37% of sampled trees have some form of damage. Land cover mapping has only been carried out on the 10 larger atolls which make up 74% (13,403 hectares) of the land area.

The changes of forest cover on the main urban atolls greatly reduce the habitat and key species of importance. Increased urbanisation has major negative impacts on ground water and forest biodiversity. The loss of forest cover and native tree species has major implications for native fauna. Coastal strand/forest vegetation plays an important role in reducing salt damage to crops and other forest vegetation ? the loss of this buffer has adverse consequences.

Biodiversity:

The entirety of the Marshall Islands lies in the central-western part of the Conservation International Polynesia/Micronesia Hotspot, and the northern Marshall Islands form the Key Biodiversity Area, Kabin Meto. Nine unique mangrove forests are located on the islands within Jaluit Atoll. The largest of the mangrove forests, estimated to be approximately 4 kilometers long and 0.5 kilometers wide at its widest point, is located on Jaluit island, Jaluit Atoll. Three species of mangroves (*Brugiera* sp., *Rhizophora* sp., and *Sonneritia* sp.) have been identified in this area although it is possible other species are also present[16].[17]. Although most of the terrestrial fauna such as reptiles and arthropods are poorly documented, species such as the coconut crabs are a popular delicacy and as a result are a threatened species on the inhabited atolls.[18] Seventy bird species (mainly seabirds and migratory birds) are reported to be found in the RMI. Of the 31 species of seabirds found, 15 are reported to breed in the islands.

The RMI threatened species list, which includes the vulnerable, endangered and critically endangered, is dominated by marine species. The IUCN Red List has only assessed 1,130 or 19% of the 5,821 species found in RMI. The IUCN has identified 101 species that are vulnerable to extinction. The IUCN Red List lists one Critically Endangered species in the country (the Oceanic white-tip shark *Carcharhinus longimanus*), 7 Endangered species (of which one, Boettger's emo skink, Emoia boettgeri, is terrestrial and limited to Eastern Micronesia) and 48 Vulnerable species. RMI has identified an additional 61 species that are a high priority for conservation. Only 18 species overlap with the IUCN Red List, meaning that RMI must expand its assessment of the 5,821 species list and prioritise its conservation efforts.[19]

RMI has some of the healthiest and robust coral reefs globally with high species diversity with more than 1,000 fishes, 360 corals, 2,500 invertebrates, 5 sea turtles and 27 marine mammals. Marine flora include over 230 species of green, brown, red and blue-green algae. There are also limited stands of seagrasses. Many of these have a potential for commercial use but are increasingly being affected by pollution in lagoons. The main marine fauna include a diverse range of 360 coral species mentioned above. In Majuro, 146 species of stony corals from 50 genera have been recorded. Other fauna include species such as sea cucumber, oysters, mussels, and crabs, providing a source of food for the Marshallese.[20] All 5 of the world?s species of marine turtles occur in the Marshall Islands and two species, the green turtle and the hawksbill turtle, nest in the islands.[21]

The over 1000 species of fishes mentioned above comprise of more than 860 in-shore, or reef fish[22]. The deep-sea fisheries also provide a valuable resource with species such as skipjack, yellowfin and bigeye tuna. In the more populated atolls, overfishing and the use of new fishing methods has placed increasing pressure on lagoon and reef fishes, leading to a marked decline in subsistence harvests. Marine mammals including whales, dolphins, and porpoises are found in RMI waters, but insufficient information is available on their status.[23]

Nuclear fallout:

A very unique threat to RMI?s biodiversity is the fallout from nuclear testing.[24] From 1946 to 1958, the U.S. conducted 67 nuclear tests in, above, and around Bikini and Enewetak Atolls in the Northern part of the country. This changed the landscape and seascape of these atolls and exposed the population to radiation, dislocating people from their homelands.[25] While several measurements have been taken of radioactivity in soil particularly in the northern atolls, there has been no comprehensive assessment of the deposition of all the radionuclides contributing to radiation exposure for all the atolls of the Marshall Islands. The risk of radioactive exposure for key traditional crops, including coconuts, has degraded the ecosystem on these atolls and changed the way the Marshallese people relate to their natural environment.[26] A recent study carried out in-situ measurements of cesium-137 on fruits (primarily coconuts and pandanus) from 11 islands on four atolls in the northern Marshall Islands. The study concluded that contamination remains above the limits set by international safety standards in some measured fruits, and several islands display contamination from this human-made radionuclide.[27] According to a 2016 Columbia University study, radiation levels in some areas of the Marshall Islands are almost double of what is deemed safe for human habitation; but overall the islands are slowly becoming less radioactive[28].

Protected Areas:

The 2016 RMI State of the Environment Report reported over 20% of all land area is protected in its Protected Area Network (PAN) as recorded in the World Database on Protected Areas (WDPA) (www.protectedplanet.net)[29]. The RMI PAN as per the WDPA consists of 16 sites totalling 5,839.29 km2, of which 5,812.23 km2 (99.5%) is marine area. There are however more than 63 community declared marine managed areas covering about 70 percent of reef area in the RMI and most of the managed areas do not yet have official management plans developed or implemented.[30] Table 1 below summarises RMI?s Protected Area Network as recorded in the WDPA.

RMI has two declared Ramsar sites (wetlands of international importance) in Namdrik and Jaluit[31] which have been managed by the local government with support from the Environmental Protection Authority (EPA). However, there is limited data to determine their current status.[32] The two sites have a combined area of 11.38km2 and are important breeding areas for the endangered hawksbill and green turtles, the coconut crab and other rare species. A third site is currently being considered (Lib Island).[33]

Table 1: Summary of Protected Area Network as recorded in the World Database on Protected Areas (www.protectedplanet.net)

Protected Area Network of the Republic of Marshall Islands:

Location	WDPA ID	Designation	IUCN Category	Protected Area (km²)			Status	Status Year	Type of Designation	Governance	Data Provided By
				Total	Marine	Terrestrial					
Ailinginae	555583308	Conservation Area	Ib	1,068.58	1,065.50	3.08	Designated	2002	National	NA	MIMRA
Likiep	555583334	Conservation Area	VI	0.32	0.31	0.01	Designated	2006	National	Local Communities	MIMRA
Mili	555583340	Conservation Area	Ib	98.50	97.61	0.89	Designated	NA	National	Individual Landowners	MIMRA
Ailuk	555583309	Conservation Area	VI	25.13	25.11	0.02	Designated	2010	National	Local Communities	MIMRA
Arno	555583313	Conservation Area	VI	71.45	65.85	5.60	Designated	2004	National	Local Communities	MIMRA
Kwajalein	555592846	Conservation Area	Ib	7.77	7.72	0.05	Designated	NA	National	Individual Landowners	MIMRA
Rongerik	555556767	Conservation Area	VI	1,047.87	1,046.28	1.59	Designated	2006	National	NA	MIMRA
Namdrik	555592843	Conservation Area	VI	26.59	25.61	0.98	Designated	2012	National	Local Communities	MIMRA
	555555577	Ramsar Site, Wetland of International Importance	Not Reported				Designated	2012	International	Local Communities	MIMRA
Bikini	555556766	Conservation Area	Ib	212.28	205.95	6.33	Proposed	2006	National	NA	MIMRA
Majuro	555592845	Conservation Area	Ib	2.83	2.72	0.11	Designated	2013	National	Local Communities	MIMRA
Bokaak (Taongi) Atoll	4248	Other Area	Ia	106.97	106.97	0.00	Established	NA	National	NA	MIMRA
Jaluit	902678	Ramsar Site, Wetland of International Importance	Not Reported	201.93	200.90	1.03	Designated	2012	International	Local Communities	MIMRA
	555583329	Conservation Area	VI				Designated	2002	National	Local Communities	MIMRA
Rongelap	555583362	Conservation Area	VI	2,912.76	2,905.39	7.37	Designated	2002	National	NA	MIMRA
Bikar Atoll	4229	Other Area	Ia	56.31	56.31	0.00	Designated	NA	National	Local Communities	MIMRA
Wotje	TBD	TBD	TBD	TBD	0.00	8.18	TBD	TBD	TBD	TBD	SOE
Erikub	TBD	TBD	TBD	TBD	0.00	1.53	TBD	TBD	TBD	TBD	SOE
			Sub-Total	**5,839.29**	**5,812.23**	**36.77**					

Source:
www.protectedplanet.net

Agriculture:

Agriculture in atoll environments has always been challenging, as illustrated by the *Pat* (traditional taro pit). The Marshallese have a long history of making major investments to grow staple crops. Agriculture was traditionally a key component of the country?s economy, mainly permanent crops and plantations. Nearly all families were once involved in agriculture. There has however been a steady decline and loss of engagement in the agricultural sector.[34] Less than half of the 9,217 households were engaged in agriculture (crops, livestock and copra production) in 2011, well down from previous years. This is primarily due to changes in lifestyle and increased dependence on imported food. RMI has never conducted an agricultural census, leading to a major data gap for agricultural policy development.[35]

Nevertheless, agriculture plays a vital role in terms of sustaining the living standards of people, particularly in the outer islands. The contribution of agriculture to GDP decreased from 4.5% in 1997 to 3.5% in 2010, while the contribution of fisheries increased from 4.5% to 10.8% over the same period. The contribution of tourism to GDP decreased from 5.4% in 2001 to 1.6% in 2010. A household survey conducted by EPPSO in 2006 showed that a large portion of rural households continue to rely on home production for own consumption (of 244 homes surveyed in Wotje, Jaluit, Arno and Likiep, around 80% kept and relied on home-grown crops such as breadfruit and pandanus), and well over half relied on copra as a source of income. The high prices of imported rice and other staple foods prompted the Government to reconsider and refocus efforts on strengthening basic food security.

The nature of agriculture activities in RMI however, is in part limited by the system of land ownership, where most of the land is owned traditionally and there is no large scale commercial farming. The land size is also too small to allow large scale commercial farming. The soil type, and the fact that RMI is prone to natural disasters does not allow mono-cropping. Very little has been done in terms of livestock production because of a number of constraints including lack of technical knowhow and the challenge of getting livestock feed amongst other things.

The factors that have negatively affected the agriculture sector include less food being produced locally, more imported food, loss of traditional agricultural practices, and prevalent spread of invasive species. The effects of rapid development in the main urban centers, as well as climate change (particularly changing rainfall patterns, drying out of soil and water land lenses, and saltwater intrusion) have further exacerbate the agriculture sector. In addition, the relatively low price of imported food, and the challenges of transporting locally produced crops, makes it harder for local farmers to market their produce.[36] Furthermore, the production of copra is a significant industry across the RMI with the Government paying subsidies of 50cents per pound - to stimulate economic activity in outer islands to reduce migration to densely populated urban areas[37] - and with the price of copra approximately tripling by unit weight in recent years,[38][39] this has naturally encouraged an increase in household emphasis on the harvesting of coconuts and production of copra. One impact of this, however, is the disincentivization to grow diverse crops or grow a home garden and to instead use the increased household income to purchase imported foodstuffs.

Traditional Food crops:

Breadfruit is the most widely available starch food and regularly consumed when in season from January to March and June to July. Some breadfruit is preserved using traditional methods. Pandanus produce fruits between December and March and a year?s supply of leaves for roofing and handicrafts. Production of sweet bananas varies between atolls with Namdrik and Ebon atolls having the greatest relative production. Cooking banana is less common while pumpkins are widely eaten and easy to grow. Production of taro and sweet potato has fallen dramatically because of increased access to imported staples which are more convenient for preparation and storage. Arrowroot, the traditional staple of the atolls, has virtually disappeared from use.

Traditionally, food crops were not sold but shared or exchanged. Exchanging local atoll food for imported food between relatives living in the outer islands and those living in urban centers was prevalent. But many young families have been growing up in times of easy access to imported food and

many youths, especially those in urban centers, are therefore unfamiliar with atoll food today. Today, local foods are used mainly on special occasions as a reserve when imported foods are not available and for variety from imported foods.

Because of cultural values, food produced on the outer atolls is rarely sold locally, though a pig may sometimes be purchased for a special occasion. Outer atoll crops are rarely marketed at the urban atolls because of seemingly insurmountable problems in transportation and lack of a reliable mechanism for payment. Urban relatives sometimes request that a pig, a bunch of bananas, a cluster of pandanus, lobsters, crabs or other shellfish be sent to them depending on availability of transportation. These are not tendered for a particular cash value but are ?paid for? under the cultural tradition of reciprocity among Marshallese. The principal methods of marketing foods produced locally in Majuro are at roadside stands, ?take-out? stores, major retailers, the Laura Farm, and at the monthly Farmers? Market[40]. Domestic marketing of food is largely the responsibility of women[41].

Livestock:

While husbandry of domestic ducks, geese, turkeys, goats, and other livestock species have been attempted, only pigs and chickens have proved viable. For the most part, these are raised in a haphazard manner as the primary source of meat on festival occasions and are allowed complete freedom to roam as they please. Free-ranging pigs have been the demise of many private attempts to garden. Commercial chicken production, for either meat or eggs, thus far has not been profitable because it requires importation of costly imported feed. A few small piggeries exist in Majuro, including one at the Laura Farm. Demand for pork, chicken and eggs is now almost wholly met by imports.

In terms of household participation in livestock, the 2019/2020 HIES data shows chickens were the most reared livestock with 24% of all private HHs raising chickens. HHs raising pigs were also fairly numerous with a national rate of 21%.[42]

Fisheries:

The fisheries sector in the RMI comprises two main sub-sectors: coastal fisheries (inshore and near-shore) and oceanic fisheries (offshore, within the RMI EEZ). Coastal fisheries resources are typically utilized by individual households for subsistence, and to some extent for sale within urban areas. According to the Fishery Policy in the Marshall Islands (2005) approximately 1,500 to 1,700 metric tons of fish are harvested and consumed by households annually. Subsistence fishing is a significant household activity, with 66?85% households engaging in this type of fishing. Consumption of fishery products in the RMI has been calculated at 38.9?59.0 kg/year per capita[43]. Fisheries also make economic contributions, partly through income derived from fishing licenses, and partly through employment and income generation from tuna processing operations, from fishing activities and from servicing fishing vessels. Over the last decade there have been significant increases in fisheries contribution to GDP and in fisheries exports. Yellowfin tuna in the RMI is nearing full exploitation and if the fishing effort is maintained at the current rate, yellowfin tuna stock will be overfished. Bigeye tuna stock is reported to be fully exploited and the current level of exploitation is therefore unsustainable.

Removal of large biomass of target fish stocks may have impacts beyond these stocks, some of which may also have a high fishery value (e.g. billfishes). Due to the poor state of knowledge the impact of fishing on these species is uncertain. Other species also interact with fisheries. For example, turtles, seabirds and marine mammals are sometimes caught accidentally by longline and purse-seine operations. Continuing extraction of

sand and gravel aggregate from the reef, beaches and nearshore areas of Majuro Lagoon is unsustainable and may be contributing to shoreline erosion and hence, inshore fisheries.

A study conducted in 2015 around several islands found concentrations of harmful contaminants in fish and runoff water that could pose a health threat to the population. The contaminants, the study concluded, were mainly pesticides, other organic chemicals and toxic metals. Experts say that this pollution could be caused by anything from boat paint stripping to unregulated waste disposal. For the moment, a fishing prohibition is applied in polluted harbours[44].

Fisheries in the RMI are regulated, promoted and managed in terms of resource sustainability by the Marshall Islands Marine Resources Authority (MIMRA). The Marshall Islands Marine Resources Authority (MIMRA) is responsible for policies, regulations and the monitoring of all types of coastal and oceanic fisheries, as well as aquaculture and mariculture activities that include supporting oyster and clam production. The Marshall Islands Marine Resources Authority (MIMRA) acts as a business and broker for small fishers, as well as a regulator for larger private companies operating in domestic and international waters. The involvement of the Marshall Islands Marine Resources Authority (MIMRA) in the RMI food system extends to its transportation of artisanal fishers? catches from the Outer Islands to Majuro markets, and the promotion of consumption of domestic blue foods across the country[45].

*Food and nutrition****[46]****:*

At present food retail in the urban centres is almost exclusively through privately-owned supermarkets: these receive food imports through monthly container shipments, and much of the fresh produce typically spoils between one shipment and another. There is therefore a large unsatisfied potential demand for fresh produce which, given the infrequency of shipments, would need to be supplemented by local production. The trade in locally-produced food in urban centres is largely limited to small niche markets such as the Majuro Local Food Market, and one-off purchases for social occasions.

Whilst outright hunger may not be prevalent in the RMI, poor nutrition certainly is a major issue. The increase in incidence of non-communicable diseases (NCDs), and lifestyle diseases, many of which have dietary causes, is testament to this. Serious problems of nutritionally-related diseases are common, including vitamin A deficiency and anemia among children, diabetes, hypertension, heart disease, and certain cancers among adults. In 2002, 64% of the population did not consume the World Health Organization (WHO)-recommended 5 serves of fruit and vegetables each day[47]; in 2007, at least 10% of children (0-5 years) living in urban areas and 18.8% of children in rural areas were malnourished, indicated by low weight for age, thinness or wasting[48], and the Community Survey conducted in 2006 showed that 35% of households did not have sufficient food for all their family members at all times. There is a strong relationship between children?s nutritional status and economic well-being of their families, with the largest proportions of malnourished children (20%) found in households of the lowest wealth quintiles. The significant economic costs of NCDs continue to be a major burden on the health budget, and NCDs also have implications for productivity and income losses at national, household and company/firm level.

Because of physiological needs, pregnant women, infants, children and adolescent girls are particularly vulnerable to the effects of poor nutritional quality: preventing malnutrition during pregnancy and the first two years of life is when most gains can be made in reducing morbidity and mortality and preventing the onset of NCDs later in life. For infants, food security is primarily about exclusive breastfeeding for the first six months of life and the introduction of nutritious complementary foods after this. Micronutrient supplementation (i.e. iron and folic acid) of pregnant women, children and adolescent girls is important when there are low levels of food fortification and consumption of nutrient rich food[49]. Rates of death from diabetes and cardiovascular disease are higher among men than women, however[50].

This situation is strongly related to increasing dependence on poor quality imported food. Food imports arrive monthly by sea and, between one shipment and another, vegetables typically deteriorate to the point of becoming inedible. There is therefore a large unsatisfied need for fresh locally produced vegetables.

Fish is a very important component of the national diet and is vital to food security, particularly in the outer-islands where people are highly dependent on fish for daily nutrition. In the atolls, livestock rearing is difficult due to limited water supply and limited access to suitable animal feeds, thus making the sustainable supply of local fish as a source of quality protein even more important. Sustainable fisheries management and security of village marine food resources are therefore recognized in the national Food Security Policy as priority outcomes to ensure long-term food security in RMI. The role of Iroij (chiefs), local governments and the active involvement of communities are essential to realizing these outcomes.

Tenure:
Land tenure in the RMI is based on a matrilineal society. All children inherit lands from their mothers. There are no landless people and their land tenure pattern is the most important single factor of their lives. All children become members of their mother's clan. However, the clan is not a factor in the land ownership pattern. Paramount chiefs in the Marshalls are not clan chiefs: their powers are associated with specific land parcels and the people that live on them. A land parcel is controlled by a paramount chief, a family head and an undetermined number of commoners.

*COVID-19:*In Marshall Islands, from 3 January 2020 to 8 November 2022, there have been 15,382 confirmed cases of COVID-19 with 17 deaths, reported to WHO[51]. The Marshall Islands was the first country in the Pacific to start its COVID-19 vaccinations, which was on 29 December 2020. As of 25 September 2022, a total of 103,067 vaccine doses have been administered.
The first cases in the country were reported on 28 October 2020, among two members of the US Army Garrison, who were among a group of 300 Marshall Islanders abroad being repatriated. There was judged to be no threat of community transmission and no lockdown was implemented. As a result of RMI Government measures (including restrictions on international arrivals), COVID-19 infection rates remained very low until 8 August 2022 when a handful of positive cases of the Omicron BA.5 variant were confirmed, and quickly skyrocketed to the one-day total of 1,064 testing positive by 13 August at the three community-based "alternative care sites" established to test and treat local residents[52].

The pandemic has had major negative impacts on the tourism fishery-related sectors, and has also resulted in significantly increased the prices of imported foods. The Government has taken additional measures to address this situation, including the distribution of farming equipments and fishing gear in order to support local food self-sufficiency.

1) Environmental problems and Root causes

The overall problem statement may be summarized as follows:

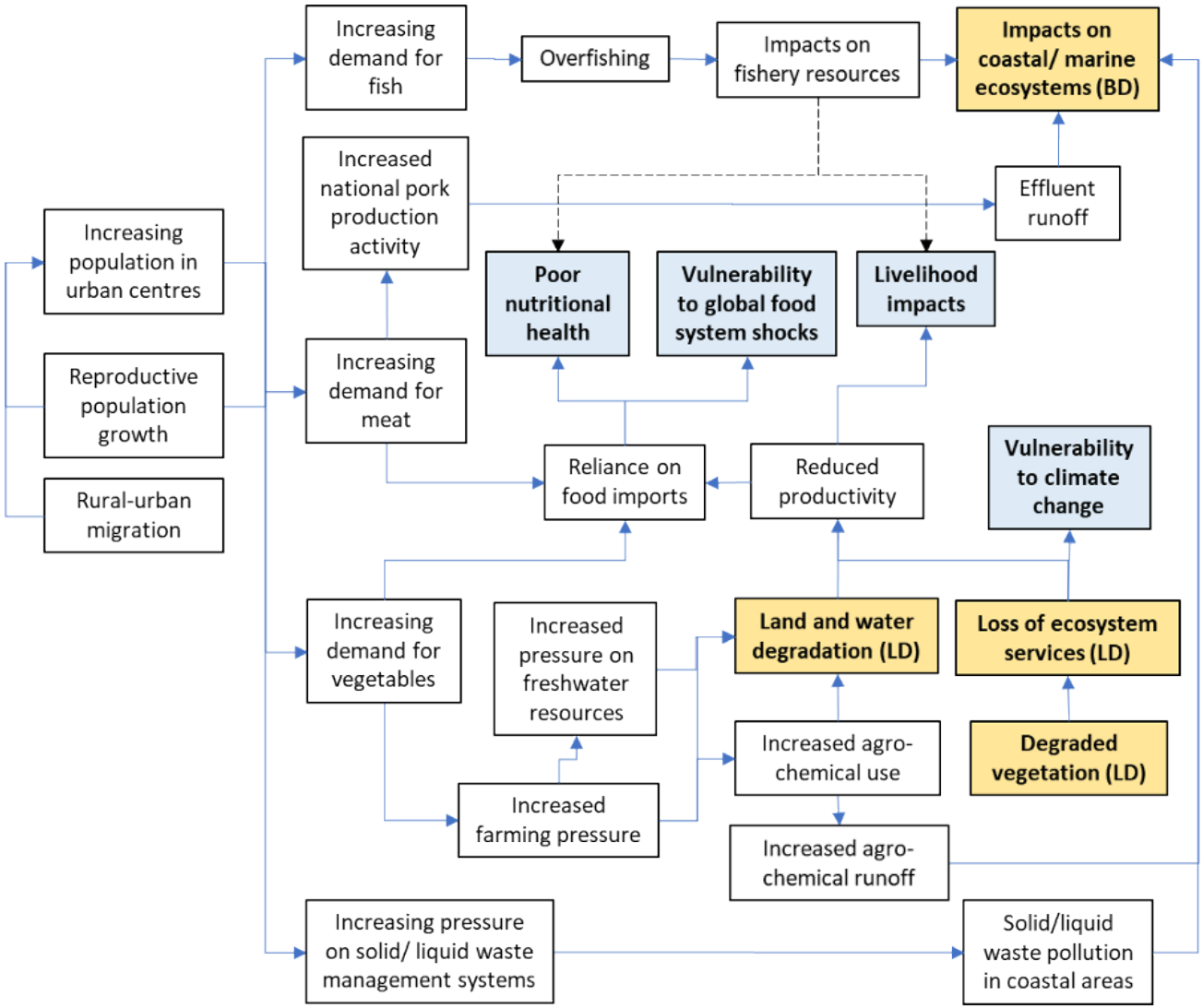
- Food system conditions (ranging from farming and land/seascape management practices through to demand-side drivers), coupled with population growth and urbanization, are leading to the degradation of terrestrial, coastal and marine natural resources in the RMI, which are already under growing pressure from the impact of global climate change;

- Investments in development of the agriculture and food sectors, aimed at addressing issues of food supply (security and self-sufficiency) and nutritional quality, are unlikely to be environmentally sustainable (and risk exacerbating environmental problems) or to gain widespread and lasting uptake, unless they are adequately adjusted to environmental, social and cultural conditions and take into account traditional knowledge and governance structures;

- The degradation of natural resources and ecosystems is itself undermining food system sustainability, in a vicious cyclic effect.

The environmental problems to be addressed by the project are summarized in Figure 1.

Figure 1: Summary of environmental problems and causes to be addressed by the project (potential ?entry points? for project actions in blue boxes)



Specific issues of concern shown in Figure 1, at the nexus between unsustainable food systems, land degradation and biodiversity/ecosystem services loss, include the following:

- Increased and unsustainable pressures on the country?s highly fragile soils and scarce freshwater resources, associated with increased intensity of vegetable production with inadequate measures for sustainable land management;

- Pollution of coastal waters, with impacts on fisheries and biodiversity, arising currently and potentially from, for example, domestic sources in urban settlements, increases in livestock production (particularly in enclosed piggery systems), and from food value-chain activities;

- Inadequate protection and management of coastal vegetation, given the vital ecosystem functions that it delivers, for example in buffering agricultural production against the effects of salt spray and sea level rise;

- Degradation of coastal fisheries due to overexploitation (associated directly with demographic growth and increasing demand) and poor management.

- Climate change impacts associated with effluent from livestock production systems, and from the long-distance transport of imported foodstuffs.

RMI faces additional challenges to environmental sustainability and food security stemming from the potential impact of climate change on natural resources. Extreme events such as drought, extreme high tides, violent winds, and storm surges are major risks to the low-lying islands that make up the country. On-going sea level rise is likely to cause significant problems through both contamination of ground water and erosion of land, coupled with changing weather patterns and changing migration routes of commercially exploitable fish species.

These environmental problems, and the social problems (especially dietary-related non-communicable diseases, NCDs) with which they are inextricably linked, call for a transformation towards more sustainable food systems in the RMI, that are:
- Compatible with the carrying capacity of country?s natural resources;
- Resilient and adaptive to environmental pressures, climate change and changing social conditions;
- Capable of providing the country?s population with nutritious food;
- Capable of offering socially and economically attractive options to actors all along the length of food value/supply chains; and
- Adjusted to the ?nature-intensive? traditional approach to natural resource management and farming that is predominant in the country.

External pressures and threats requiring adaptive measures

In addition to the pressures and threats described above, there are a number of highly significant other factors which affect environmental and productive conditions in the project area, which are outside of the direct control of the project, but to which it must be resilient and adaptive in order for its strategies and impacts to be durable. These include:

- Climate Change and Sea-level rise

The effects of climate change and climate variability are being felt in the Marshall Islands, as a key driver of environmental change. RMI is extremely reliant on consistent rainfall for its water supply, given there are few freshwater reservoirs or sources of groundwater. A strong El Ni?o climate event can fuel drought, and this can be worsened by changes in the climatic pattern. For example, a state of emergency was declared in April 2016 due to drought.[53]

Over the past 30-50 years overall maximum and minimum temperatures have increased significantly and are projected to increase further. Average annual rainfall as well as extreme rainfall events are also projected to increase. Increase in seawater temperature and in ocean acidification are also expected in the Marshall Islands. The main projected future climate change impact for RMI is sea level rise because of the low elevation of its atolls and islands. The State of Environment report (2016) points out that more needs to be done to address the issue of climate adaptation in areas including food security, water security, health, and flood risks.[54]

- Urbanization

In 2021, the urban population of Marshall Islands was 78.2%[55], making Marshall Islands? urban centers some of the most densely populated areas in the Pacific, and internal migration from outer islands has only intensified over the past 30 years[56]. This rapid urbanization and growth exacerbate risks to climate change and natural hazards. This is a particularly serious concern in the low-lying atoll nation that is already highly vulnerable to climate change impacts such as sea level rise, tropical storms, typhoons, and prolonged droughts. Urbanisation has affected the use of many plants for traditional medicine, with a decline in popular species in the urbanised areas and a loss of the knowledge and skills for traditional medicines.[57] The same applies for traditional knowledge in general including more healthy cooking methods and skills that have been replaced with conveniences of modern lifestyles, but has fuelled reliance on less nutritious imported foods. As noted in the National Strategic Plan (2020-2030)[58] recent poverty assessments have found that informal safety nets are weakening as increased urbanization, westernization and aid dependence have undermined traditional customs and values.

The Government has been paying subsidies copra production at 50cents per pound to stimulate economic activity in outer islands to reduce migration to densely populated urban areas[59]

- Socio-economic changes

Public sector spending and contributions from the United States, via the Compact of Free Association, largely drives the RMI?s relatively small national economy. The government sector accounts for 41% of formal employment and 40% of GDP (including state owned enterprises). The US Test Site on Kwajalein also accounts for one-third of economic activity. The Marshall Islands was one of the fastest growing island nations with an annual growth rate of 4.2% from 1980 to 1988. This slowed to 0.4% in the last decade. Like Palau and the Federated States of Micronesia (FSM), RMI has a free association with the United States, whereby Marshallese citizens can freely migrate between the two countries. According to the 2011 national census, the Marshall Islands have a population of 53,158 people.[60] Between 1999 and 2011, only 2,318 people were added to the total population. Much of this low population growth rate is related to emigration to the mainland US and Hawaii, as well as a trend towards smaller family

sizes. Based on the 2011 census and 1999 projections, it is estimated that over 11,000 Marshallese have migrated. Internal migration from rural areas to the urban centres has continued. In 2011 Majuro had 27,797 people or a 52% share of the total population.[61]

The Marshallese economy combines a small subsistence sector in the outer islands with a modest urban sector in Majuro and Kwajalein. The RMI government is the country?s largest employer, employing approximately 46% of the salaried work force.[62]

Economic growth and a declining private sector have mixed impacts on the environment and society. As economic drivers have shifted from resource-based to services and trade, this has increased the urban economy in the urban centres of Majuro and Ebeye, where most services are based. The decline in the resource-based economy, has led to an underperforming rural economy.[63]

One indicator of a cultural driver is the reliance on imports. Across the Pacific, including RMI, reliance on imports has increased. The cultural change over the past 100 years is evidenced by Marshallese food sources. In the early 1900s, the Marshallese depended on local sources for most of their carbohydrates (taro, breadfruit, banana, pandanus and arrow roots).[64] There is growing evidence that Marshallese of all incomes experience chronic health problems and sometimes premature death due to poor quality diet, suboptimal nutrition, and occasional exposure to unsafe food.[65]

Despite this trend, the people of the Marshall Islands have developed and maintained a remarkable knowledge of native forests and plants, and strong skills in agro-forestry. The fishery sector contributes significantly (12%) to the country?s economy.[66] It constitutes the largest private sector contributor to the economy, through the sale of fishing rights to other nations. The fisheries industry employs both Marshallese and foreign workers as maritime crewman on the fleet and as maritime observers on fishing vessels.[67]

High food and fuel costs pose a serious issue in RMI as it puts pressure directly on household budgets. Poorer households with a larger share of food in their total expenditures suffer the most from high food prices, due to the erosion of purchasing power, which has a negative impact on food security, nutrition and access to school and health services. This is very significant in RMI as 20% of the population are estimated to live on less than USD 1 a day and over 80% of the country?s population live below the US poverty lines. Furthermore, the widely dispersed islands and high transport costs increase even further the price of food for the outer island communities.[68]

2) Barriers

Satisfying the country?s food needs in an environmentally sustainable manner is unlikely to be achievable unless the following factors are addressed:

a. Policy, planning and institutional conditions fail adequately to provide for integrated approaches to food system sustainability that address land/ecosystem degradation and biodiversity loss

Agriculture and marine resources are among the strategic areas under the Economic Development pillar of the National Strategic Plan 2020-2030 and in which protection of the environment is identified as a policy objective. Aligned with the NSP, the key sector policies and planning instruments such as the Agriculture Sector Plan, the Food Security Policy, the Trade Policy and the Forestry Action Plan highlight the need for the protection of the environment and the sustainable production of nutritious food. They do not, however, as yet present a fully integrated approach to achieving this in

ways that respond adequately to environmental, social, cultural, economic and logistical realities, such as the spatial dimensions of ecological and social interactions between land, coastal and marine elements of the land/seascape, and the evolving and uncertain nature of demographic and economic conditions and climate change impacts. In general, the existing policies, strategies and action all highlight the ?what?, which is the importance of protecting the environment while pursuing economic development and sustainable livelihoods, but very weak in terms of ?how?.

In addition, there are gaps in Policies, Strategies, Action Plans, and Regulatory Frameworks with regard to concepts of Land Degradation Neutrality (LDN) and of food systems approach. The latest UNCCD National Action Plan is outdated as it was developed in 2012, prior to the Convention?s new Strategic Framework, which outlines the most comprehensive global commitment to achieve (LDN) and SDG 15.3. In addition, the existing Policies, Strategies, Action Plans, and Regulatory Frameworks do not yet capture the concepts of food systems, which encompass the entire range of actors and their interlinked value-adding activities involved in the production, aggregation, processing, distribution, consumption and disposal of food products that originate from agriculture, forestry or fisheries, and parts of the broader economic, societal and natural environments in which they are embedded[69].

This is reflected at ground level by limitations in land use planning and governance, that fail adequately to ensure that land uses are appropriately matched to land and ecosystem conditions, or to considerations of resilience and ecosystem service flows.

b. Limited availability and knowledge of technical options for environmentally- and socially-sustainable landscape management, farming and food systems

While the people of the Marshall Islands have developed and maintained a remarkable knowledge of native forests and plants, and strong skills in agro-forestry as reported in the 5th National Report to the CBD as mentioned above, the PPG consultations pointed to these traditional knowledges being primarily with the older generation and in rural areas. As noted above, one of the impacts of increase in urbanization is the loss of traditional knowledge in general, including loss of traditional agroforestry knowledge, especially in the youth, which has accompanied the decline in engagement in agriculture activities by Marshallese households. Traditional knowledge of how to farm and care for domestic and traditional plants and animals is eroding. Even traditional forms of food preparation and preservation are unknown to many young people. To date, international cooperation has focused heavily on commercial, technocentric approaches which have relied heavily on external support, with questionable sustainability. Agricultural extension systems have not succeeded in stimulating large-scale uptake of agricultural production practices and management systems that combine environmental sustainability with social and economic attractiveness, or that fully respond to the challenging and changing biophysical, demographic and economic conditions in the country.

Opportunities for environmentally sustainable local food production are particularly limited in the main urban centers of Majuro and Ebeye due to their high population densities, resulting from rural-urban migration, which also puts increasing pressure on water resources.

There are no laboratories in the country to carry out chemical analysis for soil, plant materials and water to support decision making and monitoring the impacts of agriculture on the surrounding ecosystems. One of the key reasons why agricultural extension systems have not succeeded, as mentioned above, is the very limited human resources capacity in agricultural extension services and the Agriculture Division of MNRC has no permanent presence in the outer Atolls. Another very important hurdle is the lack of quality data and information to improve knowledge and support decision making. For example, although it is estimated that agriculture contributes about 3.5% to GDP, there is no disaggregated data on this. There is a need to gather data on agricultural production, as well as imports and exports of agricultural products to assess the scope for import substitution, where feasible.

c. Food value-chain/market conditions that are set up principally for imported foodstuffs of low nutritional value.

Anecdotal evidence suggests there has been a major shift in consumer preferences, especially among the urban population, towards imported foods with low nutritional value, at the expense of environmental, nutritional and cultural values, and food supply/marketing systems perpetuate these preferences by focusing on price and convenience. The RMI has been importing more food products than it exports and this widened the trade deficit, which was largely financed by Compact grants and other grants. The consumption of less nutritious imported foods has contributed to life style diseases such as diabetes, gout, obesity and high blood pressure. The RMI Trade Policy 2012 recognizes the need to promote the production of local foods to address some of these problems and also to ensure food security and export the surplus.

The Trade Policy 2012 also recognize that commercial agriculture is not developed in the RMI because farmers perceive the returns from agriculture to be very low and slow to materialize compared with other activities such as fishing, tourism, handicraft and non-traded services and Government employment. Skewed wages in the public sector which are inflated by Compact assistance has turned the terms of trade against agriculture and makes agricultural production less attractive. Lack of interest in agriculture and the land tenure system have also adversely affected commercial farming[70].

The current food value-chain and market conditions are severely hindered by logistics, marketing, lack of farming skills, lack of economies of scale, limited arable land and lack of coordinated policies, which are factors that make it difficult for RMI to produce its own agricultural food products and fuelling reliance on imported foods. There are also constraints to agricultural production and exports due to disconnections between producers and buyers and lack of meaningful incentives to stimulate investment in the agriculture sector.

The other very important limiting factor to the food value-chains that regularly came up during PPG consultations and recognized in the National Strategic Plan (2020-2030), the Food Security Policy 2013, Agriculture Sector Plan (2021-2031) and the Trade Policy 2012, is the uncertainty and unreliability of transport services between Atolls.

d. Limited knowledge and awareness of alternative approaches to food system sustainability.

The predominance in the country of external technocentric approaches to natural resource management and food production is in part due to inadequate flow of knowledge on the values of resilient traditional approaches and their implications for environmental values, resilience and nutrition: also

lacking are mechanisms for combining this traditional knowledge with potentially valuable external knowledge contributions (generated in the country, elsewhere in the country or in regional research centres), and with reliable and relevant information on biophysical and social variables.

For a national transformation in the food systems to materialize in the RMI, it is essential to encourage national self-sufficiency while improving and expanding local agriculture production to promote long-term food and nutritional security with climate change resilience. Such a transformation need evidence from scientific research as well as traditional knowledge and culture. The RMI however, has not yet conducted an Agriculture Census to provide the knowledge to enable technical experts and decision-makers to better understand core agronomic, production, ecological and socioeconomic data while identifying specific agri-food system sector needs and alternative approaches to food system sustainability, and identifying areas for future investments.

2. The baseline scenario and any associated baseline projects.

Under the baseline scenario, in the absence of the project interventions, there will be continued high reliance on imported food, with consequent high value-chain GHG emissions, as well as social disbenefits in the form of poor nutrition and diet-related non-communicable diseases. In addition, weak environmental governance will undermine ecological and food system sustainability, for example through overfishing in the vicinities of urban areas and impacts on fisheries from the discharge of pollutants, especially in urban areas. Furthermore, there is a risk that initiatives aimed at boosting national food security and dietary quality, if inadequately planned and executed, will increase extractive pressures on scarce freshwater lenses (already under pressure from climate change), degrade already nutrient-poor soils, lead to the pollution of soil and water resources and coastal ecosystems by agricultural chemicals and the runoff of wastewaters from highly population density areas and animal production facilities, and lead to the clearance of forest cover.

Although a movement towards self-sufficiency in agriculture is favored in the RMI?s development policies, it is recognized that total self-sufficiency is impossible given demand for foods like beef which cannot be produced locally. The Marshall Islands National Development Plan (1981-1995) had as its first priority the attainment of self-sufficiency in basic foods, for both economic and health reasons. Two strands of this were the rehabilitation and replanting of coconut plantations and the development of vegetable production. Demonstration farms were established on Laura and Wotje in 1981 and 1982, both of which were supplying vegetables to urban Majuro by mid-1982. By 1983, there was little marketing of agricultural produce and grave concern was expressed about the heavy dependence of the experimental farms on fertilizer inputs making produce both expensive and declining over time. Efforts by UNDP through its Integrated Atoll Development Project to encourage agricultural development achieved only intermittent success mainly because of transport problems (UNDP 1991). The overarching national development plan is now the RMI National Strategic Plan (2020-2030) as mentioned below in next section on key Policies, Strategies and Action Plans.

There is a growing movement in support of organic agriculture in the country[71], but this still remains at niche level, without a significant scale of insertion into value-chains. In 2015, SPC and the Pacific Organic and Ethical Trade Community (POETCom), set up the Marshall Islands Organic Farmers Association (MIOFA) under an IFAD project, which focused on the Participatory Guarantee System (PGS) - a system for local and Pacific islands regional markets. For regulated organic markets such as US, Japan, EU, China and soon to be NZ where a Bill is currently going through

Parliament, the only way to get organic products into these markets is under a 3rd Party System for organic certification. A 3rd Party System is however an expensive option, and there is no capacity in RMI in the foreseeable future to pursue this option, hence the focus of POETCom on the PGS system[72].

(i)Key Policies, Strategies and Action Plans

*RMI National Strategic Plan (2020-2030)**[73]***

The objective of the RMI National Strategic Plan (NSP) 2020-2030 is ?sustainable, equitable and measurable development reflecting the priorities and culture of the Marshallese People?. The NSP provides a roadmap for progress regarding national priorities in strategic areas of social development and cultural identity, economic development, infrastructure, environmental awareness and climate change and governance. It is designed to align with national priorities and frameworks set forth in national policies, sectoral plans and international agreements.

The economic development pillar of the NSP recognize Land, Agriculture, Marine Resources and Trade among the key strategic areas. The policy objectives for Land as a key strategic area are: (i) greater opportunities to utilize land for economic growth; and (ii) promote greater awareness of land rights and opportunities through awareness and partnerships. For Agriculture as a key strategic area, the policy objectives are: (i) improve production, supply and distribution of nutritious food; (ii) promote environmental sustainability; (iii) enhance capacity of agriculture sector stakeholders; and (iv) develop enabling policies and legislation. For Marine Resources, the policy objectives are: (i) maximize the long-term value from its fisheries for the benefit of the economy and people of RMI; (ii) conserve and manage the aquatic resources for current and future generations; (iii) enhance professionalism, transparency and accountability in the management of fisheries resources; and (iv) maximise income and livelihood opportunities through sustainable coastal fisheries. The policy objectives of relevance to this project under Trade as a key strategic area of the NSP are: to increase import substitution and production and export of locally manufactured goods; promote fair and friendly business environment; promote micro, small and medium enterprises for women entrepreneurs; and promote partnerships among public-private and Civil Society Organizations.

*RMI Draft National Food Systems Pathway (2021)**[74]***

The 2021 draft National Food Systems Pathway (NFSP) - *Transforming the Marshall Islands Food System by 2030* was presented by Government of RMI as a ?pre-pathway document? - a culmination of a number of National Dialogues held during July and August 2021 - as its commitment to the United Nations Food System Summit 2021. The 2021 draft NFSP recognize numerous challenges faced by RMI related to the natural environment, climate change and its nuclear legacy that together, highlight the need for a transformation of the RMI food system to one that is more sustainable and resilient to external factors:

The 2021 draft NFSP identified the following 5 key themes that reflect the major issues being faced and the opportunities to address them:

1. Diverse and sustainable blue food production and consumption.

The Dialogues emphasized the importance, value and potential of the blue food sector for the provision of food and nutrition security in a way that supports ecosystem health and resilience.

2. Sustainable green food production and consumption.

The Dialogues demonstrated the importance and potential of a diverse and sustainable green food sector that contributes to individual and community healthy, well-being and prosperity

3. Lifelong nutrition and health education and awareness raising.

Nutrition and health education and awareness is a society-wide issue that touches all ages, genders and social groups and is central to shifting perspectives and behaviours related to food consumption patterns.

4. Food safety in a complex system.

The RMI food system requires the implementation and enforcement of adequate measures to ensure the safety of foods within that system and preserve the health of individuals and communities

5. Inter-ministerial/cross-sectoral collaboration.

Transformation of the RMI national food system will be complex, requiring the will and commitment of multiple and diverse stakeholders across all levels of government and society to ensure success.

The above 5 themes provide a framework within which to consider how the RMI food system may be transformed and act as a starting point for the development of a transformative pathway to a sustainable, resilient and equitable food system. As such, the project design will be framed around the above 5 themes of the NFSP, focusing on strengthening the integration of food systems and landscape/seascape management of natural resources. The project will support under Component 1 a participatory process towards Cabinet approval and to raise public awareness on the NFSP. In addition, the project will support the development of an implementation framework under Component 1, including development of Atoll Food Systems Pathway Integrated Action Plans to take into account the atoll-specific issues and local governance structures to operationalise the NFSP at the atolls level, ensuring equitable participation of women. The draft NFSP 2021 proposes that government must work in partnership with those businesses operating within the food system to help bring about the required food system transformation. The project in this regard will partner with Private Sector companies involved in buying and selling blue and green foods produced by local suppliers.

*RMI Food Security Policy (2013)****[75]***

The 2013 Food Security Policy recognize the high degree of vulnerability in RMI?s food security given 80 to 90 percent of the food consumption is being imported and given the persistent and large trade deficit (with an estimated 30 percent of imports being food) and limited capacity for foreign exchange earnings. The Food Security Policy consider increasing and stabilizing domestic food production to be essential for a resilient food secure Marshall Islands. In addition, the Food Security Policy acknowledge the integral role that nutrition plays in ensuring a healthy population and productive work force.

The 2013 Food Security Policy goal is ?To ensure access to nutritious, quality, safe and affordable food for all Marshallese people at all times?. To achieve this goal, the Policy identified five priority strategic action areas:

1. Stimulating sustainable local food production and preparation and better linking producers to consumers.
2. Strengthening access to nutritious food for vulnerable households and individuals.
3. Educating the public about food security and nutrition and encouraging home gardening.
4. Facilitating efficient national food distribution channels.
5. Building safety, quality and resilience into food supply and production systems.

The project will support implementation of the strategic actions proposed under the above 5 strategic action areas, focusing on strategic actions that support the integration of food systems and landscape/seascape management of natural resources and ensure equitable participation of women in implementation, aligned with the proposed NFSP as mentioned above.

RMI Agriculture Sector Plan (2021-2031)[76]

The Agriculture Sector Plan (ASP) for the 10 year period of 2021-2031 is the first agricultural strategy for the Marshall Islands and ?is the first time that a plan is being applied to guide our efforts to address the emerging and challenging issues of agriculture production and food security? as stated by the Hon. Sandy Alfred, Minister of Natural Resources and Commerce in the foreword. The sector plan will provide policy guidelines and direction for the Agriculture Sector to implement programs that will focus on the needs related to increasing agriculture productivity. The Sector Plan will also provide a clear direction to the sector to align its objectives in a well-coordinated and integrated approach.

There are five principles that guided the consultation process in the development, and will provide the key guiding principles for implementation of the ASP, as follows:

1. Contribution to Food Security.
2. Contribution to Economic Growth.
3. Contribution to Social Sustainability.
4. Contribution to Environmental Sustainability.
5. Public-Private Partnerships (PPP).

The Plan identified seven outputs to be achieved by the end of the 10-year period, as follows:

1. Environmental degradation minimized.
2. Sustainable small-livestock production systems developed and promoted.
3. Sustainable crop production systems developed and promoted.
4. Increased consumption of nutritious locally- produced foods.

5. Improved biosecurity and marketing.
6. Improved capacity of agriculture sector stakeholders.
7. Developed enabling policies/legislations.

The project will contribute under Component 2 towards implementation of the activities outlined in the Logical Framework Matrix of the ASP, provided as Appendix 1. In particular, the project will place focus on those activities that contribute to the ASP output of ?sustainable crop production systems developed and promoted?, which was assessed as High in terms of both feasibility and impact in the Plan. The project?s TOC conceptualize these activities in the same support to the second theme of the NFSP 2021 as mentioned above on ?Sustainable green food production and consumption?. Furthermore, the project will contribute to outputs 6 and 7 of the ASP in terms of strengthening of human resources capacity and of enabling policies/legislations. In this regard, the project activities will be informed by the identified human resources requirements of the ASP and the partnerships identified in its proposed operational structure. As much as possible, the project will focus its support to promote and ensure equitable participation of women.

The Reimaanlok Conservation Area Management Planning Framework (2008)

In 2006 RMI joined 4 neighbouring Micronesian nations (Palau, FSM, Guam and Northern Mariana Islands) to commit to the *Micronesia Challenge*, an ambitious goal with each partner aiming to effectively manage 30% of their coastal resources and 20% of their land resources by 2020. In 2021, the Leaders of the Micronesia Challenge nations celebrated fifteen years of progress and affirmed their commitment to a new Micronesia Challenge 2030 goals to effectively manage at least 50% of marine resources and 30% of terrestrial resources by 2030 across the region.

The strategy developed by RMI to meet the Micronesia Challenge is called the *Reimaanlok* ? *Looking to the Future*: National Conservation Area Plan for the Marshall Islands[77], which provides the framework for promoting community led management of protected areas across the archipelago. It develops the principles, process and guidelines for the design, establishment and management of conservation areas that are fully owned, led and endorsed by local communities based on their needs, values and cultural heritage. The aim is to revive the physical and spiritual connection of people to their environment, to ensure the sustainable use of resources and food security, and to conserve the remarkable biodiversity of the Marshall Islands.

The Reimaanlok framework outlines an 8-step process for resources management planning. This process is led by MIMRA in support of Local Governments in each Atolls and which culminates in the development of Local Resources Management Plans (LRMP) and establishment of Local Resources Committees (LRC). Each of the LRMPs identifies areas the LRCs decide on behalf of the communities to be established as protected areas. Four types of Protected Areas are defined under Regulations of the Protected Areas Network (PAN) Act of 2015 as shown in Table 2 below. The four types of PAs help guide the Ordinances the LRCs for each Atoll put in place to prevent communities from overfishing and overharvesting, and come as preventative measures to ensure that with the development of coastal fisheries, there will be controlled use of natural resources for both subsistence use and commercialization.

Table 2: Types of Protected Areas as defined under Regulations of the Protected Areas Network (PAN) Act of 2015 a

Type 1 – Subsistence only / Jikin kakijen	This type of area is managed for subsistence non-commercial use / *Jikin kakijen an armej ro rej joke ioon Ailinlaplap, ejjab nan an bar ro jot kōjerbale, kab ejjab nan an juon wia kake*
Type 2 – High level of protection / Jikin kōjparok	This type of area is subject to no-take / *E mo an jabdewot eonwod ak ebbok menin mour in lojet, ioon ane, kab bok, dreka im jabdewot ilo jikin in*
Type 3 – Restricted and protected area / Elon kakien	This type of area has total restrictions subject to no activities, either within a large, protected area or in an identified protected area / *Juon jikin kōjparok eo elon kain kakien ie*
Type 4 – Traditional mō / Mō an Irooj	This type of area includes parts of land, a whole island, or a reef area that is managed and restricted by the Chiefs (Irooj)/ *Mo ko an Irooj ro im armej ro rej loor I*

The project will contribute to the implementation of the Reimaanlok Conservation Area Management Planning framework by aligning the integration of food systems, in particular the promotion of local food production, with landscape/seascape management of natural resources in the proposed Atoll Food Systems Pathway Integrated Action Plans under Output 1.1.2 and in the context of the LRMPs of each atoll. In this regard, the LRCs in each atoll will be consulted and is proposed to provide the oversight of project activities so they, on behalf of their communities, ensure their natural resources base is utilized in a sustainable manner for their food security and sustainable livelihoods.

*RMI National Climate Change Policy Framework (2011)****[78]***

The National Climate Change Policy Framework (NCCPF) was endorsed in 2011 and provides strategic priorities for scaling up the government?s commitments to address climate change. The policy aims to address climate change issues across relevant sectors and also provides an entry point for donors to provide assistance in reducing RMI?s vulnerabilities to climate change impacts. The NCCPF national priority areas for action in addition to five strategic goals to address key vulnerabilities and areas requiring a boost in resilience.

Among the nine priority areas identified in the NCCPF are Food and Water Security, Biodiversity and Ecosystem Management and Land and Coastal Management, including Land Tenure. The project will support and promote integrated food systems and landscape/seascape approaches aligned with these key priority areas of the NCCPF.

RMI Joint National Action Plan for Climate Change Adaptation & Disaster Risk Management (2014-2018) (JNAP)

The aim of the JNAP is to enhance the resilience of the Marshall Islands people. It does this through providing all stakeholders, from communities, to national level to regional and international levels, with a nationally owned and driven guiding action plan that identifies key national priorities for reducing risk and vulnerability in the RMI

Among the identified drivers of vulnerabilities is limited resources, in particular food, water and fuel. Outbreaks of disease via contamination of water is not uncommon ? an issue that is exacerbated by the high population densities of the urban centres.

This project is very relevant and will contribute to the JNAP Goal 5: Enhanced local livelihoods and community resilience, and the following related outcomes:

? All households have reliable access to clean, fresh water.
? The resilience of community livelihoods (including health and wellbeing) and vulnerable groups including youth and children are strengthened.
? Vulnerability to water and food related hazards and shortages resulting from hazards and climate change impacts is reduced.
? Reduced vulnerability to coastal hazards.
? Effective management of coastal resources including land and marine biodiversity.

This project is also very relevant and will contribute to the JNAP Goal 6: Integrated approach to development planning including consideration of climate change and disaster risks, and the following related outcomes:

? All land use policies and settlement planning processes reflect DRM/CCA.
? Improved national and local capacity to undertake vulnerability and adaptation assessments and planning.
? Key stakeholders are integrated into the planning and implementation of adaptation programmes at all levels.

The related actions (JNAP Action # in brackets) the project will contribute to implementation include:

? Assess scope for increased local food production and preservation (5.5.1)
? Identify and implement key practical strategies for increasing and diversifying local food production, including climate- resilient crops and replanting traditional foodstuffs (e.g. panadus, koin, konnat, lukweetc) to reduce import dependency (5.5.2)
? Assess the need to address marine food security and coral reef protection (5.5.3)

? Strengthen, enforce and implement the RMI Food Security Policy (5.5.4)
? Strengthen networks for conservation of fisheries and biodiversity (5.7.3)
? Support activities that deal with coastal erosion and enhancing buffer zones (5.8.1)

(ii) Baseline projects and programmes by Government Agencies, NGOs and Development Partners

The following programmes and projects were identified during the project preparation phase as most relevant in terms of related goals and objectives with, and thus provide the baseline for this project. There are several Government agencies, NGOs and Development Partners involved in these baseline activities outlined below according to their relevance to the objectives of this project:

Baseline Projects/Programs	Brief Summary and Focus	Potential linkages
1) Marshall Islands Marine Resources Authority (MIMRA). Division of Coastal Fisheries: Marshall Islands Protected Area Network (PAN) program	The MIMRA Coastal Fisheries Division hosts the PAN Office, which implements the PAN program under Regulations made by MIMRA under Section 522 of the Protected Areas Network (PAN) Act 2015. The purpose of the Protected Areas Network Regulations 2020 is to create an avenue for the PAN Office to receive and disburse funding to support protected areas established by communities in the RMI. These Regulations also provide the legal framework for the process of nominating areas for protection under the Act. Under the Reimaanlok process, MIMRA PAN Office works closely with local governments and communities to facilitate the development of Local Resources Management Plans (LRMP), under which communities become responsible for managing their own natural resources. MIMRA is supported by partner agencies in the Coastal Management Advisory Council (also known as CMAC) in the Reimaanlok).	Output 1.1.2 of this GEF project proposes the development of Atolls Food Systems Pathway Integrated Action Plans (AFSP IAP) to be closely aligned with the LRMPs of each Atoll, which would ensure the integration of food systems with land-seascape management of local natural resources, and with oversight to be provided by the Local Resources Committee of each Atoll. In addition, Output 1.1.3 proposes the establishment of a multi-sectoral/inter-ministerial Working Group to coordinate the implementation of the National Food System Pathway (NFSP). It is proposed to explore during the inception phase of this GEF project, the possible role of CMAC to provide the oversight on implementation of the NFSP.

2) Ministry of Natural Resources and Commerce (MNRC). Division of Agriculture: Demonstration Gardens for Local Produce	MNRC/DoA?s program on demonstration gardens for local produce establishes nurseries to supply seedlings as part of implementation of the Agriculture Sector Plan 2021-2031.	This GEF project will establish synergistic implementation with the Demonstration Garden for Local Produce under Component 2, in particular in strengthening the capacities of nurseries, demonstration of compost making and installation and management of home gardening systems.
3) Ministry of Natural Resources and Commerce (MNRC). Division of Agriculture: ?Enhancing Nutrition Balance Through Agricultural Production Project?	MNRC/DoA is executing the project ?Enhancing Nutrition Balance Through Agricultural Production Project? with the objective to promote fruit and vegetable production and consumption, to further strengthen the correct concept and eating habits of the Marshallese people on balanced nutrition, thereby gradually reducing the risk of chronic diseases.	This GEF project will expand and replicate the demonstration of hydroponics carried out under the ?Enhancing Nutrition Balance Through Agricultural Production Project?. It will also expand on the farms planned on Arno Atoll, Kwajalein Atoll, and Jaluit Atoll, to increase the production capacities on these Atolls and to cover Wotje Atoll and Alinglaplap Atoll.
4) Ministry of Environment. Climate Change Directorate (CCD)/ UNEP GEF Project: Strengthening national-level institutional and professional capacities of Marshall Islands towards enhanced UNCCD monitoring and reporting	The CCD is the RMI National Focal Point for UNCCD. The GEF Enabling Activity Project will strengthen the capacity of the CCD in UNCCD reporting process in the context of the UNCCD Strategic Framework 2018-2030 and SDG15.3. The Project will update the RMI UNCCD National Action Plan and will introduce the concept of Land Degradation Neutrality to the RMI policy development processes.	Output 1.1.5 of this GEF project proposes the establishment of a LDN Working Group to lead the development of a LDN strategy and target setting Program in the context of the updated UNCCD NAP.

5) EU/ACP. Global Climate Change Alliance Plus (GCCA+) Scaling up Pacific Adaptation (SUPA**): ?**Lifestyle Changes and Climate Resilience in the Marshall Islands?	The EU funded GCCA+/SUPA project adopts a participatory and inclusive approach that addresses the vulnerabilities and the rights of all residents. It aims to enhance skills in climate resilience, particularly for island council members and community leaders. It focuses on the people living in the Delap-Uliga-Darrit communities in Majuro and in the communities in Jaluit. The project focuses its food security measures on increasing the availability of food crops by training community members to prune and replant fruit trees, remove senile trees and create home gardening at the household and school level. Health measures include healthy cooking classes, setting up exercise clubs with targeted activities for different groups, and the regular monitoring of basic health indicators.	This GEF project will establish synergistic implementation and build on the achievements and lessons learned from the GCCA+/SUPA project, including: - A desktop review of the capacity of Majuro Atoll Local Government to address the impacts of climate change. - Capacity Development Plan for Jaluit Atoll. - Agricultural Needs Assessment and Action Plans for Jaluit and Majuro. This GEF project will build on the above GCCA+/SUPA activities and expand them to the atolls of Kwajalein, Arno, Wotje and Ailinglaplalp.
6) UNDP/GEF Project: ?Looking to the Future: Strengthening natural resources management in atoll communities in the Republic of Marshall Islands employing integrated approaches (RMI R2R)?. (2017-present)	The RMI R2R project combines Biodiversity and International Waters focal areas and has as its objective ?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? through expanding and sustaining the RMI protected areas network, and improved governance for integrated atoll management, within the framework of the National Conservation Areas Plan (*Reimaanlok*).	The project will also support the operationalization of the Reimaanlok ? National Conservation Area Plan, and will contribute RMI?s efforts in meeting the Micronesia Challenge to effectively conserve at least 50% marine and 50% terrestrial by 2030. The RMI R2R is being implemented in 5 atolls: project is piloted on five (5) outer islands of Wotho, Mejit, Likiep, Aur and Ebon. The project will build on lessons learned from the RM?I R2R and expand operationalization of the Reimaanlok Framework in 6 different Atolls that are key to the National Food Systems Pathway, namely: Majuro, Kwajalein, Arno, Jalui, Wotje and Ailinglaplap.

7) Global Agriculture and Food Security Program (GAFSP): Small Islands Food and Water Project (SIFWaP)[79]. (under preparation)	The GAFSP/SIFWaP seeks to improve food, nutrition, and water security and livelihood opportunities in the small island communities by investing in community-, group-, and household-level projects. The project will sensitize communities to diagnose, prioritize, and implement activities that improve agricultural systems and ensure the production and availability of local, nutritious foods; mainstream climate change adaptation measures into agricultural production activities to increase climate resilience; and develop an enabling policy framework to address food, nutrition, and water security.	The proposed GAFSP/SIWaP components align well with component 1 of this GEF project, in particular the development of Atoll Food Systems Pathway Integrated Action Plans, which also focus on ensuring ownership by Local Governments and Traditional Leaders. Component 2 of GAFSP/SIFWaP will focus on community planning and awareness raising and will ensure the relevance, ownership and sustainability of these investments. Component 3 will improve the enabling policy environment, primarily at the national level, to facilitate access to resources and programmes supporting these results over the long term.
8) GCF: Addressing Climate Vulnerability in the Water Sector (ACWA) in the Marshall Islands[80]. (July 2019 ? Feb 2027)	This project will increase the resilience of water resources for drinking and hygiene in the Marshall Islands. Planned interventions include improving household and community rainwater harvesting and storage structures; and securing groundwater resources from seawater intrusion. The project will also strengthen the technical capacities of national and subnational institutions and key stakeholders to integrate climate change risks into water governance processes.	The GCF/ACWA project is developing a Drought Contingency Plan, Standard Operating Procedures (SOPs) and Water Safety Plan at the National level, and will establish community-based Water Committees. This GEF project will collaborate with the PMU of the GCF/ACWA project to strengthen integrated approaches in the water-food nexus, building on and aligning with the Plans mentioned above. This GEF project will also build on the water governance processes being strengthened by the GCF/ACWA as baseline that will serve to reduce competition for water between different users, thereby increasing the availability of water for agriculture (including urban), and improving its feasibility.
9) GCF: Pacific Resilience Project Phase II for RMI[81]. (March 2018 ? Feb 2024)	The project will focus on enhancing the resilience of coastal infrastructure in the densely populated areas of the capital Majuro and the island of Ebeye. It will include strengthening institutions and improving access to early warning and disaster preparedness. The proposed coastal infrastructure intervention has been shown to be the only feasible option to protect people and assets against sea level rise and storms.	This baseline investment in coastal resilience constitutes an essential element in integrated land/seascape management of atolls, but does not fully address linkages with sustainable food systems or the management of the land/seascape as a whole, and its different constituent land uses.

10) The Japanese Technical Cooperation Project II for Promotion of Regional Initiative on Solid Waste Management in Pacific Island Countries (JPRISM II).	The SWM/JPRISM II is implemented by the Japanese International Cooperation Agency (JICA) in partnership with SPREP. It aims to create a sound Solid Waste Management System in Majuro, and support the Majuro Atoll Waste Company (MAWC) in the implementation of the Solid Waste Management Plan for Majuro (2019 ? 2028). One of the strategic actions of the Solid Waste Management Plan for Majuro (2019 ? 2028) is ?Reduction of final disposal amount by composting and recycling?. As of May 2019, MAWC has signed a 30- year lease for some land in Laura, and has constructed a composting facility. MAWC plans to bring most of the green wastes coming in to the final disposal site to the compost yard at Laura.	This project will establish a link with the MAWC Composting Facility in Laura to distribute compost to home gardens and offer technical support to users of compost on soil health and as agro-ecological alternative to imported chemicals. As such the project supports a circular economy system linked to the production and consumption elements of sustainable green food systems.

3. The proposed alternative scenario

The Project Objective will be *to transform food systems and land/seascape management in the Marshall Islands to deliver integrated global environmental benefits and health benefits*.

The project will focus in particular on supporting the recognition of the values of traditional food system elements, particularly sustainable farming practices and traditional natural resource management and customary governance models, and their adaptive application within a context of evolving demographic, cultural, economic and climatic conditions in order to meet present and future nutritional needs in an environmentally sustainable manner. The project will contribute to LDN, by strengthening the institutional capacity to apply LDN concepts in monitoring integrated land/seascape approaches in food systems, in which spatial flows of agro-ecosystem services and interactions with food value-chains are addressed and promoted. This integrated approach ensures essential underpinnings of sustainability; environmental, productive and socio-cultural factors are considered in an integrated manner; and natural resources are subject to effective community-focused governance. This integrated food systems and land/seascape ecosystem-based approach is also designed to generate biodiversity benefits, by addressing flows of negative impacts on terrestrial and aquatic biodiversity resulting from poor land and ecosystem management in food production and along the value-chain.

The focus of the project on resilient local food systems based on integrated land/seascape approaches to the management of the natural resource base and ecosystem services which ensures environmentally-sustainable domestic food production will contribute to reducing the country?s reliance on imports from global food systems, which have proven to be highly vulnerable to global shocks such as the COVID-19 pandemic, as well as global

climate change and economic crises. Another dimension of integrated food systems and land/seascape approaches to the management of local natural resources is provision of sustainable and culturally-appropriate local livelihood support options, capable of supplying nutritious foods, ecosystem goods and services, employment and income, as fallback options or alternatives to the tourism, commercial fisheries and port-related employment on which much of the population currently depends and which has been heavily impacted by COVID-related restrictions.

The project will be highly strategic within the region given that similar challenges of growing population, urbanization, environmental degradation, climate change impacts, unsustainable food systems and nutritional problems are being faced by many other Pacific SIDS countries.

During the PPG process, the Government was going through the Cabinet approval process for the draft National Food Systems Pathway - Transforming the Marshall Islands Food System by 2030: Implementation Framework, developed in the context of the UN Food Systems Summit in September 2021[82]. During PPG consultations the Government expressed strong interest in framing around the project design around the 5 themes of the NFSP. These are:

1: Developing diverse and sustainable Blue food production and consumption
2: Expanding sustainable Green food production and consumption
3: Delivering lifelong nutrition and health education and awareness raising
4: Ensuring food safety in a complex system
5: Building inter-ministerial/cross-sectoral collaboration

The project will also complement and build on the achievements of the GEF/UNDP R2R Reimaanlok project (2017-2023) [83]. The integrated land/seascape approaches promoted in this project dovetails well with the ?ridge to reef? concepts applied to integrated atoll local resources management supported through the R2R project, building on this through the incorporation of the added dimension of sustainable food systems. The R2R project piloted the ?ridge to reef? concepts and integrated approach in the five (5) outer islands of Wotho, Mejit, Likiep, Aur and Ebon, including development of Local Resources Management Plans in these Atolls.

Project Localities

This project is proposed to be implemented on 6 atolls: Majuro, Kwajalein, Arrno, Wotje, Jaluit, Ailinglaplap. These Atoll have been selected based on population sizes and density, land areas, level of urbanization and the existence of areas with agricultural potential near to urban centres. These characteristics are summarised in the Table below.

Table 3: General characteristics of the 6 Atolls selected as project sites

Atoll	Population (2011)	Average	Atoll area	Land area	Population Density

	Total	% of national total (53,158)	household size	(km2)	(km2)	(population/km2)
Majuro	27,797	52.29	6.7	295	9.71	2863
Kwajalein	11,408	21.46	8.3	2,174	16.4	696
Arno	1,794	3.37	6.9	338.7	13.0	138
Jaluit	1,788	3.36	6.2	690	11.34	158
Wotje	723	1.36	6.4	624	8.18	88
Ailinglaplap	1,729	3.25	6.0	750	14.7	118

The 6 Atolls project sites also play key roles as ?hubs? in the food pathways and supply chain of local foods, including movement between the Atolls, between islands within the Atolls and on their way to export. The Figure below (prepared by the PPG team) provides a very rough picture of this movement of local foods. It shows that some of the local foods flow from the neighbouring islands to the project Atolls through movement of people to urban areas for employment opportunities or schools as in the case of Jaluit. The Figure also gives an overview of the 6 Atolls as ?food hubs? and why transport services is so crucial, yet one of the biggest hurdles, to transforming the national food systems for food security and sustainable livelihoods for all of RMI.

Figure 2: Overview of flow of local foods showing the 6 Atolls as food hubs[84]

(i)Theory of Change

The project?s Theory of Change (TOC) is shown in Figure 3 below which illustrates the overarching principles of ?food sovereignty? as the guiding principle for achieving the project?s objective *to transform food systems and land/seascape management in the Marshall Islands to deliver integrated global environmental benefits and health benefits*. The TOC accounts for the logical model that this objective will be achieved if the outcomes in the four components are achieved. These components are: (1) favourable enabling conditions are in place for integrated environmental and food system management, (2) sustainable food production is enhanced in sustainably managed land/seascapes, (3) favourable value-chain conditions are created for sustainably-produced and nutritious food, and if (4) knowledge is created and shared.

Building on the logical model, the TOC highlights several assumptions identified and elaborated upon in close consultation with stakeholders during PPG consultations, as described in Annex I2. These assumptions are highlighted in light red oval shapes in Figure 3. They add clarity to the local realities against the conditions that need to be place to achieve the outcomes and objective. They build on the vertical logic of the logical framework model as follows: *if* the Outputs are delivered *and* assumptions addressed, only *then* will the Outcomes be achieved; and *if* the Outcomes are achieved *and* assumptions addressed, only *then* will the Objective be realised.

At the Outputs level, the assumptions recognise factors such as the very heavy workloads that Government Officials carry because of the limited number in the workforce compared to the responsibilities they have to share. The project will address this, for example, by strengthening capacities through partnerships with regional technical partners and ensuring international consultants and contractual services have capacity development components in their ToRs. At the community level, the assumptions include: that the buy-in of communities and private sector are secured; that youth are motivated to participate in SLM and local food production; and women participation will not be hindered by unequal workload at home. These assumptions are underpinned by socio-cultural aspects of society and points to why ?food sovereignty? was raised by stakeholders in PPG consultation and agreed as an important guiding principle for the project.

Some of the assumptions identified during the consultations are beyond the scope of the project, including the limited availability of transport services which will remain one of the most important factors impacting value-chains. The TOC also shows the external pressures and threats at the Outputs level, such as climate change and sea-level rise, urbanization, and socio-economics and socio-cultural changes.

At the Outcomes level, the key assumptions include: that there is coherence in policies and regulatory frameworks on LDN; that good land governance based on traditional and customary tenure system of ?*mo*? will facilitate access to land for food production; that institutional and human resources capacity exist for SLM and integrated landscape/seascape approaches and food system management, incorporating CC resilience, sustainability of livelihoods, gender equality; and there will be adequate scientific and analytical capacity for LDN science-policy interface.

To achieve the objective of bringing about transformations in the RMI food system, the proposed outputs takes into consideration the key features and guiding principles of the Scientific Conceptual Framework for LDN (LDN-SCF)[1]. Figure 4 below, depicts how the project design takes these key features and guiding principles of the LDN-SCF into consideration, illustrating where the various outputs contribute and relate to each other in the interface of science and policies, as related to LDN. The conceptualization in Figure 4 also provides an illustration of how the project will address the project assumptions identified in the TOC, as mentioned above. On the policy side of the LDN science-policy interface, Figure highlights project interventions in terms of outputs that will contribute to strengthening policies, strategies and action plans to provide the enabling environment for inclusive participation and behaviour change required for transforming the food system through SLM and landscape/seascape approaches. In this regard, it is important to note that in terms of coherence in policies and regulatory frameworks, the concepts of LDN have not yet been introduced to the RMI national planning processes, primarily because the latest version of the RMI UNCCD National Action Plan was developed in 2012, which predates the UN Conference on Sustainable Development (Rio+20) and adoption of SDG 15 target 15.3 in the new UNCCD 2018-2030 Strategic Framework. The RMI will however be participating in a UNEP/GEF Enabling Activity project that will support the update of the RMI UNCCD NAP

and this project will ensure collaboration and synergistic implementation under Output 1.1.1 and Output 1.1.5 which will support the development of a LDN Strategy and target setting program, aligned with SDG target 15.3. While LDN has not been introduced as a policy objective, the concepts of SLM and landscape/seascape approaches have been mainstreamed into policies such as the NSP (2020-2030), ASP (2021-2030) and NBSAP (2000)/CBD 5th National Report (2017) and several baseline projects will contribute to provision of datasets for LDN indicators.

On the science side of the LDN science-policy interface, Figure 4 shows the project interventions in terms of outputs that will contribute to the science (both modern and traditional knowledge) and technical aspects of the assumptions identified in the TOC, focusing on project interventions that will strengthen LDN scientific and technical capacity to account for land-based natural capital and ecosystem services. In this regard, Figure 4 depicts how the various outputs contribute to, or impact/drive the flow of, land-based natural capital and ecosystem-services in transforming the food system and illustrates how the various outputs facilitate, promote and support the adoption of SLM practices to avoid and reduce new land degradation and losses in ecosystem services, and implementation of restoration and rehabilitation measures to reverse past land degradation and losses in ecosystem services, as per the LDN response hierarchy of avoid > reduce > reverse, outlined in the LDN-SCF.

To align with national priorities in existing national policies, strategic and action plans, the project aims to achieve neutrality at the Atolls level through work plan activities to be outlined in Atolls Food System Pathway ? Integrated Action Plans (Output 1.1.2), linked to the National Food System Pathway (Output 1.1.1) and other national policies such as the ASP and NBSAP. The focus on the Atolls level ensures alignment of the project with the existing efforts in developing and implementation of Local Resources Management Plans (LRMP) under the Reimaanlok Conservation Area Management Planning Framework (2018). The LRMPs places focus on community-based conservation at the Atolls level and recognise the importance of good land governance based on traditional and customary tenure system of ?*mo*? (or ?tabu?) - a traditional system of chiefly-designated portions of land, a whole islet, or a reef area, as restricted sites for the purpose of natural resource conservation, with oversight by Traditional Leaders and link to the national level support through the respective Local Governments of each Atoll.

Many of the issues raised in multi-stakeholder consultations during the project design phase highlighted the importance of the socio-cultural aspects of food systems and pointed to the principles of ?food sovereignty? as the guiding principle for the project, as mentioned above. The project will therefore, focus on supporting locally-relevant LDN indicators for measuring the globally defined LDN metrics[2] for SDG 15.3, and in this regard, the project will ensure the datasets in the proposed LDN indicators database (Output 1.1.5) include traditional knowledge of the communities and their knowledge of people-nature interactions that have defined their identity and cultures. As such, the datasets will include data and ethnobiological knowledge such as varieties of traditional crops (breadfruits and pandanus) in local language. The development of the LDN datasets will be guided by the LDN Strategy and targeting setting program, supported by the AFGSO program (Output 1.2.1). The project will also build on datasets collected through baseline activities already being carried out by MNRC under co-financing, such as the coconut census and land vegetation assessments, in partnership with USFS and MICS.

[1] Orr et al. (2017): Scientific-Conceptual Framework for Land Degradation Neutrality. <https://www.unccd.int/publications/scientific-conceptual-framework-land-degradation-neutrality-report-science-policy>

[2] Land Productivity, Land Cover, Soil Organic Content

Figure 3: Diagrammatic representation of the Project?s Theory of Change

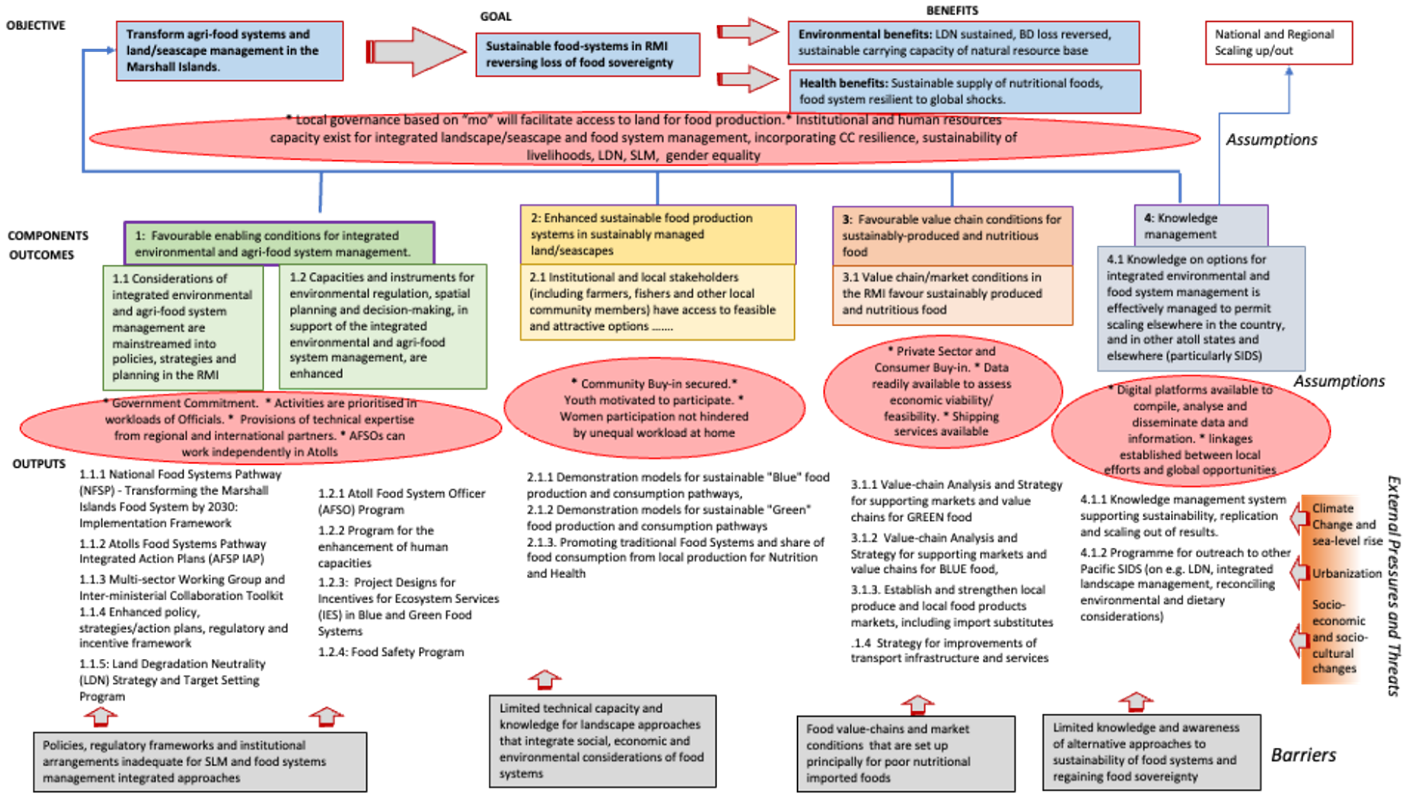
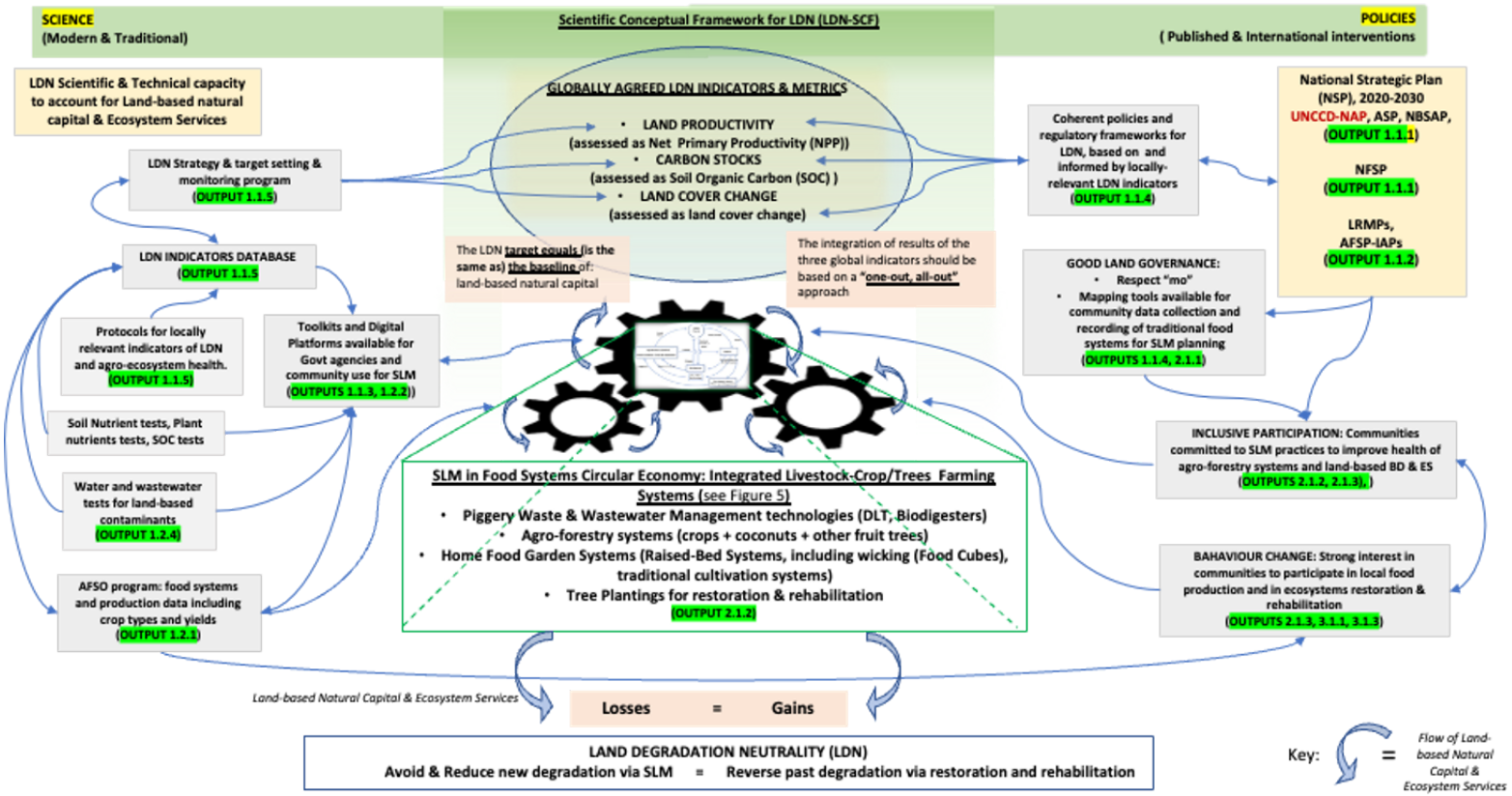


Figure 4. Project conceptualization of Land Degradation Neutrality (LDN) Science-Policy Interface



(ii) Project Components

Component 1: Favourable enabling conditions for integrated environmental and food system management

Outcome 1.1 Considerations of integrated environmental management and food system are mainstreamed into policies, strategies and planning in the RMI

This Outcome, if achieved, will strengthen the mainstreaming of the integration of food systems and land/seascape management of the natural resources upon which food systems rely, into the policies, strategies and planning processes. One of the barriers identified in section 2 above is the

current policy, planning and institutional conditions fail adequately to provide for integrated approaches to food system sustainability that address land degradation and biodiversity/ecosystem loss.

Another key challenge identified in the PPG review of existing policies, national strategies and action plans as summarised in baseline section 2(i) above, is the weak coordination mechanisms across sectors and between Ministries, in particular, the absence of a high-level coordination mechanism for the NSP (2020-2030). While this was identified as a key hurdle, the Government senior officials during PPG consultations advised against establishing any new high-level decision-making body because they would not be able to participate due to their existing heavy workloads, including their roles in the negotiations of the Compact of Free Association (COFA) with the United States and in Committees responsible for Covid19 responses. Instead of establishing a new high-level body to coordinate the integration of environmental management and food system, the project will build on existing inter-ministerial/cross-sectoral mechanisms such as the Coastal Management Advisory Council, which provides the oversight and strategic guidance on the Reimaanlok framework implementation. This will ensure the oversight in the transformation of the food system take into consideration the protection of biodiversity and ecosystem services and will strengthen the mainstreaming of land degradation neutrality.

Output 1.1.1: National Food Systems Pathway (NFSP) - Transforming the Marshall Islands Food System by 2030: Implementation Framework

During PPG, the Government of the RMI had commenced the Cabinet approval process for the draft NFSP, which sets out principles, strategies and a detailed road map for addressing the country?s food needs in an environmentally sustainable manner in the medium term. It recognized numerous challenges faced by RMI related to the natural environment, climate change and its nuclear legacy that together, highlight the need for a transformation of the RMI food system to one that is more sustainable and resilient to external factors. There were extensive consultations with stakeholders during the National Dialogues held in July and August 2021 as part of RMI?s commitment to the United Nations Food System Summit 2021. This output will support further multi-stakeholder dialogues and consultations to support the Cabinet approval process and to raise awareness of the NFSP by stakeholders especially at community level.

In addition, the project will support multi-sectoral participatory processes for developing and finalising an Implementation Framework for the NFSP. The proposed Implementation Framework will support and ensure linkages with existing sector-based policy, strategy and planning instruments outlined in the baseline section of the project document above, namely: the National Strategic Plan (2020-2030); Food Security Policy (2013), Agriculture Sector Plan (2021-2031); National Biodiversity Strategy and Action Plan2017; and Reimaanlok Conservation Area Management Planning Framework (2018). The NFSP Implementation Framework will also be integrated with the development of a LDN Strategy and target setting program (Output 1.1.5) to strengthen support to the adoption of SLM practices and landscape/seascape approaches in the food system. The development of an Implementation Framework for the NFSP will be a collaborative and negotiated process that will involve both public and private sector actors, given the key roles that private sector actors (especially food retailers) play in shaping food demand and determining the nature of food supply, and their need for favourable business conditions to enable them to make positive contributions to food system sustainability and healthy diets.

Output 1.1.2: Atolls Food Systems Pathway Integrated Action Plans (AFSP IAP)

The Reimaanlok framework for conservation of terrestrial and marine ecosystems to meet the Micronesia Challenge 2030 targets, places focus on empowering communities and encouraging their participation in developing Local Resource Management Plans for their atolls, including conservation plans and fisheries management plans, by acknowledging the existence and value of their knowledge and of their local governance. The local level governance of natural resources in RMI encapsulate the importance of ?*mo*? (or ?tabu?), the traditional system of chiefly-designated portions of land, a whole islet, or a reef area, as restricted sites for the purpose of natural resource conservation.

During PPG, it was recognised that traditional knowledge and local level governance of natural resources - based on the customary land tenure system of ?*mo*? - are crucial to implementation of the NFSP. It was also recognized that different Atolls have very specific challenges, issues and priorities that would impact on the operationalization of the NFSP at the Atolls level. A consultations workshop held on 7th October 2022 with Local Governments and Traditional Leaders of the 6 Atolls selected as project sites, discussed and endorsed the development of Atoll-specific Food Systems Integrated Action Plans to operationalize the NFSP in their Atolls. The project will support participatory processes to develop AFSP-IAPs in the 6 Atolls, linked to the LRMPs developed under the Reimaanlok framework 8-step process, which will ensure the communities have ownership and oversight through their Local Resources Committees. The development of AFSP-IAPs will be aligned with the LDN Strategy to be developed under Output 1.1.5 to ensure to be implemented will either avoid and reduce new land degradation and losses in ES through SLM practices or reverse past land degradation and losses in ES through restorative and rehabilitation activities, and that they contribute to the locally-relevant LDN indicators and targets.

Output 1.1.3: Multi-sector Working Group and Inter-ministerial Collaboration Toolkit for integration of SLM and Landscape/Seascape Management approaches in the Food Systems Pathway

One of the 5 themes of the draft NFSP is to strengthen inter-ministerial/cross-sectoral collaboration. In this regard, the project will facilitate the establishment of a multi-sector and inter-ministerial Working Group, with permission of Government and in the context of the NSP and CMAC to support implementation of the NFSP. As mentioned above, the Government senior officials, during PPG consultations, agreed that their heavy workloads would not allow time to participate in a high-level decision-making body. The CMAC however is functioning well in providing the oversight and strategic guidance on the Reimaanlok framework implementation and in providing strategic guidance on national efforts in reversing losses in biodiversity and ecosystem services. Instead of establishing a separate high-level decision-making body, it was proposed to explore during the inception phase the possible expansion of the scope of CMAC to include considerations of food systems issues, and to establish a mechanism at the working group level to support implementation of the NFSP.

As part of the NFSP Implementation Framework (Output 1.1.1), the project will develop procedures for coordinating the proposed NFSP Working Group, and materials as toolkit to support Working Group engagement and as 'How To' guide for coordination. The project will organize an Inception Workshop and organize ongoing meetings.

By establishing linkages with the Reimaanlok oversight process, the proposed NFSP Working Group will become a permanent entity that will outlive the project itself and support ongoing negotiation and adaptive management of food systems issues into the future. The NFSP Working Group will be closely linked to the proposed LDN Working Group under Output 1.1.5 to ensure efforts for managing land-base natural capital and ecosystem services are well coordinated, as per the LDN-SCF and UNCCD Checklist for Land Degradation Neutrality Transformative Projects and Programmes.

Output 1.1.4: Review and update of sector policies, strategies/action plans, and regulatory framework to ensure coherence with the NFSP

The project will support a synthesis of existing policies, strategies/action plans, regulatory and incentive frameworks to identify aspects related to food systems and land/seascape management of the natural resources base. The project will also carry out an analysis of the draft NFSP in terms of its alignment with existing policies, strategies/action plans, regulatory and incentive frameworks, in order to make recommendations for strengthening the integration, harmonization and coherence across and between them and to identify opportunities for strengthening integration of food systems with SLM and landscape/seascape approaches in planning processes. Based on this review, the project will support the drafting of necessary and recommended adjustments, in particular in the 5-review ASP, the update of the UNCCD NAP, and in the preparation of a new NBSAP, focusing on support for good land governance and incentives for communities to adopt SLM practices to avoid and reduce new land degradation in food production and to implement ecosystem restorative and rehabilitation activities to reverse past land degradation and biodiversity losses.

Output 1.1.5: Land Degradation Neutrality (LDN) Strategy and Target Setting Program to support planning and decision making as related to the Food Systems Pathway.

The concepts of land degradation neutrality have not yet been introduced to the RMI, primarily because the latest version of the RMI UNCCD National Action Plan was developed in 2012, which predates the new UNCCD 2018-2030 Strategic Framework and the UN Conference on Sustainable Development (Rio+20) that outlined the SDG 15 target 15.3. The RMI will be participating in a UNEP/GEF Enabling Activity project that will support the update of the RMI UNCCD NAP.

The project will establish collaboration and synergistic implementation with the GEF Enabling Activity project and will support the establishment of a LDN Working Group to lead the development of a LDN strategy and target setting Program in the context of the updated UNCCD NAP. The project will also provide provision for regional and international technical expertise to provide scientific and analytical capacity development, to carry out a full assessment of land degradation in the RMI and support the identification, and development of locally relevant LDN indicators with associated datasets for measuring LDN metrics that reflect priorities of communities and ensure alignment with the NFSP in terms of integration of food systems and landscape/seascape management. In addition, the project will support the design of a LDN database to compile and analyse local LDN indicators and datasets under LDN metrics of: Soil Organic Carbon; Land Productivity, and Land Cover Changes, building on datasets being gathered and compiled by MNRC on vegetation cover and on coconut and breadfruit census. It will also include the relevant datasets to be collected by the AFSO program under Output 1.2.1.

Outcome 1.2 Capacities and instruments for environmental policies, spatial planning and decision-making, in support of the integrated environmental and food system management, are enhanced

This Outcome, if achieved, will address the limited technical capacity and knowledge of technical options for environmentally- and socially-sustainable landscape management integration with farming and food systems.

Output 1.2.1: Atoll Food System Officer (AFSO) Program for food system natural resource base and local knowledge data recording and reporting to inform planning and decision-making.

The project will develop and deliver a structured training program and establishes a network of skilled Atoll Food System Officers deployed across the 6 Atolls. The AFSOs will work with communities to record local knowledge sets under a changing climate, as well as to identify opportunities (and establish initiatives) to develop sustainable, climate-resilient green and blue food production systems to increase local resilience to climate change, enhance local food and nutrition security, and to strengthen national food sovereignty. By ensuring accurate recording and reporting of data, this program further enhances national data sets, including for the LDN database mentioned above, and will provide a living census of food production across the RMI. The AFSO program will support indigenous knowledge, food security and adaptation, and the need for the expansion of scientific capacity within and beyond governments. Recording local knowledge enhances understanding of climate and ecosystem changes at the community level, informing ongoing skills development in planning and decision-making in support of SLM practices and of ecosystem restorative and rehabilitation interventions.

The AFSO program activities to be support by the project include: a wide-ranging data and knowledge audit to collect and assess existing food systems related knowledge sets, data, policies and initiatives; development of an AFSO Training Program curriculum; , including in agro-ecosystem management ; development of data recording and reporting tools; recruitment of a gender-balanced team of AFSOs for each of the 6 project Atolls; provide training and deployment of AFSOs; and initiate a ?living national census? of food production - data collation and analysis.

The data recording tools will include mapping tools with georeferencing capabilities and functionalities that allow the datasets to be used for spatial planning purposes. The ?living national census? will be in the form of a Knowledge Recording and Reporting System and will be populated with food production and consumption-related datasets, traditional ecological knowledge and agro-ecosystem datasets relevant to locally-relevant LDN indicators. The functional System will contribute and be linked to the work of the NFSP Working Group (Output 1.1.3) and LDN Working Group (Output 1.1.5) including the LDN indicators database, to inform planning and decision making as related to SLM practices and landscape/seascape approaches.

As well as data recording and reporting activities for the proposed Knowledge Recording and Reporting System, the AFSOs will receive ?training as trainers? on mainstreaming biodiversity and agro-ecosystem approaches in food/production landscape sectors so they can act as Field Officers for the project to coordinate and support implementation of the project work plan activities. As mentioned in the section on barriers, MNRC has very limited human resources capacity for extension services and the Agriculture Division has no presence in the outer Atolls. It is envisaged that the AFSO program will contribute to addressing this barrier and the AFSOs will become part of the MNRC extension services beyond the life of the project.

Output 1.2.2: Toolkits and training program for the enhancement of human capacities in landscape/seascape approaches and SLM practices for implementation of the National Food System Pathway and Atoll-specific Food System Pathway Action Plans

Several 'How-to" Manuals and Toolkits related to management of natural resources in local food production and marketing have been developed under baseline programmes and previous initiatives, including but not limited to the Reimaanlok R2R and GCCA+/SUPA. The project will review all the existing Manuals and toolkits to identify gaps and training needs aligned with the AFSO training program in 1.2.1. focusing on tools for SLM practices in food production and landscape/seascape approaches for effective management of natural resources. Based on this review, the project will support the development of new 'How-to" Manuals and Toolkits to fill the gaps in training needs as related to ecosystem restoration and rehabilitation activities, SLM and landscape/seascape approaches for effective management of the natural resource base for local food production.

The project will also provide gender-inclusive training and Farmer Field Schools for the 6 Atoll communities using the toolkits/How To Manuals mentioned above to support implementation of integrated food systems and landscape/seascape approaches for effective management of natural resources priorities in AFSP-IAPs, including but not limited to:

- Soil health: composting, biochar, home-made liquid fertilizer (e.g., from seaweed);
- ecosystem-based alternatives such as use of mucuna as ground cover for soil fertility and conditioning in agro-forestry systems
- restorative measures and ecosystem rehabilitation in agro-forestry systems through better spatial planning and selection of crop varieties and tree species;
- climate and environmental risk management;
- Food processing and food preservation (both traditional and modern);
- Home Gardening systems
- Post-harvesting;
- seed saving methods and seedlings;
- nursery installation, operation and management;
- livestock (piggery) waste management technologies;
- climate and environmental risk management; and
- ecological labelling of food products for markets.

Output 1.2.3: Project Designs for Incentives for Ecosystem Services (IES) as enabling policy framework and coordination of policy instruments for strategic planning towards protection of BD and ES in Blue and Green Food Systems

Incentives for ecosystem services (IES) can provide an enabling policy framework for supporting sustainable agriculture and the protection of biodiversity and ecosystem services in production land/seascapes. Improved coordination of policy instruments through such a framework can enable strategic planning and investment in agricultural and environmental measures that are co-financed from multiple public and private users of ecosystem services[86]. In the context of the RMI, ecosystems-based approach to sustainable production provide the opportunities to apply IES to the sustainable production of blue and green foods.

Blue food production, particularly off-shore fisheries, is central to the economy, culture and environment of the RMI, and offers great potential for expansion and development. Conversely, there is a general lack of agricultural activity in the RMI, resulting in a limited supply of fresh, nutrient-dense produce to households and markets. As mentioned above, agriculture at the household level, specifically home gardens, has been de- prioritized in favor of copra production. There is, therefore, a critical need to increase engagement in agriculture. Though the status of these sectors is very different, both offer scope for development, and in both cases this development must be sustainable. In addition, the recent COVID-19 pandemic has disproportionately impacted female employment, with a loss of tourism driving down women?s incomes. Developing Incentives for Ecosystem Services (IES) or Payment for Ecosystem Services (PES) schemes offers the opportunity to increase sustainability in the blue foods sector, to expand engagement in agriculture and green foods sector in a way that is sustainable, and to create greater employment and income-generating opportunities for women[87].

In terms of the RMI blue foods system, this can be considered in terms of near-shore and off-shore fisheries, and aquaculture/mariculture. In relation to the RMI green foods system, there is a need for the development and expansion of sustainable small-scale agricultural activity.

Aquaculture-focussed IES scheme

An aquaculture-focussed IES scheme would build on current pilot projects to ensure their sustainability, enabling them to evolve from a pilot project with a limited life cycle to a fully established industry. For example, it would be possible to build on the work being undertaken by Aquaculture Technologies of the Marshall Islands (ATMI), which support women on outer atolls by providing training to carry out the daily activities of moi fish and seaweed aquaculture, and developing their administrative and managerial skills to enable them to run a successful commercial food production operation. An aquaculture IES scheme would support the expansion and ensure the financial sustainability and continuity of this type of work.

The requisite financial support/incentive could be raised in a number of ways and with different partners. For example, major retailers could buy moi fish, seaweed and sea vegetables directly from the producers, with a percentage of sales revenue being channelled back to the aquaculture project. While this re-investment in the project need not be large it would be enough to enable, for example, the purchase of seaweed seeds, the transplanting of seaweed, the purchase of moi eggs/larvae or fry to cultivate or feed procurement.

Linking near-shore and off-shore fisheries IES scheme

Near-shore and off-shore fisheries are interrelated ecosystems, and this can be reflected through establishing an IES scheme whereby off- shore fisheries support the ecosystem-based management (EBM) of near-shore fisheries.

With high levels of revenue generated via fishing access fees paid to access RMI waters, one option is to channel a small fraction of this income to pilot projects supporting near-shore ecosystem-based management and biodiversity conservation. For example, utilizing 3% of the revenue from 2017 access fees would deliver more than $1 million for such projects. Another option for the provision of funding would be via income generated through fines associated with the enforcement of regulations regarding illegal, unreported and unregulated fishing activity. The ornamental fish/aquarium fish export trade should also be brought into the scheme; ornamental fish, coral and shells are, respectively, the first, second and third most exported near-shore/coastal fishery ?products? in the RMI. The engagement of the aquarium trade could directly support stock replenishment and habitat conservation, both of which should be critical aspects of this IES scheme.

The financial input into the scheme would benefit near-shore fisheries by not only supporting stock replenishment, but also coral reef transplanting and rehabilitation activities, as well as the implementation, monitoring and enforcement of no-take zones/protected areas. Thus, ecosystem- based management of near-shore fisheries could be established under this scheme. Furthermore, it would support food and nutrition security, particularly for those dependent on subsistence fishing (i.e., outer atoll communities).

Linking Agriculture with Copra Production IES scheme

Agriculture is traditionally a key component of the Marshall Islands? economy, with an emphasis on permanent crops and plantations. Nearly all families were once involved in agriculture, however, the 2011 national census reported a small majority of 52% of households being engaged in raising crops. As mentioned above, underutilized land with the potential for conversion to agriculture is limited in the RMI, the soil conditions are generally poor, and few people are engaged in farming. The production of copra on the other hand is a significant industry across the RMI with the price of copra approximately tripling by unit weight in recent years, which has naturally encouraged an increase in household emphasis on the harvesting of coconuts and production of copra. One impact of this, however, is the disincentivization to grow diverse crops, grow a home garden or undertake artisanal fishing and to instead use the increased household income to purchase imported foodstuffs.

There is, therefore, an opportunity to link agriculture to copra production. Establishing an IES scheme that supports the rehabilitation of ecosystem-based agricultural diversification can help reverse the decline in agricultural diversity and home gardens.

The use/sale of foods produced under this scheme must be considered. The scheme can be linked to school nutrition projects, ?buying back? produce from home gardens for use in school meals.

A portion of the revenue entering into the scheme could be used to support community seedbanks, ensuring any activities are developed in harmony with existing initiatives and projects. In addition, revenue collected through the scheme could be used to support female agricultural entrepreneurs.

Such a scheme integrates corporate social responsibility into a key RMI industry, supports alternative incomes for households and farmers, contributes to the revitalization of home gardens, supports increased agrobiodiversity and enhances gender inclusiveness and alternative incomes for women. The scheme therefore benefits women directly, but also children and entire households, as well as linking food and nutrition security with food education.

While the concepts of the three IES schemes above have merits, it is recognized that they, or similarly IES/PES approaches would require extensive consultations with many potential stakeholders and partners over an extended period of time. Due to the complexities of the potential IES scheme projects and the extensive consultations required for their development, this GEF project will contribute to a participatory consultative process towards their project designs, only as far as to allow MNRC to consider their inclusion in the NFSP implementation framework.

Output 1.2.4: Ecosystems restorative measures to reverse loss of Ecosystem servicces from coastal land-based contaminants affecting food safety

The 2021 draft NFSP recognise the RMI food system require the implementation and enforcement of adequate measures to ensure the safety of foods within the system and preserve the health of individuals and communities. The sources of contaminants entering the food system and causing eutrophication and pollution of coastal areas include the runoff of wastewaters from highly population density areas and inadequate sewage and animal waste management systems. A recent assessment by the Marshall Islands Environmental Protection Authority (MIEPA) found that 9 out of 10 ocean and lagoon locations in Majuro were badly polluted, often with disease-causing bacteria associated with human and animal waste. These coastal land-based contaminants cause significant losses to provisioning ecosystems services in terms of food supply as they affect the safety of in-shore fish and other aquatic foods.

[88]

The project will identify sites where provisioning ecosystems services in terms of food sources are lost due to land-based contamination affecting food safety, then procure services of a Food Safety Specialist from a reputable laboratory to analyse soil, plants, fish and runoff water for contamination at selected sites. The results will inform communities on safety of foods and provide incentive to reduce sources of contaminants and restore ecosystem services through SLM and landscapes/seascape approaches as restorative measures for inclusion in their AFSP_IAPs, including adoption of appropriate technologies for managing human and livestock waste, and planting mangroves, trees and coastal cover crops that can absorb contaminants.

Component 2: Enhanced sustainable food production in sustainably managed land/seascapes

Outcome 2.1: Institutional and local stakeholders (including farmers, fishers and other local community members) have access to feasible and attractive options for resource management and restoration and food production that contribute to land degradation neutrality, and ecosystem conditions and services.

This Outcome, if achieved, will provide farmers, fishers and other local community members with options to incentive and support them to adopt and implement environmentally- and socially-sustainable integrated approaches in local production of green and blue foods. The specific activities to be

implemented in each Atoll will be informed by the priorities identified in their AFSP-IAPs and LRMPs, in close consultation with their Local Resources Committees.

Output 2.1.1: Demonstration models for sustainable ?Blue? food production and consumption pathways, featuring landscape concepts, seascape management, aquaculture, sustainable harvesting of in-shore species, nature-based solutions and circular economy solutions

The project will synthesise the LRMPs of each Atoll and in conjunction with the development of their AFSP-IAPs, identify and support implementation of SLM practices and priority near- and in-shore ecosystems restorative measures with positive impacts on food systems that contribute to meeting RMI?s commitment under the Micronesia Challenge to effectively manage 50% of its marine resources.

The project will support implementation of the identified key priorities related to blue foods in LRMPs and AFSP-IAPs, in collaboration with Private Sector and close consultation with Local Governments, including but not limited to:

- moi fish
- seaweed farming
- giant clams, trochus
- coral gardening
- development strengthening enforcement of conservation ordinances.

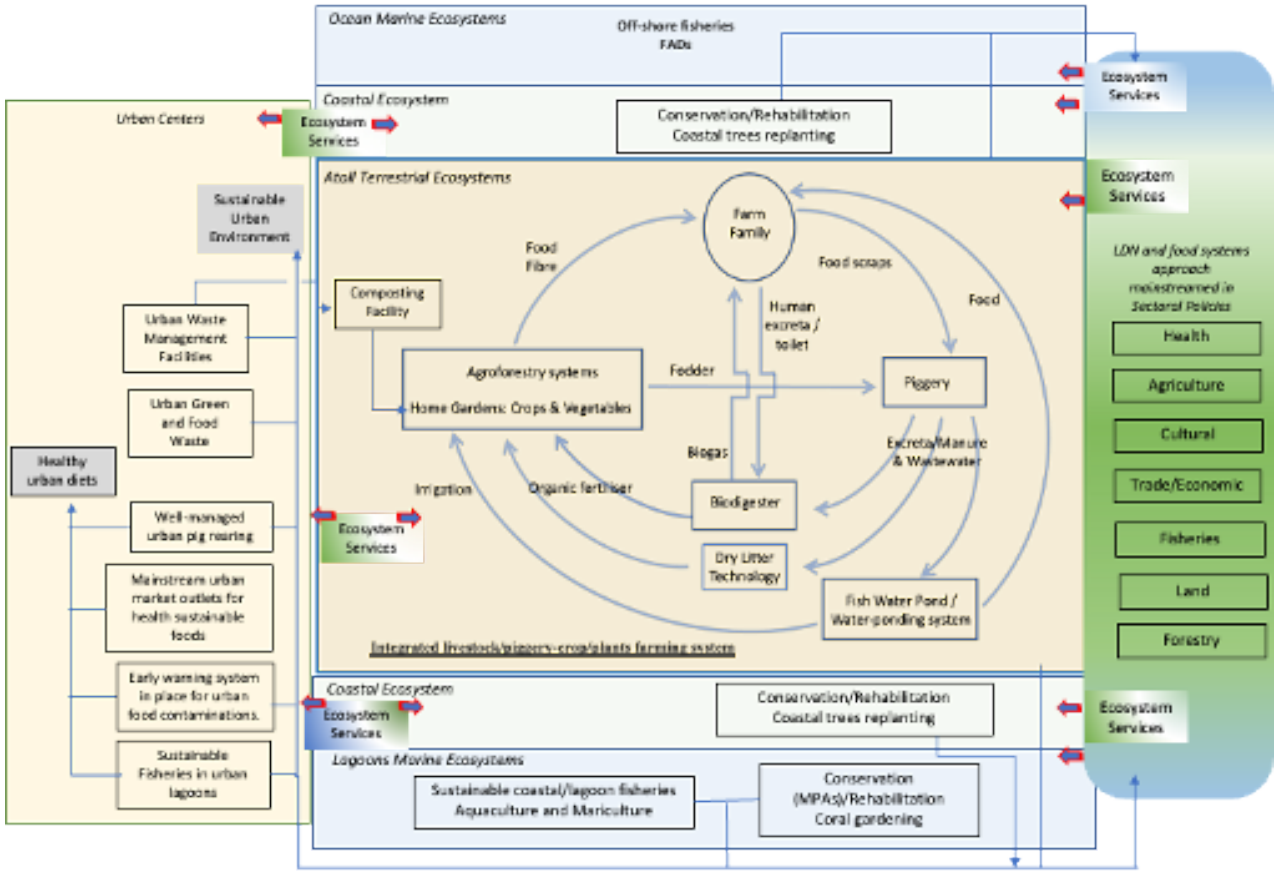
The project will also support Nature-based Solutions (NbS) in coastal areas, including mangroves and trees replanting to rehabilitate habitats.

Output 2.1.2: Demonstration models for sustainable ?Green? food production, featuring landscape concepts, landscape resources management, sustainable land management, integrated farming systems, nature-based solutions and circular economy solutions

The project will synthesise the LRMPs of each Atoll and in conjunction with the development of their AFSP-IAPs, identify and support implementation of SLM practices and priority land-based ecosystems restorative measures with positive impacts on food systems that contribute to meeting RMI?s commitment under the Micronesia Challenge to effectively manage 30% of its terrestrial resources.

The project will promote, where feasible, appropriate to local situations and conditions (e.g., availability of feed, water and labour) and has the buy-in of local communities, the establishment of livestock-plants/crops integrated farming systems as key component of a circular economy model and to illiustrate nature-based solutions in practice to be promoted by the project.

Figure 5: Depiction of the land/seascape circular economy model to be supported by the project



The integrated livestock-crop/plants farming system revolves around the needs for wellbeing and livelihood of the farm family through improved provisions of ecosystem services in terms of food, fibre and biogas energy for cooking. It is based on concepts of integration, agroecology and circular economies through the recycling and retention of carbon, nutrients and moisture within the system. The benefits include:

- Piggery effluent is channelled into on-farm biodigesters that will provide an energy source on-farm use (including for the small-scale processing/value-adding of agricultural products), resulting in avoidance of GHG emissions and of contamination of soil, freshwater and atoll/coastal waters by effluent runoff;

- Biodigester residues will be used as organic fertilizer for vegetable production (on farm, and potentially for distribution/sale to local farmers), avoiding the need for application of non-organic fertilizers.
- Improved soil fertility from organic fertilizer will increase yields and vegetation cover, contributing to reduction in land degradation.

In most cases, the conditions are not feasible or suitable or have the buy-in of communities to integrate the various components of an integrated farming system illustrated in Figure 5. The various components can nevertheless be established separately and as standalone activities in implementing the identified priorities and support adoption of SLM practices and agro-ecosystem approaches in green food production. These activities include:

- Establish and support agro-forestry systems, including implementation of NbS and ecosystems-based agricultural production and management within agro-forestry system to improve productivity, vegetation cover and soil organic carbon.

- Establish and support livestock (pigs and chickens) that may potentially be components of livestock-crop integrated farming systems and as circular economy solutions.

- Establish and support Home Gardens as standalones or as component of livestock-crop integrated farming systems as circular economy solutions, including but not limited to: raised-bed gardens (standard, wicking, key-hole), aquaponics systems.

- Sustainable seed and seedlings supplies through nurseries.

- Provisions for piggery and poultry farming construction, shelter and fencing materials.

- Install livestock waste management technologies (biodigesters and dry litter) appropriate for local situations as components of integrated livestock-crop farming systems as circular economy solutions, as shown in Figure 5.

- Support a coconut rehabilitation and replanting program to improve production capacity and vegetation cover.

- Propagate and plant trees and crops of high cultural, medicinal and nutritional values and those that are becoming rare.

More specifically in Majuro, the project will explore linkages with the production of compost from organic waste isolated out from the landfill in a Compost Facility established in Laura island under the PRISMII JICA project, managed by the Majuro Atoll Waste Company (MAWC). During PPG, the General Manager of MAWC reported they are already making compost but are looking a supply of fish waste to improve quality. There are not enough volume yet to sell.

Output 2.1.3: Reviving traditional nature-based food production systems and share of food consumption from local production.

Among the priority actions identified in the RMI Agriculture Sector Plan 2021-2031 is to implement key practical strategies for increasing and diversifying local food production, including climate-resilient crops and replanting traditional foodstuffs (e.g., panadus, koin, konnat, lukweetc) to reduce import dependency. The ASP recognises some of the varieties of species like pandanus, taro, breadfruit, coconuts, dwarf banana, traditional fruits and sources of traditional medicines are now endangered. Traditional knowledge of surrounding ecosystems that was the foundation of

traditional nature-based approach to farming and caring for domestic and traditional plants and animals has been eroding. Even traditional forms of food preparation and preservation are unknown to many young people. Loss of traditional agroforestry knowledge has accompanied the decline in engagement in agriculture activities by Marshallese households.

The project will support activities to increase traditional food production and improve the biodiversity and resilience of the traditional food production systems and to introduce trees including coconuts into the farming systems.

The project will also support a campaign to promote 'eat local' and One Island One Product to support efforts to increase consumption of locally grown foods promote consumption of local farm produce to households, schools, hospitals, prisons, cargo vessels, and other functions serving foods. In addition, the project will support the demonstration of, and training on, traditional food preservation techniques to be provided by community Elders targeting youth and schools. Furthermore, the project will build on existing programs to expand development of recipes books for local foods and expand cooking demonstrations activities, including in schools.

Component 3: Favourable value-chain conditions for sustainably-produced and nutritious food

Outcome 3.1 Value-chain/market conditions in the RMI favour sustainably produced and nutritious food

There is a need for a nationwide change of mindset regarding food purchasing and dietary habits, moving away from the currently dominant preference for convenient low nutritional value foods with high environmental impact, to a recognition of the nutritional, cultural and environmental value of sustainably-produced local food, including agricultural, tree-based and fisheries products. This needs to move from being a niche issue to being placed in the mainstream of consumers? decision making. The justification for the use of GEF funds to this end will be the potential to associate the leverage of environmental benefits with the improvement of nutritional habits, through purchasing decisions.

The project will work with local food retailers on the high-visibility placement of sustainably-produced and nutritious local food in the supermarkets on which the urban population in Majuro and Ebeye principally rely for their food purchases. This will be complemented by support to the development of advertising materials. Crucially the project will also provide support along the length of the value-chain in order to ensure that produce arrives on the supermarket shelves in a reliable and timely manner, and is of consistent high quality: this will involve the technical and organizational strengthening of producer organizations in the areas of origin, to enable them to negotiate effectively with retailers; to plan production in accordance with future demand; to carry out high quality post-harvest management, packaging and, as appropriate, processing for value-addition; and to organize reliable storage and transport, especially for fresh produce, in order to ensure timely market access.

This approach is in accordance with the draft NFSP Critical Pathway 5.2, ?Incentivize the private sector to realign its resources to sustainably deliver healthier diets?, This recognizes that there is a vital role for the private sector in reforming the RMI food system, and that government must work in partnership with those businesses operating within the food system to help bring about the required food system transformation. It proposes that encouraging Corporate Social Responsibility within businesses domestic to, and operating within, the RMI has an important role to play in encouraging consumption patterns that support sustainable, local food production and drive improved nutrition and health outcomes. Highlighting meals and

products made with locally produced products is one way of doing this. The potential role of tax incentives and disincentives will be explored: for example, restaurants incorporating a specific proportion of local foods in their menus, or those partnering with local suppliers, may qualify for specific tax concessions. In addition, there is role for taxes to be placed on highly processed goods and those containing high levels of fats, salt and sugar.

One of the key challenges raised during the PPG consultations is the limitation in transport services for shipment of foods to the outer islands and shipment of agricultural and fisheries products from outer islands to urban markets. There was a recognition from the PPG consultations that while this very important issue is highlighted in both the Food Security Policy and the Trade Policy, there is no clear Strategy developed to address the issue.

Output 3.1.1: Value-chain Analysis and Strategy that ensure no new land degradation and losses in BD&ES and implement restorative measures for supporting markets and value-chains for sustainably-produced and nutritious GREEN food, including private sector engagement.

The project will support in pre-production the value-chain analysis and strategy for, as well as the production and supply of, but not limited to: breadfruit flour, papaya jam, banana jam, coconut virgin oil, and handicrafts such as woven flowers, baskets, fans, etc by Wotje women.

The proposed value-chain analysis and strategy will be based on, and informed by, the results and findings of the ?living national census? of food production in the form of a functional Knowledge Recording and Reporting System by the AFSO program under Output 1.2.1. As mentioned above, the proposed Knowledge Recording and Reporting System will involve food systems data recording and reporting and will include agro-ecosystem datasets that quantifies and account for land-based natural capital and ecosystem services, such as types and varieties of trees and crops as sources of traditional foods, plants with high cultural and medicinal values, and nature-based traditional farming methods. The recordings of local ecological knowledge including ethno-biological diversity information will enhance understanding of climate and ecosystem changes at the community level that need to be considered in the proposed value-chain analysis and strategy to ensure sustainability of the natural resource base for the food products. As such, a key component of a value-chain strategy is the promotion of agro-ecosystem approaches in the production landscape.

The proposed value-chain analysis and strategy for the various products will highlight the importance of SLM practices in production and holistic landscape approach to avoid and reduce land degradation and losses to ecosystem services, to be recoded and reported in the ?living national census? and monitored by the NFSP Working Group (Output 1.1.3) and LDN Working Group (Output 1.1.5). The proposed value-chain strategy will highlight to the communities the responsiveness of markets to products produced from sustainable production systems, as incentive for communities to adopt SLM practices and landscape/seascape approaches to the management of natural resources.

In production stage, the project will support training and monitoring of sustainable harvesting of respective green products, as per guidelines outlined in the respective product?s value-chain strategy to ensure sustainable harvesting levels. In the post-harvesting stages, the project will support packaging and eco-labelling for green food products including information on SLM practices adopted that ensure no land degradation occur or losses in BD and ES as a result of production of the products. The project will also support value-adding of green foods where both domestic and export market opportunities have been identified.

Output 3.1.2: Value-chain Analysis and Strategy that ensure no new losses in biodiversity and ecosystem services and implement restorative measures for supporting markets and value-chains for sustainably-produced and nutritious BLUE food, including private sector engagement.

The project will support in pre-production the value-chain analysis and strategy based on analysis for, but not limited to: moi fish, seaweed, clams and other aquaculture products.

Following the same approach as in Output 3.1.1, the proposed value-chain analysis and strategy for blue foods will be based on, and informed by, the results and findings of the ?living national census? of food production by the AFSO program under Output 1.2.1 that will include datasets on local ecological knowledge of marine and in-shore ecosystems, such as types and varieties of fish and other seafoods as well as fishing and harvesting methods. The recordings of local ecological knowledge enhance understanding of climate and ecosystem changes at the community level that need to be considered in the proposed value-chain analysis and strategy to ensure sustainability of the marine natural resource base for the food products. As such, a key component of a value-chain strategy is the promotion of ecosystem-based approaches in the production seascape.

The proposed value-chain analysis and strategy for the various products will highlight the importance of adhering to conservation ordinances outlined in Local Resource Management Plans and provide communities with incentives to implement ecosystem restorative and rehabilitation activities to meet market response preferences for products from sustainable production systems.

In production stage, the project will support training and monitoring of sustainable harvesting of respective blue products, as per guidelines outlined in the strategy to ensure sustainable species levels. In the post-harvesting stages, the project will support processing, packaging and eco-labelling , including information on sustainability practices adopted that ensure no losses in BD and ES as a result of production of the products. The project will also support value-adding of blue foods where market opportunities have been identified.

Output 3.1.3: Training (both formal and informal) to support and strengthen the sustainability of value-chains for local produce and local food products markets, including import substitutes.

As explained in the baseline section, the 2021 draft NFSP proposes that government must work in partnership with those businesses operating within the food system to help bring about the required food system transformation. The project in this regard will support partnership with Private Sector companies that are buying and selling fish, fruits and vegetables from local suppliers, including in collection of data towards the proposed Knowledge Recording and Reporting System under Output 1.1.2 to better understand impacts of production on the natural resource base and changes in land-base natural capital and ecosystem services to support their value-chains, and in exploring opportunities or import substitution products.

The project will provide training, in partnership with Private Sector companies, on agro-ecosystem management practices to ensure the sustainability of local value-chains and to recognize opportunities for import substitution. The project will also provide training on the use of sustainable harvesting,

processing, packaging and eco-labelling of traditional foods for markets, including information on agro-ecosystem management practices adopted in production.

Component 4: Knowledge management

Outcome 4.1 Knowledge on options for integrated environmental and food system management is effectively managed to permit scaling elsewhere in the country, and in other atoll states and elsewhere (particularly SIDS)

The project will place a strong emphasis on knowledge management and outreach, with the aim of positively influencing perceptions of stakeholders throughout the country regarding the need and options for transformation towards increased sustainability of food systems. A review of information management conditions and needs in the agriculture sector was carried out in 2005[89], and this will be updated and extended to cover other issues related to food system sustainability.

Output 4.1.1: Knowledge management system supporting sustainability, replication and scaling out of results.

The project will develop a Communications Strategy incorporating the development of communication products (videos, brochures, factsheets, social media, etc.,) and outreach program to share lessons learned and good practices and case studies from the project sites. A website will also be designed and developed to provide an online Knowledge Management Platform to facilitate and support implementation and share knowledge. In addition, the project will support the preparation and documentation of case studies in how implementation of AFSP-IAPs, aligned with LRMPs under the Reimaanlok Conservation Framework to meet the Micronesia Challenge, impact positively on food systems.

Output 4.1.2: Programme for outreach to other Pacific SIDS

The project has major strategic potential in the region, as a catalyst and source of lessons on sustainable food system and integrated land/seascape management for scaling out throughout the region, especially the atoll countries of Micronesia and Polynesia. Regional entities such as the South Pacific Regional Environment Programme (SPREP), the Pacific Community (SPC) and the University of the South Pacific (USP) will be used as channels for knowledge exchange and outreach across the region, as well as (with FAO support) global mechanisms such as the Agroecology Knowledge Hub. In addition, the RMI has very strong influence and demonstrated strong leadership in international fora and has established strong partnerships within the international community. For example, the President of RMI is the current Chair of the Global Island Partnership (GLISPA)[90] and its Ambassador to the US/Permanent Representative to the UN is the Chair of the GLISPA Board.

The project will support the show casing of the project?s case studies as Bright Spots from SIDS in High-Level events and Side Events organized by the Local2030 Islands Network[91] and GLISPA in international meetings.

4. Alignment with GEF focal area and/or Impact Program strategies

Land degradation: The project will contribute to achieving GEF objectives in the focal area of Land Degradation, specifically Objective 1 - Support on the ground implementation of SLM to achieve LDN, and its (sub)objectives 1-1 Maintain or improve flow of agro-ecosystem services to sustain food production and livelihoods through SLM; and Objective 2 - Creating an enabling environment to support voluntary LDN target implementation. 2-5. Create enabling environments to support scaling up and mainstreaming of SLM and LDN.

Towards Objectives 1-1 the project will support implementation of SLM by promoting and supporting integrated farming systems and traditional ?nature-intensive? farming systems that positively reinforce the linkages between the socio-cultural and socio-economic well-being of the population and the health of the ecosystems. The project will take a landscape approach in the context of low-lying atolls and coral islands, where the ground freshwater lens of each atoll is a fragile system and where the agricultural ecosystem covers the whole islands, including coconut and breadfruit agro-forestry areas that dominate the landscape as well as dwelling areas where vegetables and fruit trees like pawpaw and bananas are grown. The proposed adoption of integrated livestock/piggery-crop/plant integrated farming system promoted by the project will improve the flow of ecosystem services to local communities in terms of higher crop and vegetable yields and improved provisions for food and livestock fodder from agro-forestry systems as a result of improvements in soil health from organic fertiliser generated from piggery waste and improved compost products. By improving the management of livestock within integrated farming, the project will contribute to reducing soil erosion from reduction in free roaming pigs.

In terms of Objective 2-5, the project will update the 2006 UNCCD NAP to realign with the 2018-2030 Strategic Framework of the Convention and support a LDN Strategy and target setting process. The project will establish a LDN Working Group to support the LDN Strategy development. The project will also support the mainstreaming of LDN concepts in the 5-year review of the Agriculture Sector Plan (2021-2031) and in the next update of the NBSAP. The project will also contribute to building national capacity to monitor land degradation in the country for enhanced decision-making processes through strengthening of spatial planning tools.

Biodiversity: the project will contribute principally to GEF-7 BD Objective 1: ?Mainstream biodiversity across sectors as well as landscapes and seascapes?, and specifically ?Biodiversity Mainstreaming in Priority Sectors?, through its investments in improving and strengthening agro-ecosystems approaches to bring about the necessary changes to production practices to be more biodiversity-positive with a focus on sectors that have significant biodiversity impacts. The project will have a primary focus on agriculture, and a secondary focus on forestry and fisheries. The project will also strengthen capacity for spatial and land-use planning as mentioned above, which will ensure that land and resource use is appropriately situated to maximize production without undermining or degrading biodiversity. In addition, the project will support the development of policy and regulatory frameworks that favour biodiversity-friendly traditional production and resource management systems. By proposing the development of Atoll-specific Food Systems Pathway Integrated Action Plans aligned with the Local Resources Management Plans under the Reimaanlok framework,

the project recognise the importance of traditional governance structures, based on customs such as ?mo?, in the conservation of the natural resource base upon which the food systems rely. Furthermore, the project will also provide communities with the tools and capacity development, including through the Atoll Food System Officers program, to maintain a sustainable balance between livestock production, crop production and agro-forestry biodiversity and ecosystem services and to contribute to diversified agro-ecological food production systems.

5. Incremental/additional cost reasoning and expected contributions from the baseline, the GEFTF, LDCF, SCCF, and co-financing

The project will combine the delivery of global environmental benefits with contributing to the aim of RMI Government to improve dietary health among the population, and reduce the heavy reliance on food imports.

Without GEF support, the development of the food and agriculture sectors would focus largely on technocentric approaches with high requirements of ongoing investment and technical support, and the issues of food production, natural resource management and health would be viewed in isolation from each other, without adequate consideration of the relations and flows of ecosystem services between different elements of the land/seascape, and the relations between the various actors in the food systems and the natural resource base. As a result, there would be a risk that production practices, and declining appreciation of traditional sustainable management systems, coupled with climate change, would lead to the degradation of land, water and vegetation resources, and of terrestrial and aquatic ecosystems.

GEF incremental support will focus on bringing about a transformation of how food systems are viewed and approached in the Marshall Islands, in accordance with the National Food Systems Pathway. This new food systems vision will involve:

- Increased recognition of the value and potential of traditional foods, farming systems and natural resource management systems, in terms of their contributions to land degradation neutrality, ecosystem protection and health; and also the need to combine them with exogenous ideas (subject to participatory validation) and to adapt them to changing conditions and emerging challenges (including demographic growth, cultural change and climate change).
- ?Joined-up thinking? on how dietary health is dependent on a diverse and sustainable food supply, and how this in turn relies on the sustainability of the management of food production systems (crops, wild food and fish); and in order to be sustainable food production in turn needs to be embedded within land/seascapes that are subject to integrated management that recognizes ecological interactions and spatial flows of ecosystem services.
- The introduction of a ?circular economy? approach that will reduce waste and pollution, and improve resource use efficiency, by linking together different food system and resource management elements in both rural and urban areas.
- A community-based approach to food system and natural resource management, promoting interactions among individual farms centred on learning and resource hubs; participatory learning, experimentation and knowledge exchange; and natural resource governance building on traditional cultural mechanisms.

- A value-chain approach that aims to address current challenges by supporting the grouping of farmers, and the coordination and bulking of their production (in order to reduce transport and transaction costs, increase their market negotiation power and ensure reliability and quality of supply), and by working with private sector value-chain actors (particularly retailers) to insert local sustainable products as mainstream, rather than niche, items in urban outlets.
- Enhanced human and systemic capacities for planning and managing landscapes and food systems for the generation of multiple benefits, including tools for evidence-based decision-making and LDN monitoring.

This will result in incremental global environmental benefits in terms of the sustainability of the management of soils, water and vegetation (contributing to land degradation neutrality at land/seascape level) and the improved protection of natural ecosystems of importance for biodiversity.

The project will build on a significant baseline, much of which will also constitute co-financing, including the following:

- The R2R Reimaanlok project will generate important experiences and capacities in integrated atoll local resources management, which will expanded upon in terms of the number of Atolls covered and will be applied and built upon in terms of introducing food systems elements.
- The EU funded GCCA+/SUPA **?**Lifestyle Changes and Climate Resilience in the Marshall Islands? project, which adopts a participatory and inclusive approach to address the vulnerabilities and the rights of all residents. It aims to enhance skills in climate resilience, particularly for island council members and community leaders. The project will establish synergistic implementation and build on the achievements and lessons learned and expand coverage beyond the Majuro and Jaluit communities.
- GCF project, ?Pacific Resilience Project Phase II for RMI? providing support to climate change resilience under the Pacific Resilience Project Phase 2 for RMI, which will include major investment in the restoration of coastal ecosystems, and will constitute core elements of the integrated land/seascapes in which the project will work, helping to buffer the food production systems against the effects of climate change.
- Japanese Technical Cooperation Project II for Promotion of Regional Initiative on Solid Waste Management in Pacific Island Countries (JPRISM II), which support the Majuro Atoll Waste Company (MAWC) in the implementation of the Solid Waste Management Plan for Majuro (2019 ? 2028), including installation of a Composting Facility in Laura Island to compost organic materials going to the landfill ? estimated as 42.7% of total solid waste.

6. Global environmental benefits

The project will deliver global environmental benefits (GEBs) under each of the target GEF-7 focal areas, as follows:

Land degradation: support to sustainable, diversified low-input traditional farming/agroforestry systems will result in the maintenance and improvement of soil fertility and agroecosystem function (including natural predator/pest balances and nutrient cycling), which in turn will lead to a reduction in the contamination of soil, freshwater and marine/lagoon waters from agro-chemical use. The promotion of climate-smart traditional farming systems, and water capture/management technologies (in crop production and piggery systems) will also reduce extractive pressures on

freshwater lenses and reduce soil erosion and crop damage from free roaming pigs. The project will contribute to land degradation neutrality through the application of a landscape approach, supported by land use planning, decision-making and monitoring tools and capacities, and including ecosystem restoration and protection (coastal trees replanting, coral gardening, planting ground cover crops) thereby maintaining and promoting flows of ecosystem service across the target land/seascapes (such as the protection of agricultural production systems from salt spray, and the provision of reproduction/nursery habitat for fisheries).

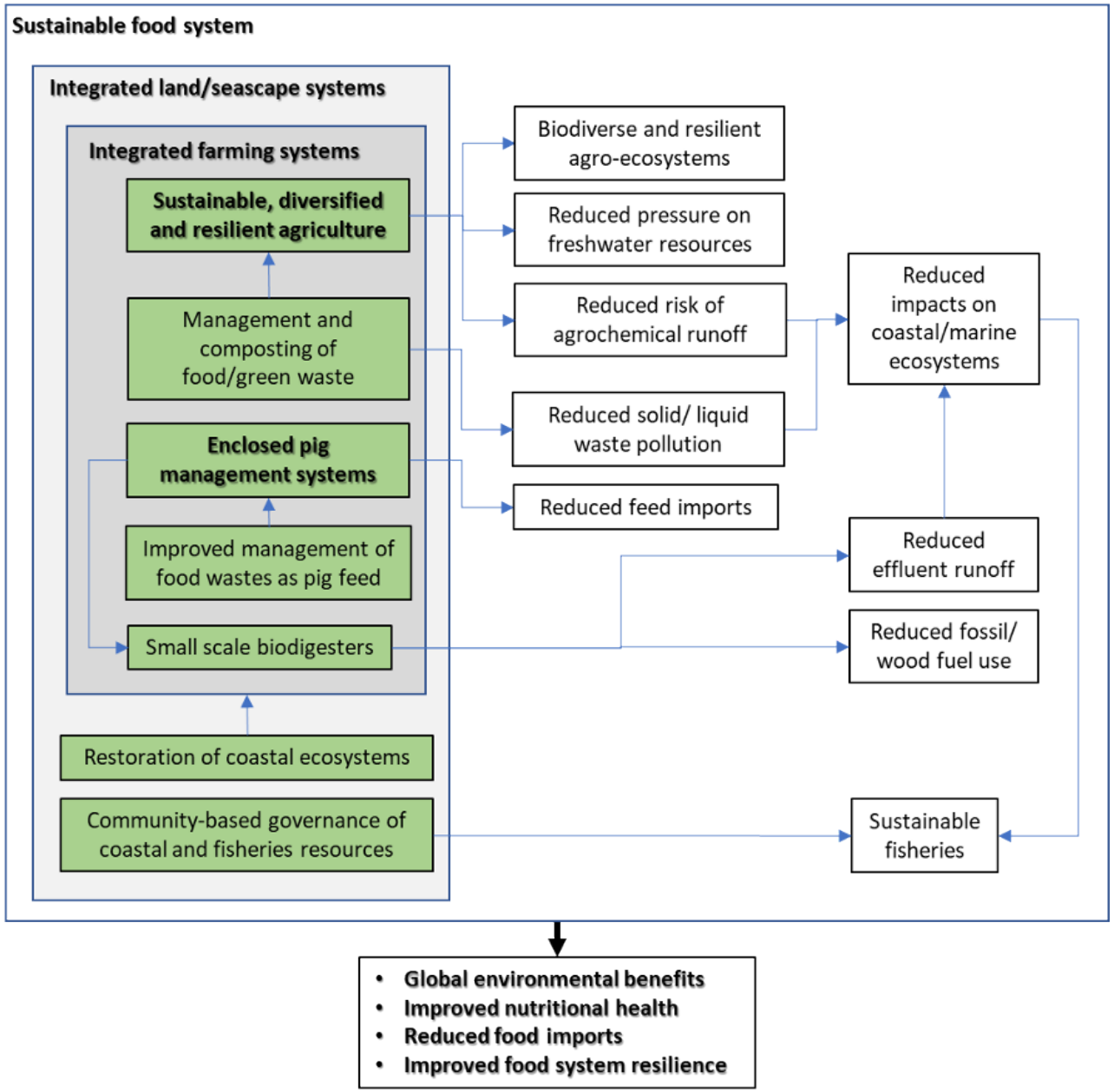
Biodiversity: support to sustainable, low input and appropriate-technology farming (crop and livestock) production systems, and improved waste management, will result in reductions in flows of organic and inorganic pollutants (including agricultural chemicals, piggery effluent and domestic wastes) into coastal and aquatic ecosystems (coral reefs, mangroves, lagoons and coastal waters), which are of vital importance for fish populations and for migratory birds. Support to traditional diversified production systems will also contribute to the conservation of agricultural biodiversity: in small Pacific islands [such as those of the Marshall Islands], sustainability depends largely on traditional agrobiodiversity, and the most culturally useful and highly threatened biodiversity is normally found within the fabric of active garden areas rather than in virgin forests[92].

Specifically, the project will result in 150 ha of land restored (100 ha agricultural land and 50 hectares of agroforests), 425 ha of landscapes under improved practices (200 ha under improved management to benefit biodiversity and 225 ha under sustainable land management in production systems). Furthermore, it will result in 3,500 ha of marine habitat under improved management and/or with reduced threats. These 3,500 ha correspond to the estimated marine area in the six target Atolls that will benefit from reduced livestock effluent runoff, habitat rehabilitation, banning dredging and improved fisheries practices. This may include existing marine protected areas (MPAs) as part of the seascapes/ landscapes that the project will operate in. Details will be established through more detailed consultations during implementation, and Management Effectiveness Tracking Tool (METT) scorecards would be prepared for any MPAs that will be selected as part of the project sites.

Finally, the project will result in an estimated 34,808 tons of CO2e (24,863 tons direct and 9,945 tons indirect) sequestered through improved farming practices and ecosystem restoration.

Figure 5 highlights the technical options on which the project will work, and the justifications of each of these in terms of their potential to contribute to environmental and social benefits.

Figure 5: Technical options and their links to environmental benefits, within an overall food system framework


Sustainable food system
Integrated land/seascape systems
Integrated farming systems
Sustainable, diversified and resilient agriculture
Management and composting of food/green waste
Enclosed pig management systems
Improved management of food wastes as pig feed
Small scale biodigesters
Restoration of coastal ecosystems
Community-based governance of coastal and fisheries resources
Biodiverse and resilient agro-ecosystems
Reduced pressure on freshwater resources
Reduced risk of agrochemical runoff
Reduced solid/ liquid waste pollution
Reduced feed imports
Reduced impacts on coastal/marine ecosystems
Reduced effluent runoff
Reduced fossil/ wood fuel use
Sustainable fisheries
• Global environmental benefits
• Improved nutritional health
• Reduced food imports
• Improved food system resilience

The project will contribute to the following Aichi Biodiversity targets:

? **Target 6:** All fish and invertebrate stocks and aquatic plants are managed and harvested sustainably, legally and applying ecosystem-based approaches (the integrated atoll management approach of the project by aligning the AFSP-IAPs with LRMPs under the Reimaanlok framework will address community-based fisheries in lagoons and coastal waters)

? **Target 7:** Areas under agriculture, aquaculture and forestry are managed sustainably, ensuring conservation of biodiversity (agro-forest areas and coastal forest areas in the form of coastal vegetation, which be subject to improved management).

? **Target 8:** Pollution, including from excess nutrients, has been brought to levels that are not detrimental to ecosystem function and biodiversity (the project will address the risk of pollutant flows into lagoons and coastal waters from agriculture and piggery systems).

? **Target 10:** The multiple anthropogenic pressures on coral reefs, and other vulnerable ecosystems impacted by climate change or ocean acidification are minimized, so as to maintain their integrity and functioning (integrated atoll management, including ecosystem-based fisheries and reduction of pollutant runoff, will reduce pressures on coral reefs).

? **Target 13:** The genetic diversity of cultivated plants and farmed and domesticated animals and of wild relatives, including other socio-economically as well as culturally valuable species, is maintained, and strategies have been developed and implemented for minimizing genetic erosion and safeguarding their genetic diversity (the project will support local communities? management of traditional crops, including tree-based crops, which are being marginalized by cultural and dietary shifts).

? **Target 14:** Ecosystems that provide essential services, including services related to water, and contribute to health, livelihoods and well-being, are restored and safeguarded, taking into account the needs of women, indigenous and local communities, and the poor and vulnerable (the project will support the management and restoration of coastal ecosystems, which provide buffering services against salt spray and sea level rise, as well as contributing to the recharge of freshwater lenses).

? **Target 15:** Ecosystem resilience and the contribution of biodiversity to carbon stocks has been enhanced, through conservation and restoration, including restoration of at least 15 per cent of degraded ecosystems, thereby contributing to climate change mitigation and adaptation and to combating desertification (the restoration of coastal ecosystems under Core Indicator 3.1 and the improved management of coastal ecosystems under 4.1 will contribute to ecosystem resilience

? **Target 18:** The traditional knowledge, innovations and practices of indigenous and local communities relevant for the conservation and sustainable use of biodiversity, and their customary use of biological resources, are respected (the project will support the recovery, maintenance and promotion of traditional practices of production and natural resource management).

As a co-benefit, the project will contribute to climate change adaptation by promoting the use of resilient, diverse farming systems capable of withstanding impacts such as extreme rain events and droughts; providing alternative income sources to buffer livelihoods against CC-related failure; and improving the condition of coastal ecosystems capable of buffering farming systems against the effects of CC-related sea level rise and salt spray.

7. Innovativeness, potential for scaling, sustainability and capacity development

Innovation

The project will be highly innovative in the context of the Marshall Islands by virtue of its promotion of systems-based ?circular economy? approaches linking sustainable production, healthy consumption and sound environmental management. By developing atoll-specific AFSP-IAPs to operationalise the NFSP, the project takes into account the important role of Traditional Leaders and customary governance structures to ensure success in combining traditional knowledge, and traditional approaches to food systems and natural resource governance and management, with external technical inputs (subject to Local Government validation), supported by objective science-based decision support tools.

To date, most of the ?how-to? Manuals and toolkits as outputs from previous projects have been developed and disseminated as hardcopy publications. The feedback from stakeholders during the PPG phase was these glossy publications are often not read nor used by communities to inform their farming practices primarily because it is not in the culture to read manuals for farming purposes. On the other hand, the number of the population with access to cell phones and mobile devices has grown exponentially within the last decade and is where the population now generate and use information. The project will take the innovative approach of making the toolkits available in the forms of ?how to? videos and other visual forms to delivering training virtually and making available over a digital platform for stakeholders to access on their mobile devices.

Developing Incentives for Ecosystem Services (IES) schemes (or Payment for Ecosystem Services (PES)) have potential to bring about the necessary changes necessary to improve local food production and reduce the heavy reliance on imported foods. The development of IES schemes however would require extensive consultations with many potential stakeholders and partners over an extended period of time due to the complexities of the potential IES scheme projects and the extensive consultations required for their development. To manage expectations and ensure a meaningful contribution, the project will support a participatory consultative process towards the project designs of potential IES schemes, but only as far as to allow MNRC to consider their inclusion in the NFSP implementation framework.

Sustainability

Social sustainability of the models to be promoted will be furthered through the use of proven participatory methods for technology generation, dissemination, selection and adaptation based on the Farmer Field Schools approach which FAO has pioneered globally, and through the project?s focus on working with a base of traditional crops and farming/resource management systems with which local people are already familiar. The project will also promote broader sustained cultural support through its investments in outreach to the population as a whole regarding the importance of sustainably-produced, healthy food.

Financial sustainability will be ensured by adopting a whole value-chain approach, supporting groupings of producers at the supply end in order to realize efficiencies and economies of scale, permit post-harvest care and value adding, and increase farmers? bargaining power; while at the same time working with retailers in order to promote the mainstream insertion of sustainably-produced local food into urban outlets.

Environmental sustainability will be ensured through the promotion of an ecosystem approach that will maintain ecological functioning, and a landscape approach that will maintain and support essential ecological interactions between different land/seascape units.

The draft NFSP recognizes that the transformation of the RMI food system is complex and requires a consistent, cross-sectoral commitment and action. To be successful, this commitment must come from across all sectors and all levels of RMI society, as well as from the partner organizations at the international level. This itself requires extensive inter-ministerial coordination and oversight to maintain momentum, ensure monitoring, identify synergies between existing policies, strategies and projects, and facilitate ongoing stakeholder engagement. The project will will support the establishment of a multi-sector and inter-ministerial Working Group, with permission of Government and in the context of the NSP and CMAC to support implementation of the NFSP. By establishing linkages with the Reimaanlok oversight process, the proposed Working Group will become a permanent entity that will outlive the project itself and support ongoing negotiation and adaptive management of food systems issues into the future.

The project will be implemented by national counterpart entities in order to maximize ownership and institutional sustainability. Capacity enhancement investments by the project will be specifically focused on ensuring the existence of knowledge, technical capacities and operational/financial capacities required in order for the project?s results to be sustained in the long term. Technical approaches and tools to be promoted and supported both at farm/community and institutional levels will focus in particular on appropriate options that are compatible with cultural norms, operational conditions and institutional capacities.

Scaling

The environmental and food systems issues found in the Marshall Islands are repeated across much of the Pacific, especially the atoll countries of Micronesia and Polynesia. There is therefore major potential for this project to act as a laboratory from which models and lessons on sustainable food systems can be scaled out throughout the region, taking advantage of regional entities such as SPREP, SPC and USP, and global mechanisms such as the Agroecology Knowledge Hub and the World Overview of Conservation Approaches and Technologies (WOCAT), with both of which FAO is closely involved.

Capacity development

As described in Section 4) Alternative scenario, the project incorporates capacity development as integral part of its approach. Capacity will be developed at multiple levels: (1) systemic (policies) and institutional capacity development as part of Component 1, as well as (2) individual capacity development as part of Components 2, 3 and 4.

Summary of changes in alignment with the project design with the original PIF

No significant changes were made to the project design. There were however some changes necessary to better align the design with the 5 themes of the draft National Food Systems Pathway as requested by the Government, in the same manner the UNDP/GEF implemented R2R project ? one of the baseline projects ? was designed around the Reimaanlok framework to strengthen capacities of Government agencies and communities for local natural resources management. The main adjustments are summarized below.

Topic	**Main changes from PIF stage**
1) Co-financing	The total co-financing in the project document is **$6,842,450**, and increase of $812,450 from the $6,3030,000 identified in the PIF. The increase is from the significant increase in Government co-financing from $1,000,000 in the PIF to **$4,342,450** after the PPG process identified various other sources of co-financing and where synergistic implementation is strengthened as well as reflect the inter-ministerial collaboration to be strengthened and fostered under the project. The PIF included a $2,530,000 co-financing from the IFAD project, Global Agriculture and Food Security Program (GAFSP). The project document proposes to establish cooperation and partnership during implementation as during PPG, the RMI national Small Islands Food and Water Project (SIFWaP) project formulation was not finalised.

2) Institutional arrangements	The PIF proposed the intention for MNRC to act as lead Executing Agency of the Project, and as such the Operational Partners under OPIM implementation modality proposed in the Project Document. The capacity of MNRC to act as EA will be assessed during PPG in line with FAO policy. At time of submission, the Government has submitted its responses to the information requested by the independent Auditor carrying out the Capacity Assessment, but the report was not available to fully inform the implementation arrangements. The PIF suggested the use of SPREP as a project partner, in particular the potential to facilitate inter-project coordination across the region, and also to act as a hub for knowledge exchange. It was also proposed that during PPG, any national or regional GEF-8 projects of potential relevance that may at that time be under development will be identified, and coordination arrangements defined. Particular attention will be paid to coordination, especially in the form of knowledge exchange, with GEF-8 projects in the Pacific region under the Blue-Green Islands Impact Program (IP). As at time of finalising the Project Document, the GEFSec has selected UNDP to lead the global coordination of the GEF-8 BGI IP. In what form the BGI takes in the Pacific region is not yet clear; whether there will be regional child projects or a regional coordination program with country child projects, etc. It was therefore premature to consult with SPREP on its possible role in the BGI IP. During PPG however, the GEF OFP expressed concern that despite the many efforts to establish a SPREP Office in Majuro and the Government had allocated office space already, there is only one person occupying that office. The Stakeholder Engagement Strategy propose consultation with SPREP to be carried out when UNDP announces how the BGI IP will be coordinated in the Pacific, and what structure it will take. Linkages will also be established during implementation with SPREP?s knowledge sharing platforms. Accordingly, the coordination mechanism will be reviewed and adjusted during the project inception phase. In terms of knowledge exchange, consultations with the Executive Director of the Global Island Partnership were held to explore opportunities to use the Local2030 Islands Network as a platform to share the project case studies as Hot Spots in GLISPA High-level events organised for SIDS in the margins of many international meetings, including at UNGA and at COPs of MEAs. At the time of submission of the Project Document, the baseline R2R UNDP/GEF project has requested a 9-months project extension. The timing will allow continuity of the PSC for the R2R to roll over to this project, but with changes to Local governments representations to reflect the change in Atolls covered.
3) Core Indicator targets	- Core Indicator 2 target (MPA) moved to Core Indicator 5 (marine area). - Core Indicator 6 was revised based on a refined EX-ACT calculation (uploaded as a separate file in the Portal).

4) Outputs and Outcomes	No changes were made on the outcomes. There were no significant changes to the outputs except for changes in wording to better align with the 5 themes of the NFSP as requested by the Government. Detailed consultations were undertaken with stakeholders during PPG to discuss the project outcomes and outputs and elaborate a detailed Theory of Change. The process is described in Section 4) Alternative scenario. The work plan and activities for each output were elaborated in more detail through consultations with stakeholders. Stakeholder inputs have been incorporated as described in Annex I2.
5) Project duration	The project duration has been increased from 48 months to 54 months to account for an initial start-up period of approximately 6 months.

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Note: The boundaries and names shown and the designations used in these maps do not imply the expression of any opinion whatsoever on the part of FAO concerning the legal status of any country, territory, city or area or of its authorities, or concerning the delimitation of its frontiers and boundaries.

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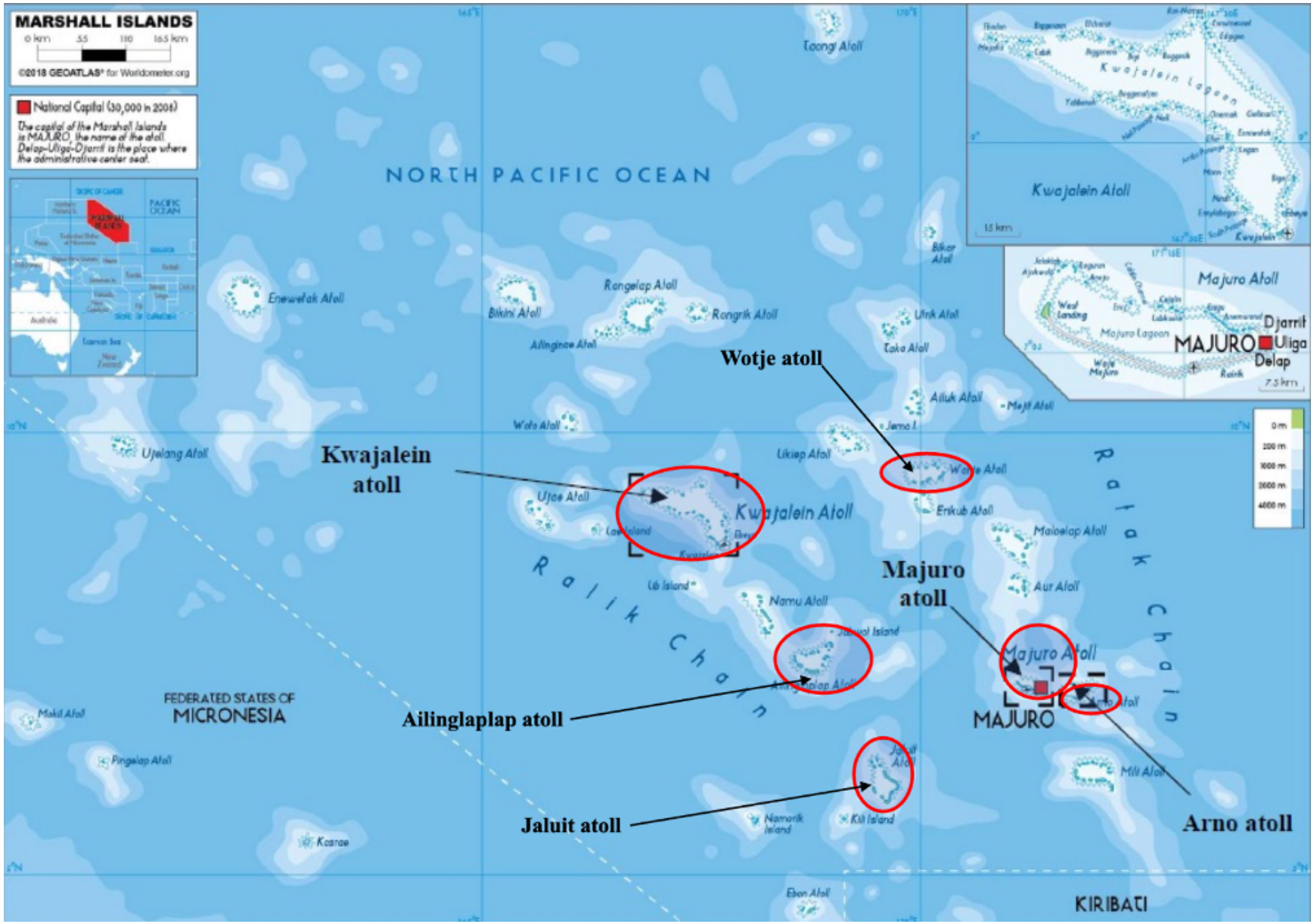
1b. Project Map and Coordinates

Please provide geo-referenced information and map where the project interventions will take place.


MARSHALL ISLANDS
0 km 55 110 165 km
©2018 GEOATLAS® for Worldometer.org
National Capital (30,000 in 2016)
The capital of the Marshall Islands is MAJURO, the name of the atoll. Delap-Uliga-Djarrit is the place where the administrative center seat.
NORTH PACIFIC OCEAN
Toongi Atoll
Enewetak Atoll
Bikini Atoll
Rongelap Atoll
Rongrik Atoll
Ailinginae Atoll
Utrik Atoll
Taka Atoll
Bikar Atoll
Wotje atoll
Ailuk Atoll
Majit Atoll
Wotu Atoll
Jemo I.
Likiep Atoll
Wotje Atoll
Erikub Atoll
Maloelap Atoll
Aur Atoll
Ujelang Atoll
Kwajalein atoll
Ujae Atoll
Kwajalein Atoll
Lae Island
Lib Island
Namu Atoll
Jabwot Island
Ailinglaplap Atoll
Majuro atoll
Majuro Atoll
MAJURO
Ralik Chain
Kwajalein Lagoon
Kwajalein Atoll
Majuro Atoll
Majuro Lagoon
MAJURO
Djarrit
Uliga
Delap
West Landing
Wotje Majuro
Ailinglaplap atoll
FEDERATED STATES OF MICRONESIA
Makil Atoll
Pingelap Atoll
Kosrae
Jaluit atoll
Namorik Island
Kili Island
Arno atoll
Mili Atoll
Ebon Atoll
KIRIBATI

The The geographical coordinates of the three target atolls of the project are as follows:

Majuro Atoll: 7.0667? N, 171.2667? E
Kwajalein Atoll: 8.7167? N, 167.7333? E
Arno Atoll: 7.0833? N, 171.6833? E.
Jaluit Atoll
Wotje Atoll
Ailinglaplap Atoll

1c. Child Project?

If this is a child project under a program, describe how the components contribute to the overall program impact.

na

2. Stakeholders

Select the stakeholders that have participated in consultations during the project identification phase:

Civil Society Organizations Yes

Indigenous Peoples and Local Communities Yes

Private Sector Entities Yes

If none of the above, please explain why:

All the above mentioned stakeholders were consulted during the project development phase

Please provide the Stakeholder Engagement Plan or equivalent assessment.

Introduction

This stakeholder engagement plan details the consultations held with stakeholders during the project preparation phase, and lays out a process to ensure that stakeholder engagement during project implementation is in line with relevant GEF and FAO policies and guidelines. FAO is committed to ensuring meaningful, effective and informed participation of stakeholders in project formulation, implementation, monitoring and evaluation;

including government institutions, local communities, the private sector, academia and civil society. As such, the formulation team has followed a consultative process and engaged stakeholders, aiming to strengthen ownership, relevance and credibility.

The Stakeholder Engagement Matrix below includes information on how stakeholders have been consulted, and how they will be engaged in the project execution, including any disadvantaged or vulnerable groups/individuals. The project will ensure meaningful engagement of key stakeholders from government, civil society such as NGOs, regional organizations as technical partners, private sector associations and local communities throughout project implementation.

Various appraisal approaches were used throughout the project development process to ensure the involvement of all stakeholders and to start building partnerships at the beginning of the process. This approach also ensured that the stakeholders within the communities are empowered and have ownership of the project from the planning phase, which should follow through to implementation and participatory monitoring and evaluation. The consultation process was guided by the overarching principles of food sovereignty and inclusiveness that would lead to economic, social and environmental sustainability.

A Gender Specialist was contracted using PPG funds and carried out a gender-sensitive stakeholder analysis to identify and characterise all the gender related aspects of the food-land-ecosystems nexus. The PPG project team also, in close collaboration with MNRC as the proposed OP for the project, carried out a stakeholder mapping exercise to identify all the key stakeholder groups that need to be engaged in project formulation, in function of their potential to be affected positively or negatively by the project, and their potential to participate in its implementation.

Stakeholder Consultation in project formulation

In preparation for and during the process of PIF formulation, consultations were held in a participatory manner with inputs from stakeholders from Majuro, Kwajalein and Arno (including local landowners, traditional community leaders and elected representatives, as well as other community members, both male and female). During PPG, the Government requested to expand the coverage and to add 3 more Atolls to the project, namely Wotje, Jaluit and Ailinglaplap. The PPG process therefore included consultations with stakeholders from the 6 Atolls.

Three multi-stakeholder workshops were carried out during design phase, plus a series of interviews and meetings summarised in the Table below. Email correspondences were also carried out with stakeholders prior and as follow-up to these meetings and interviews. The documents, presentations and zoom video recordings of Workshop consultations were made available to stakeholders on a controlled access Google website. Regular zoom meetings were also held with the senior management and staff of the Operational Partner (MNRC) and the GEF OFP for guidance and facilitate their inputs to key issues, such as the operational Capacity Needs Assessment and Organizational/Institutional arrangements.

A national inception workshop was carried out at the start of the PPG phase, to communicate and further discuss the proposals presented in the PIF, and to agree on the stakeholder engagement to be carried out through the PPG phase. All key initially identified Government and civil society

stakeholders participated in the PPG Inception workshop, including representatives of the target atolls (local Government members and CSOs). Particular attention was paid to ensuring the adequate participation of women and their organizations.

A specific Stakeholder Workshop was also held to consult with Local governments and Traditional Leaders of the 6 target Atolls to elaborate on, and to provide an opportunity for their inputs into the proposed atoll-specific AFSP-IAPs.

Due to COVID-19 travel restrictions that were in place throughout the PPG period and a declaration of a State of Emergency in August 2022 (when a handful of positive cases of the Omicron BA.5 variant were confirmed that quickly skyrocketed within a week), it was not possible to conduct extensive consultations, especially with outer island communities. Nevertheless, borders were eventually opened in 1st October 2022 and allowed the Project Design Team to travel to hold face-to-face consultations, meetings and interviews and to run the Validation Workshop.

Consultations on the project?s Theory of Change and LDN concept

The project?s expected Outcomes and associated Outputs and Activities were identified during the project conceptualization (PIF) phase and further refined from the results and findings from the consultations and interviews with stakeholders during the project design (PPG) phase, which culminated in a Validation Workshop on 21st October 2022. While the COVID-19 lockdowns created challenges, there was adequate level of consultations over emails, zoom meetings and the week mission in October, as well as those held by the national PPG Coordinator to identify and verify the assumptions made in the Theory of Change in terms of the conditions that need to be in place, primarily at the activities level and outputs level, in order for the activities to be successfully implemented so the outputs can be reached and the outcomes can be attained.

In terms of enabling environment, the PPG consultation verified that while the term ?food systems? has not featured specifically in the existing national development and sector policies and strategies of RMI, the various concepts of protecting the natural resource base for food security and food production and the impacts of agriculture and fisheries on biodiversity and ecosystems are already recognised in existing policies and strategies. The main key elements of natural resources management currently missing is the link between food production and land degradation. The concepts of LDN for example has not been introduced to the national planning and policy development processes and the latest National Action Plan to implement the UNCCD was developed in 2012, the year Rio+20 was held and where SDG 15, target 15.3 has its roots. The project will support the introduction of LDN concepts to the policy, strategies and action planning processes, in a non-over technocratic approach that the project?s Theory of Change attempts to outline.

There are ethnoecological knowledge and other traditional knowledge that are of solid scientifically sound base. Food sovereignty in the context of the RMI is rooted in the fact that the people of the Marshall Islands are accomplished seafarers, and navigators and fishermen. As one participant in the Validation Workshop said, ?We are more ocean people, than land people?. Given the islands have an extremely low elevation, they were not visible to the navigators from great distances. To arrive safely to their destinations, the Marshallese used stick charts to map their voyaging paths. They observe waves and swell patterns, and used star patterns to navigate the ocean. They also determined the locations of the islands by observing the flight of the birds that nested on them. While these traditional knowledge and skills of forefathers may not be practiced in today?s world and the use of stick charts ended after World War II when new electronic technologies made navigation more accessible and travel among islands by canoe lessened, the resilience of Marshallese people to find solutions remain rooted in those traditional practices. Those practices were rooted in principles of *sovereignty* ? to be in control of your own systems.

The stakeholders engaged and involved in the Project conceptualization and design processes are listed in the Table below:

Stakeholder Consultations	Stakeholders/Participants	Date	Key Issues
Workshops: Three Workshops were held during project preparation. Due to COVID-19 travel restrictions, the Project Designer facilitated the inception workshop virtually and was able to facilitate the Key-Stakeholder Workshop for Atoll Local Governments and Traditional Leaders in person when the borders were opened on 1st October. The Local Government Representatives for Kwajalein Atoll participated virtually in all the workshops.			
(i) Inception Workshop	Government agencies: MNRC, CCD, MIMRA, EPA, MOHHS); Atolls Local government and Traditional Leaders; NGOs/CSOs, Women Groups (WUTMI), Tertiary Institutes, Private Sector Private Sector.	7th September 2022	Launched the PPG phase; raised awareness and buy-in of stakeholders on the Project and briefed stakeholders on the project design and Project Document preparation process. The inception workshop outlined the proposed roles and responsibilities of stakeholders during implementation. The inception workshop also provided an opportunity for stakeholder inputs into the project design and preparation of the Project Document.
(ii) Key-stakeholder Workshop for Atoll Local Governments and Traditional Leaders	Mayors and Senators who are also chiefs and Traditional Leaders of the 6 Atolls	7th October 2022	The special workshop discussed the idea of Atoll Food Systems Pathway Integrated Action Plans (AFSP-IAP) to operationalise the NFSP at the atolls level. The Local Governments will provide the oversight for the development and implementation of the AFSP-IAPs.
(iii) Validation Workshop	Government agencies: MNRC, CCD, MIMRA, EPA, MOHHS); Atolls Local government and Traditional Leaders; NGOs/CSOs, Women Groups (WUTMI), Tertiary Institutes, Private Sector Private Sector.	21st October 2022	Validated the project design Components, Outcomes, Outputs and Activities in the Multi-year Work Plan; The Workshop also validated the Organizational/ Institutional structure which outlined roles and responsibilities of stakeholders.
Meetings and Interviews: The local PPG Coordinator liaised with stakeholders and arranged a series of virtual interviews and email correspondences with the Project Design Specialist. Interviews and meetings were also held face to face during a one week mission.			
Virtual meeting	MNRC: Secretary, Chief of Agriculture, Deputy Chief of Agriculture, Chief of Forestry. CCD: Deputy Director	4th July 2022	Provided a briefing on the project concepts presented in the PIF. Discussed the PPG process and workplan, and preparations for the PPG inception workshop, including the Concept Note and Draft Agenda.

Virtual meeting	MNRC: Secretary, Chief of Agriculture, Deputy Chief of Agriculture, Chief of Forestry.	11th August 2022	Revised the PPG work plan and processes for consultations due to a declaration of a State of Emergency due to the first COVID 19 outbreak in the country.
Virtual Interview	Chief of Forestry. MNRC	19th September 2022	Elaboration on spatial planning tools and activities including the 2 year program on carrying out a coconut census using drone imagery and vegetation cover using satellite imageries, in partnership with MICS and USFS.
Virtual Interview	Deputy Director. Coastal Fisheries, MIMRA	19th September 2022	Elaborate on the roles and responsibilities of CMAC to explore options for strengthening multi-sectoral and inter-ministerial collaboration mechanisms. Overview of baseline programs implemented by MIMRA in aquaculture and in coastal management and MPAs.
Virtual Interview	Project Coordinator. R2R UNDP/GEF project	20th September 2022	Update on the status of the R2R project and implications of a proposed no-cost-extension proposal the R2R project was in the process to submit. The R2R project provide technical support to Atoll communities to develop Local Resources Management Plans that are currently at difference stages of development.
Virtual Interview	Registrar. Land Registration Authority (LRA)	28th September 2022	Digitization of the National Land Administration System and possible links with spatial mapping tools to be supported under the project. Very limited GIS capacity in the country. Private Sector providing IT support.
Meeting	MNRC Project team	19th October 2022	Preparations for the Validation Workshop. Discussed a strategy for meeting and exceeding the co-financing proposed in the PIF. Verified key outputs in particular a mechanism for strengthening multi-stakeholder and inter-ministerial collaboration within the realities of limited human resources capacities in RMI. Also elaborated on key activities under component 3 on value-chains.
Interview	CEO. Office of Commerce, Investment and Tourism	20th October 2022	Value-chain analysis on key products. Potential linkages to the ?One Island One Product? campaign and importance of initiatives for import substitution.

Meeting	MISCo: CEO, Operations Manager, Community Liaison Officer, Business Development Manager	24th October 2022	MISCo is one of three Private Sector companies buying and fish and green produce from fisherfolks and farmers in the communities and selling them in their supermarkets and in the case of MISCo, the only permanent fresh produce market in Majuro. MISCo will be a partner in the project in terms of data collection to better understand value-chain. It will also contribute to exploring of potential, and production of viable and feasible import substitution products.

In addition, provide a summary on how stakeholders will be consulted in project execution, the means and timing of engagement, how information will be disseminated, and an explanation of any resource requirements throughout the project/program cycle to ensure proper and meaningful stakeholder engagement

Stakeholder Name	**Stakeholder Type**	**Stakeholder profile**	**Consultation Methodology**	**Key issues raised (during PPG) and how they were addressed**	**Foreseen role in project implementation**	**Able to influence and decide the outcomes and the manner of the Project implementation or make decisions based on the outputs of the project? (Y/N)**

Ministry of Natural Resources and Commerce (MNRC)	Direct beneficiary	National Government institution/body	PPG Inception Wkshop. PPG Key-stakeholder Wkshop. PPG Prodoc Validation Wshop. Interviews with key staff. Regular meetings with project design team.	Primary government organization responsible for Agriculture, Energy, Trade and Investment. Includes the Agricultural Production Services Division, which provides agricultural extension support and will work through the project to promote sustainable farming systems. MNRC was the key department consulted during PPG development and is executing partner for many baseline projects and programs. The MNRC inputs were incorporated into the baseline description and project design.	MNRC will be the Operational Partner for the project and will host the PMU. MNRC will be responsible for project execution and implementation. A member of MNRC senior management will play the role of National Project Director to support coordination with other Government agencies and provide strategic guidance to the National Project Coordinator. The project will build on many of MNRC projects and programs under the Agriculture Sector Plan (2021-2031) and Forest Action Plan (2020-2030) identified as co-financing	(Y) As the OP for the project, Secretary of MNRC will chair the Project Steering Committee during implementation.

					baseline activities.	
Climate Change Directorate (CCD)	Direct beneficiary	National Government institution/body	PPG Inception Wkshop. PPG Prodoc Validation Wshop. Interviews with key staff. Regular meetings with project design team.	Limited human resources capacity to develop and implement projects and implications on the preferred national implementation modality, under Operational Partner Implementation Modality (OPIM). CCD inputs were incorporated into the Organizational Structure and institutional arrangement. Facilitate and verify co-financing sources.	The Director of CCD is the GEF Operational Focal Point and also the National Focal Point for all of the 3 Rio MEAs: UNCCD, CBD and UNFCCC. CCD will be responsible for the update of the UNCCD NAP and provide oversight on the LDN strategy and target setting related activities.	(Y) Member of Project Steering Committee during implementation.

Local Government (Atoll Mayors and Senators) and Traditional Leaders of the 6 Atolls: Majuro, Arno, Kwajalein, Jaluit, Wotje, Ailinglaplap Local communities (men, women, youth)	*Direct beneficiary*	*Local government, local leaders* *Local communities*	Inception Workshop Key-stakeholder workshop Validation workshop	A special workshop was held during the PPG to specifically consult with the Local Governments and Traditional Leaders of the 6 Atolls to provide an opportunity for their inputs into the proposed Atoll Food System Pathway Integrated Action Plans. The Local Governments and Traditional Leaders represent the Atoll communities who are the principal actors and beneficiaries responsible for management of demonstration farms as community-based enterprises and resource hubs; co-definition and application of natural resource governance mechanisms; and beneficiaries of technical and organizational capacity enhancement in relation to sustainable production, resource management and value-chains.	The Local Governments and Traditional Leaders will provide the oversight and leadership to project implementation at the Atolls level. In particular the development and implementation of key priorities in their atoll-specific AFSP-IAPs. Local Governments will also host the AFSO program for collecting traditional knowledge and local food systems datasets.	(Y)

Environmental Protection Authority (EPA)	Direct Beneficiary	National Government institution/body	PPG Inception Wkshop. Validation Wshop.	Provided inputs into the project formulation on outputs and activities related to environmental planning and governance.	As the government agency responsible for preservation and improvement of the quality of the environment, EPA will play a crucial role in providing strategic guidance on the tools to be developed for strengthening environmental planning. As executing partner to baseline projects, EPA will be a co-financing partner for the project	(Y) Member of Project Steering Committee during implementation.

Marine Resources Authority (MIMRA)	Direct Beneficiary	National Government institution/body	PPG Inception Wkshop. Validation Wshop. Meeting and Interviews with key staff.	MIMRA hosts the PAN Office that has provided support to Atoll Local Governments for the development of LRMPs under Reimaanlok framework. Synergistic implementation and establishing collaborative partnerships are crucial given the limited human resources Capacity to implement projects.	As the agency responsible for the regulation of marine resources and host of the PAN Office, MIMRA will work with the project on activities related to sustainable fisheries and in the alignment of the proposed AFSP-IAPs with the LRMPs developed with support of MIRA under the Reimaanlok framework for conservation. As executing partner to baseline projects, MIMRA will be a co-financing partner for the project.	(Y) Member of Project Steering Committee during implementation.

Ministry of Health and Human Services (MOHHS)	Direct Beneficiary	National Government institution/body	Inception Workshop Prodoc Validation Workshop.	Participated in the PPG process providing inputs as related to the health implications of heavy reliance on imported foods.	As the government agency responsible for nutrition policy and programs MOHHS will support implementation of project activities in support of nutritional dimensions of food systems, including the proposed campaigns for promoting consumption of locally produced foods.	(Y)

Office of Commerce, Investment and Tourism (OCIT)	Indirect beneficiary	National Government institution/body	Interview	Identified baseline activities in value-chain analysis for certain products. OCIT?s primary function is to develop and implement social and economic development programs and responsible for private sector business, growth and development. OCIT targets the promotion of very specific, selected areas of tourism, fisheries and small business development, in a few prioritized areas where there is capacity to succeed. Identified shipping services as the main hurdle.	OCIT will provide support and advise in the value-chain analysis and value-chain strategies to be developed for selected blue and green food products during implementation.	(Y)
Marshall Islands Organic Farmers Association (MIOFA)	Direct Beneficiary	Non-Governmental Organization	Inception Wkshop. Validation Wshop. Interview	Very limited capacity in RMI for organic certification. Main focus is promotion of organic farming practices with communities. Raised importance of eco-labelling for value-chain.	MIOFA will work as a project partner to support organic practices in production and value-chains for agricultural product.	(Y)

College of Marshall Islands (CMI)	Direct beneficiary	Tertiary institution	Inception Wkshop. Validation Wshop. Interview	CMI has developed training courses in agro-forestry systems for sustainable livelihoods. The CMI agroforestry program introduces participants to the fundamental concepts in Agroforestry identifying both global and national needs for agroforestry in RMI environment and the fundamental concepts of various Terrestrial Ecosystems.	CMI will partner in the project to provide training in agroforestry systems.	(Y)
Marshall Islands Conservation Society (MICS)	Direct Beneficiary	Non-Governmental Organization	Inception Wkshop. Validation Wshop.	The MICS has been working with MNRC Forestry Division in collaboration with USFS in developing and spatial planning tools and carrying out the coconut census and vegetation cover assessments using drone imageries.	MICS will continue to partner with MNRC and USFS in project implementation to build on existing programs and to extend it to include a breadfruit census during implementation.	(Y)
SPREP	Indirect Beneficiary	Regional Intergovernmental Organization	To be consulted during inception phase	Identify opportunities for knowledge sharing through SPREP data and information portals.	Knowledge sharing	(N)

SPC Land Resources Division	Indirect Beneficiary	Regional Intergovernmental Organization	To be consulted during inception phase	Identify provisions for technical advisory services, including sharing of planting materials from SPC?s Pacific Crops and Trees (CePaCT) programme	Technical support services	(N)
Majuro Atoll Waste Company (MAWC)	Indirect Beneficiary	State Owned Enterprise	Preliminary consultations carried out during PPG. To be continued in implementation	Manging the Compost Facility at Laura under the JIA PRISMII program.	The project will provide support to improve quality of compost and to strengthen linkages with farming households, providing technical help on compost use.	

Agricultural Centre for International Agricultural Research (ACIAR)	Non Beneficiary	Technical/Research Organization	To be consulted during inception phase	? ACIAR?s priorities in the Pacific include: ? Improving food and nutritional security ? Understanding and addressing the impacts of climate change on food systems resilience and livelihood security. ? Enabling inter-country collaboration through regional projects, capacity building, and supporting a stronger forum for exchange of ideas and experiences. ? Implementing a long-term capacity building program targeted at building skills in the sciences related to agriculture.	Build on ACIAR project that was carried out 2015-2020 on ?Improving soil health, agricultural productivity, and food security on atolls?.	
	Indirect Beneficiaries	Private Sectors	To be consulted during inception phase			

Select what role civil society will play in the project:

Consulted only;

Member of Advisory Body; Contractor;

Co-financier;

Member of project steering committee or equivalent decision-making body; Yes

Executor or co-executor; Yes

Other (Please explain)

3. Gender Equality and Women's Empowerment

Provide the gender analysis or equivalent socio-economic assesment.

Gender Analysis

A Gender Analysis was carried out during project preparation, and a Gender Action Plan developed. The objective of the gender analysis was to understand the nature of gender roles in Marshall Islands, the nature of which outside forces have disrupted the inherent gender balance in traditional custom, and to address the perceived gap between men and women in the Marshall Islands with regard to societal roles, participation in decision-making, access to land, activities, constraints, and challenges due to imposed western values.

The key findings of the Gender Analysis are summarized below:

? The Marshall Islands have high levels of domestic violence, hence there is a need for awareness raising and increased economic and social empowerment of women. This can be done, among other, through the provision of skills and vocational training to women and men.

? The country has high school leaver rates among youth 16-24 years old. Retaining young women and men in education and providing vocational training to youth are a priority.

? Significant gender disparities remain with regard to employment opportunities, wage differences and working environments. Women should be provided with equal access to employment and economic opportunities.

? The land ownership inheritance system in the RMI is based on Indigenous matrilineal system. Women?s access and control over land and natural resources can be strengthened nonetheless, ensuring respect of customary rights.

? Women play a significant role in relation to food production and family nutrition. Access to nutritionally high value and affordable food for women and their families should be strengthened.

? Women and people with disabilities remain underrepresented in planning and decision-making processes. Hence, their participation in decision-making should be improved.

A Gender Action Plan was developed in consideration of these findings. The project will seek to contribute to closing gender gaps in access to and control over natural resources, improving women?s participation and decision-making, and generating socio-economic benefits or services for women, by:

? Ensuring that gender issues are adequately reflected in the National Food Systems Pathway (NFSP) and policy, regulatory and incentive frameworks, as well as LDN Strategy, developed by the project.

? Ensuring that women, youth and persons with disability are adequately represented in the stakeholder consultations and in the multisector working group organized by the project, participating in decision-making (e.g., through the Rural Women?s Development Network and Youth Councils).

? Ensuring integration of gender issues and priorities in the capacity development program and decision-support instruments.

? Facilitating the identification and selection, and supporting the application, of options for food production and natural resource management which permit full and real participation of women in control over resources and the enjoyment of social and economic benefits, such as small-scale (including backyard) vegetable production and artisanal fishing.

? Supporting women?s and youth participation in value-adding and marketing activities for sustainably-generated produce; and foreseeing provisions for child care facilities and flexible timing to ensure women?s participation.

? Implementing training program specifically targeted at developing skills of women and youth, thereby promoting their social and economic empowerment.

? Ensuring that knowledge management system and outreach programme incorporate gender issues

Please refer to separate Annex K for details in the Project Document, also uploaded in the portal.

Does the project expect to include any gender-responsive measures to address gender gaps or promote gender equality and women empowerment?

Yes
Closing gender gaps in access to and control over natural resources; Yes

Improving women's participation and decision making Yes

Generating socio-economic benefits or services or women Yes

Does the project?s results framework or logical framework include gender-sensitive indicators?

Yes

4. Private sector engagement

Elaborate on the private sector's engagement in the project, if any.

Private Sector Engagement

The project will engage closely with private sector actors, especially on the retail end of domestic food value-chains in the RMI such as store owners (see Output 3.1.3), working with them to support the placement of sustainably produced food items in retail outlets. During PPG, there was active participation of the Private Sector in both the inception workshop and validation workshop and held a face-to-face meeting with one of the major companies, Marshall Islands Service Cooperation (MISCo) to follow up on some ideas for collaboration, in particular on data collection. MISCo buy fish from local fishermen as well as fresh fruits and vegetables from local producers and sell them in their supermarkets and the only local produce market that opens 6 days of the week (except Sunday) in Majuro.

Under output 3.1.3, the project will also support partnership with Private Sector to: explore and develop import substitution green and blue food products; support the development of promotional materials highlighting the quality and health benefits of domestically produced food; support organization of fairs and tasting sessions to stimulate interest both among the retailers and their customers; and support to medium- and long-term value-chain planning, based on analyses of supply, demand and profitability, in order to provide the private sector actors with increased confidence of the commercial viability of the products, thereby helping to ensure the sustainability of their buy-in.

5. Risks to Achieving Project Objectives

Elaborate on indicated risks, including climate change, potential social and environmental risks that might prevent the project objectives from being achieved, and, if possible, the proposed measures that address these risks at the time of project implementation.(table format acceptable):

Section A: Risks <u>to the project</u>

Description of risk	Impact	Probability	Mitigation actions	Responsible party
1) Limited pool of qualified individuals to lead or carry out project activities	Moderate	Moderate	Focus on capacity development to build human resource pool; explore national and international recruitment; agree on realistic timetables for implementation due to potential delays in recruitment; back-stopping and recruiting through CMAC agencies; utilize technical advisors and counterparts.	Executing agency
2) Weak coordination among project partners; government partners are overloaded; limited coordination with outer island leaders	Moderate	Moderate	CMAC, interagency committees created and meet regularly; senior staff participating; workplan endorsed by Chief Secretary; foster strong ownership of the project by mainstreaming project objectives into government process.	Executing agency
3) Poor communications and limited travel to outer islands	Moderate	High	Budget for and purchase cell phones (where service) or SSB/HF radio with antenna. Use ship when airlines down. Consult with atoll leaders through use of mobile and other communications if face-to-face meetings are limited. Travel costs allocated in project budget.	Executing agency
4) Weak enforcement of laws	Moderate	Moderate	The main laws to be enforced in the project relate to the various ordinances outlined in Local Resources Management Plans (LRMPs) of each Atoll for managing local natural resources. One of the key hurdles in enforcing these ordinances is the lack of quantitative and qualitative data and information to support the Local Resources Committees (LRC) to justify enforcement actions and interventions. The proposed AFSO program will support LRCs with provision of food system data and information to support them with enforcement. The project will also include issues of enforcement in education and awareness campaigns.	Executing agency
5) Limited receptiveness to dietary changes among urban population	Moderate	Moderate	Collaboration with Ministry of Health on outreach on dietary issues (linking environmental, cultural and health issues); collaboration with private sector entities on publicity campaigns and product placement to promote uptake in urban retail outlets and influence behavioural change amongst consumers.	Executing agency
6) Limited interest in sustainable traditional agriculture among young people	Moderate	Moderate	Promotion of financially viable value-chain opportunities based on sustainable agriculture; tailoring of outreach and extension campaigns to suit young people.	Executing agency

Description of risk	Impact	Probability	Mitigation actions	Responsible party
7) Climate change (especially increase in extreme rainfall events with potential for crop damage; sea level rise with potential for increase soil and water salinity, and salt spray impacts; and increase in sea temperatures, potentially affecting coastal and lagoon fisheries)	High	High	Focus on promotion of diversified traditional farming systems with a high degree of inherent climate resilience; application of sustainable livelihood approaches to ensure diversified and therefore resilience household livelihood support strategies; promotion of ecosystem and land/seascape approaches and nature-based solutions, including the protection and restoration of the roles of ecosystems in buffering against climate change impacts such as sea level rise and salt spray.	Executing agency

Description of risk	Impact	Probability	Mitigation actions	Responsible party
8) COVID-19 pandemic related impacts on the internal and international travel, operation of government/ partners/ project; health impacts on general population as well as economic impacts nationally and locally ? Reduced financial (co-financing) support from Government, development partners, and private sector, due to limited overall funding availability resulting from the COVID-19-related economic downturn, and/or the reorientation of available funding to actions directly related to COVID-19 ? Government expenditure and prioritization of different programs and sectors, including agriculture, food security and natural resources might change. ? Closure of offices, transport etc. will delay launch of project and its implementation. ? Potential or partial disruption of food system supply chains, such as logistics ? Increased losses and spoilage in high value commodities ? Disruption of demand for products and markets, due to	High	High	1. If there are changes in co-finance, then partners to work closely to seek alternative options for co-financing and ensure continuity of resource allocation to ongoing initiatives in project target areas. 2. It is anticipated that the project scope will help to support the Government?s response to COVID-19 through its focus on food security and livelihoods diversification of vulnerable communities. However, project activities will be further discussed with the Government to ensure that emerging priorities and responses, as a result of the pandemic, are well reflected in the project?s target areas during implementation. 3. It is likely that periodic closures of transport and offices as well as restrictions on organizing meetings/ training with large number of people will impact project implementation. Therefore, the project will institute local mechanisms such as local facilitators / work with local partners to ensure that some work can continue on the ground. Detailed planning will be done with the government operational partners to mobilize their field offices and others and the project will ensure that all recommended safe practices are followed by the project team and by communities where the project is working. 4. Provide advice to farmers and government to meet immediate food needs 5. Conduct socio-economic impact assessment (as part of baseline assessment) to inform the project implementation 6. Ensure close collaboration with private sector entities and logistic companies to understand emerging barriers related to the pandemic and establish feasible options 7. Support producer organizations in linking with export markets and encourage use of online markets where possible 8. FAO is planning to undertake more detailed analysis on the impacts of COVID-19. Based on these	Project executing agency, FAO and partners

Description of risk	Impact	Probability	Mitigation actions	Responsible party
temporary closure of hotels and restaurants ? Higher dependence on natural ecosystems, as people who lose employment and income from other sectors depend more on them for their livelihoods, thereby increasing pressures on them			findings, the project will prioritize work in more impacted areas of the project sites to strengthen community management and alternative livelihoods.	

Restrictions on international travel to the Marshall Islands due to the COVID-19 pandemic meant that neither FAO staff nor concept formulation consultants were able to visit the country during PIF formulation; regular Zoom calls were however held involving the FAO Funding Liaison Officer (FLO), Lead Technical Officer (LTO), GEF Programme Design Specialist consultant and representatives of Marshall Islands Government to discuss project ideas, obtain information for PIF drafting, and review the PIF draft. Government staff were able to consult with local stakeholders as there were no restrictions on domestic travel or meetings.

The pandemic has made further evident the current fragility of the country?s food systems, adding further weight to the justification for this project that emphasizes sustainable and resilient domestic food production: the Government?s COVID-19 response measures described above constitute a further element of the baseline on which the project will build.

6. Institutional Arrangement and Coordination

Describe the institutional arrangement for project implementation. Elaborate on the planned coordination with other relevant GEF-financed projects and other initiatives.

6. Institutional Arrangement and Coordination.
6.a Describe the institutional arrangement for project implementation.

GEF Implementing Agency (IA). The Food and Agriculture Organization (FAO) will be the GEF Implementing Agency for the Project, providing project cycle management and support services as established in the GEF Policy. As the GEF IA, FAO holds overall accountability and responsibility to the GEF for delivery of the results. In the IA role, FAO will utilize the GEF fees to deploy four different actors within the organization to support the project (see Annex L for details):

? The *Budget Holder (BH)*, i.e., the FAO Subregional Office for the Pacific Islands (FAO SAP), will provide oversight of project execution;

? The *Lead Technical Officer(s) (LTO),* drawn from across FAO will provide technical oversight, guidance and support to the project?s technical work on a regular basis in coordination with government representatives;

? The *Funding Liaison Officer(s) (FLO)* within FAO will monitor and support the project cycle to ensure that the project is being carried out and reporting done in accordance with agreed standards and requirements;

? The *HQ Technical Officer* is accountable for advising and supporting the LTO in ensuring project formulation, appraisal and implementation adhere to FAO corporate technical standards and policies.

As GEF agency, FAO?s responsibilities will include:

? Administrate funds from GEF in accordance with the rules and procedures of FAO;

? Oversee project implementation in accordance with the project document, work plans, budgets, agreements with co-financiers, Operational Partners Agreement(s)and other rules and procedures of FAO;

? Provide technical guidance to ensure that appropriate technical quality is applied to all activities concerned;

? Conduct at least one supervision mission per year;

? Reporting to the GEF Secretariat and Evaluation Office, through the annual Project Implementation Report (PIR), the Mid Term Review, the Terminal Evaluation and the Project Closure Report on project progress;

? Financial reporting to the GEF Trustee.

Lead Executing Agency (EA). The Ministry of Natural Resources and Commerce (MNRC) will be the project?s Lead Executing Agency and will have the overall executing and technical responsibility for the project, with FAO providing oversight as GEF Agency as described above. The MNRC will be responsible for the day-to-day management of project results entrusted to it in full compliance with all terms and conditions of the Operational Partners Agreement (OPA) signed with FAO. As Operational Partner (OP) of the project, the Secretary of MNRC is responsible and accountable to FAO for the timely implementation of the agreed project results, operational oversight of implementation activities, timely reporting, and for effective use of GEF resources for the intended purposes and in line with FAO and GEF policy requirements.[1] FAO will be involved in recruitment and procurement process by reviewing Terms of Reference and technical specifications.

Project Steering Committee. A Project Steering Committee (PSC) will be established to provide strategic guidance to the PMU and take decisions related to the project implementation including approval of project plans, budgets and revisions. Chaired by the Secretary of MNRC, the PSC will membership (to be confirmed at inception phase) include:

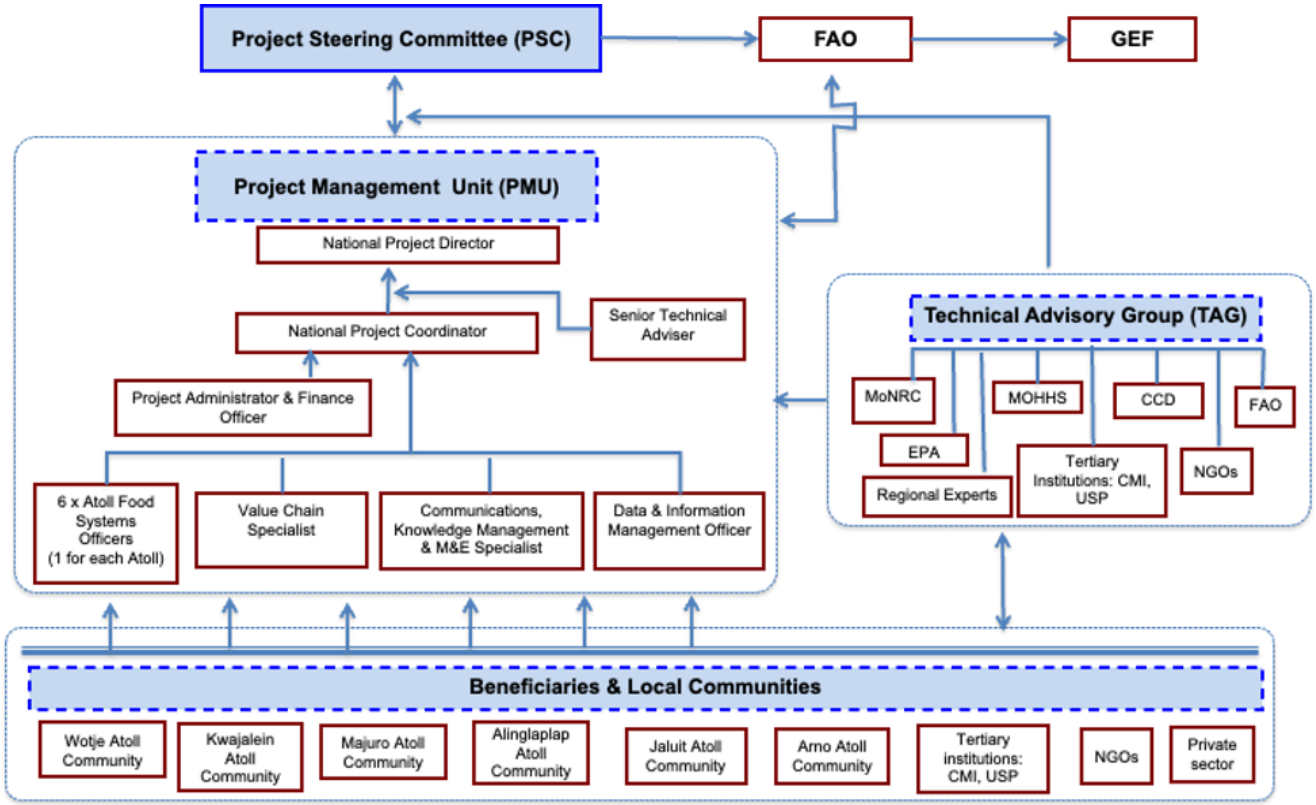
- National Project Director (Responsible Party)
- Director of Climate Change Directorate

- Secretary of Ministry of Health and Human Services
- Secretary of Ministry of Culture and Internal Affairs
- Director of Marshall Islands Marine Resources Authority
- Mayors of the 6 Atolls (Majuro, Kwajalein, Arno, Wotje, Jaluit, Ailinglaplap)
- FAO SAP technical representation

The PSC will provide strategic guidance to the National Project Coordinator (NPC) as well as Project Management Unit (PMU) and to all executing partners. The PSC will meet at least once in a year to ensure: i) Oversight and assurance of technical quality of outputs; ii) Close linkages between the project and other ongoing projects and programmes relevant to the project; iii) Timely availability and effectiveness of co-financing support; iv) Sustainability of key project outcomes, including up-scaling and replication; v) Effective coordination of governmental partners work under this project; vi) Review and approval of the Annual Work Plan and Budget; vii) Making by consensus, management decisions when guidance is required by the National Project Coordinator of the PMU. The members of the PSC will each assure the role of a Focal Point for the project in their respective agencies. As Focal Points in their agency, the concerned PSC members will: (i) technically oversee activities in their sector; (ii) ensure a fluid two-way exchange of information and knowledge between their agency and the project; (iii) facilitate coordination and links between the project activities and the work plan of their agency; and (iv) facilitate the provision of co-financing to the project. The National Project Director will be the Secretary to the PSC.

The Project?s organizational structure is shown in the Figure 6 below.

Figure 6: Project organizational structure



National Project Director (NPD). The MNRC will designate a National Project Director (*funded by Government*). The NPD will be responsible for coordinating the activities with all the national bodies and project partners related to the different project components. The NPD will also be responsible for supervising and guiding the National Project Coordinator (see below) on the government policies and priorities. As the Secretary to the PSC, the NPD (with support from the National Project Coordinator) will be in charge of organizing the PSC meetings, preparing meeting minutes, and ensuring communications among PSC members.

Technical Advisory Group (TAG). A Technical Advisory Group will be established to provide technical advice and guidance to the project and provide inputs to specific technical issues, as required during implementation when issues arise. The TAG will be convened *ad hoc* on a needs? basis and composition determined by the NPD and NPC on a case-by-case basis depending on the technical nature of the issue that require TAG inputs. The members will participate in the TAG in their individual capacities based on their technical expertise and would be selected from Government agencies,

NGOs, tertiary institutions and experts from across the region. The TAG may call on additional relevant experts and institutions depending on the agenda items. The TAG will be chaired by the Senior Technical Advisor.

Project Management Unit (PMU). A Project Management Unit will be co-funded by the GEF grant and established within the MNRC. The main functions of the PMU, following the guidance of the Project Steering Committee, are to ensure overall efficient management, coordination, implementation and monitoring of the project through the effective implementation of the annual work plans and budgets (AWP/Bs). The PMU will be composed of a National Project Coordinator (NPC) who will work full-time for the project lifetime. The PMU will also include a Senior Technical Advisor, an Administration and Finance Officer, six (6) Atoll Food Systems Officers, a Value-chain Specialist, a Communications, Knowledge Management and M&E Specialist, and a Data & Information Management Officer. Additionally, the PMU will hire experts to provide technical expertise to the implementation of the Project Components, as required.

National Project Coordinator (NPC). The National Project Coordinator (*funded by the GEF grant*) will oversee daily implementation, management, administration and technical supervision of the project, on behalf of the Operational Partner (OP) and within the framework delineated by the PSC. S/he will be responsible, among others, for the (1) technical and operational lead and project coordination (with support from the Senior Technical Advisor), (2) monitoring and evaluation, (3) knowledge management and communications, and (4) compliance with the Operational Partners Agreement (OPA) and reporting. Please refer to Annex N for the detailed Terms of Reference.

6.b Elaborate on the planned coordination with other relevant GEF-financed projects and other initiatives.

Relevant baseline initiatives are described in Section 2) Baseline scenario. As described above, the project will complement and build on the achievements of the R2R Reimaanlok project.

It is foreseen that the South Pacific Regional Environment Program (SPREP) will in particular have potential to facilitate inter-project coordination across the region, and also to act as a hub for knowledge exchange.

In addition to the projects mentioned in Section 2), the proposed project builds on lessons learned of the following initiatives.

Project / Initiative	Linkages with the project
1) UNDP GEF-7 Securing Climate-Resilient Sustainable Land Management and Progress Towards Land Degradation Neutrality in the Federated States of Micronesia (GEF ID 10858). The objective of this project is to secure critical ecosystem services through climate-resilient sustainable land and coastal management contributing to Land Degradation Neutrality in the Federated States of Micronesia.	The proposed project will seek to exchange and build on lessons learned of this project.

2) FAO GEF-7 BIOREACH: Biodiversity Conservation and Agroecological Land Restoration in Productive Landscapes of Trinidad and Tobago (GEF ID 10188). The project aims to promote biodiversity conservation, restore degraded lands, and improve livelihoods of rural communities in targeted productive landscapes of Trinidad and Tobago.	The proposed project will seek to exchange and build on lessons learned of this project.
3) World Bank Pacific Resilience Project ? Phase II (PREP II). The objective of the Second Phase of Pacific Resilience Projects in the Republic of the Marshall Islands (RMI) is to strengthen early warning systems, climate resilient investments in shoreline protection, and to provide immediate and effective response to an eligible crisis or emergency.	The proposed project will collaborate with this project to address climate risks.
4) Tonga FAO GEF-5 project R2R Integrated Land and Agro-ecosystem Management Systems (GEF ID 5578). The project aims to strengthen the resilience of communities in Tonga by enhancing land tenure systems, improving forest management, and piloting an integrated agro-ecosystem approach to rehabilitate degraded landscapes.	The proposed project builds on the lessons of this project, in particular regarding integrated agriculture and livestock planning, use of bio digesters etc.
5) Tuvalu FAO GEF-7 project Integrated Agro-ecosystem Approach for Enhancing Livelihoods and Climate Resilience in Tuvalu (GEF ID 10517). The project aims to reverse land degradation, enhance local livelihoods and increase climate resilience through integrated agro-ecosystem (IAE) approach in all the islands of Tuvalu.	The proposed project will share lessons learned with the Tuvalu project, in particular the integration of food production with land/seascape management of natural resources in Atolls environments.

[1] It should be noted that the identified Operational Partner(s) or OP, results to be implemented by the OP and budgets to be transferred to the OP are non-binding and may change due to FAO internal partnership and agreement procedures which have not yet been concluded at the time of submission.

7. Consistency with National Priorities

Describe the consistency of the project with national strategies and plans or reports and assesments under relevant conventions from below:

NAPAs, NAPs, ASGM NAPs, MIAs, NBSAPs, NCs, TNAs, NCSAs, NIPs, PRSPs, NPFE, BURs, INDCs, etc.

7. Consistency with National Priorities.

The national policy environment and country ownership of the project are highly favourable, given the commitment of RMI Government to the integration of national food security, nutritional quality and environmental sustainability, as set out in the RMI?s **National Strategic Plan (2020-2030)**.

The project is fully consistent with, and is framed around the draft RMI National Food Systems Pathway developed in the context of the UN Food Systems Summit in September 2021, including all of its priority themes:

1: Developing diverse and sustainable blue food production and consumption
2: Expanding sustainable green food production and consumption
3: Delivering lifelong nutrition and health education and awareness raising
4: Ensuring food safety in a complex system
5: Building inter-ministerial/cross-sectoral collaboration

Goal A3 of the **National Biodiversity Strategy and Action Plan (NBSAP)** is ?People Taking the Initiatives in Planting Trees and Crops?, with individuals taking responsibility for planting of trees and crops to restore the original lush vegetation and replenish food crops. Key actions will include a program to increase community awareness of the importance of planting trees and crops, and organizing communities to initiate community-based actions in Majuro and in the outer islands and atolls; strengthening the existing Agriculture Extension systems so that they have an active presence in the outer islands and they are able to provide the community-based program with the necessary support; and more research on indigenous crop species and farming systems to provide the community based program with plant cultivars suitable for the local environment.

Strategic Theme C of the NBSAP focuses on Traditional Culture and Practices: Goal C1 is to ?Apply Traditional Skills and Knowledge?; Goal C2 is ?Institute Learning of the Culture Through the Traditional Way of Passing Knowledge from Elders to the Young?; and Goal C3 is ?A Move Toward More Use of Local Products?.

In addition to the above, of particular relevance to the project is the proposed action ?Support government to initiate policies on reduction dependency on imported food and materials?, under NBSAP Goal D1 ?Self-reliance Through Traditional Values and Culture?.

The Marshall Islands **National Environment Management Strategy (NEMS) 2017?2022** is a national policy with a cross-sectoral approach. Its overall purpose is to conserve and improve its environment for current and future generations, by promoting sustainable development and integrating environment conservation and the proper governance of development efforts. The key principles are listed for the effective implementation of this Strategy, as leadership and good governance; collective responsibility for the environment; indigenous knowledge, practices and innovations; and integration of the environment and development.

The project will contribute to the NEMS Action Areas in relation to:

Land: 1. Ensure protection of existing forest; and 2) Promote sustainable agricultural practices on cultivated land and placing more focus on traditional practices;

Biodiversity: 1. Protect special ecosystems, sites, tradition, language and species and 2. Foster long term protection and maintenance of biodiversity with RMI.

Marine: proper management of inshore marine environment;

In order to ensure food security, sustainable agricultural practices will be promoted on cultivated land and existing vegetation, coconuts, breadfruit and pandanus will be protected. Public awareness-raising campaigns will be carried out for the promotion of healthy eating, with the aim of protecting public health. Furthermore, efforts will be given to maintain traditional food production and consumption.

Long-term protection and maintenance of biodiversity will be fostered through strategies in the fields of protection of natural resources and the environment, ecosystem preservation, and protection of habitats, critical sites, and species. Biosecurity concerns regarding the introduction of invasive alien species and protection of endangered species will be addressed. Programs will be developed to replenish, restore and rehabilitate natural resources and the environment that were exploited or degraded through extensive development activities. Agricultural production will be increased by promoting sustainable practices on cultivated land in line with traditional practices. Moreover, the conservation of living marine resources and the marine environment will be strengthened through effective inshore and offshore management of marine environment and control over offshore marine resources exploitation. The network of locally managed marine protected areas will be expanded for effective monitoring, control and surveillance activities. Integrated management of marine and terrestrial systems will be developed through a community-based approach. In addition, marine ecosystems and species will be protected, with a special emphasis on marine mammals and marine turtles. Management of coral reefs will be strengthened by continuous monitoring.

The project will specifically contribute to the following outputs of the RMI **Agriculture Sector Plan 2021-2031**:

Output 1. Environmental Degradation Minimised:
The activities to be undertaken to achieve this output include:
1.1 Coastal tree planting: The Division of Agriculture will lead and coordinate the planting of salt-tolerant traditional trees along coastal areas to protect the coast and to minimize current erosion along the coast.
1.2 Promote tree planting on farmlands including coconut replanting: Where there is a problem of deforestation and on barren lands, efforts will be made to promote tree plantings including coconut replanting. Surveys will also be conducted and senile coconuts will be selectively logged and replaced.
1.3 Promotion and preservation of the diversity of traditional and cultural plants: Conservation of biodiversity in the Marshall Islands concerns terrestrial native species, especially endemic species. Priority target trees and areas include breadfruit, climax forest (Pisonia grandis, Neisosperma oppositifolium), Pemphis acidula forest, and Mangrove forests. The Forestry Section of the Division of Agriculture will collaborate with other partners to map more detailed forest ecosystem types; map forest types and conservation values on the atolls and designate ?traditional land use? conservation areas (subsistence agroforestry production and compatible income generation with sustainable practices).
1.4 Support development of appropriate agroforestry systems: This activity will include promoting and increasing the production of agroforestry including high-value market intercrops; community extension and education. The approach will also rehabilitate and replant coconut.
Output 2. Sustainable small-livestock production systems developed and promoted

2.2 Improve feeds with local ingredients: Livestock feeds are very expensive, making the cost of livestock production too high. There is, therefore, a need for the Division of Agriculture to seek capacity building in making livestock feeds from local ingredients or making the feeds locally with a combination of local and imported materials. Recommendations should also be developed on good diets to be given to pigs and chickens using ingredients available to households.

2.3 Appropriate livestock management practices developed and promoted: The Division of Agriculture in collaboration with TTM will seek support for capacity building in the development and promotion of sustainable improved small livestock management practices, including animal pest and disease control, appropriate housing and waste management strategies. Many of the challenges facing the Division of Agriculture are interwoven, and significant benefits can be gained from closer integrated efforts with other stakeholders, including the Secretariat of the Pacific Community (SPC) and the United Nations Food and Agriculture Organization (FAO).

2.4 Livestock waste management improved: Piggery waste is a problem in the Marshall Islands, especially along with the coastal areas. This activity is linked to Output (soil management). Piggery waste should be used as one of the ingredients for composting to be used in crop production. The Agricultural Division should explore spearheading a national campaign on waste management for a cleaner environment and better crop nutrition.

Output 3. Sustainable crop production systems developed and promoted

3.1 Improve soil conditions: Efforts will be on improving soil organic matter by the use of composting, adaptable cover crops, and any other intervention that will recycle organic matter back to the soil. With the soils being multi-nutrient limiting, an effort should be made to develop targeted compost.

3.2 Improve water use: With the increasing incidence of droughts recently causing dwindling freshwater availability in the Marshall Islands and competition from other sectors, water use in agriculture will have to be very efficient. The use of bucket drip irrigation, wicking systems, and mulches will be promoted. Fullstops will be used to assess the vertical movement of water and potential polluting of the groundwater. One of the principles of the Agriculture Sector Plan is that agricultural innovations should be developed to bring about sustainable management of forests, soil, and water resources and their adaptation to climate change impacts and reduce agricultural pollution to manageable levels.

The Agriculture Sector Plan thereby contributes to the issues of environment, climate change and resilience and sustainable economic development that are highlighted in the Marshall Islands National Strategic Plan.

The priority areas for forestry in the Marshall Islands from the **State-Wide Assessment and Resource Strategy 2010 ? 2015+ (FAP)** are improving biodiversity; improving food security and sustainable livelihoods; coastal reinforcement; and reducing the loss of urban trees. The implementation of the activities under this output will also align with the Reimaanlok Conservation Plan.

The project will contribute to the following objectives of the 2018-2030 Strategic Framework of the United Nations Convention to Combat Desertification (UNCCD)[1]:

Strategic objective 1: To improve the condition of affected ecosystems, combat desertification/land degradation, promote sustainable land management and contribute to land degradation neutrality

Expected impact 1.1 Land productivity and related ecosystems services are maintained or enhanced.
Expected impact 1.2 The vulnerability of affected ecosystems is reduced and the resilience of ecosystems is increased.
Expected impact 1.3 National voluntary land degradation neutrality targets are set and adopted by countries wishing to do so, related measures are identified and implemented, and necessary monitoring systems are established.
Expected impact 1.4 Measures for sustainable land management and the combating of desertification/land degradation are shared, promoted and implemented.

Strategic objective 2: To improve the living conditions of affected populations

Expected impact 2.2 The livelihoods of people in affected areas are improved and diversified.
Expected impact 2.3 Local people, especially women and youth, are empowered and participate in decision-making processes in combating DLDD.

Strategic objective 4: To generate global environmental benefits through effective implementation of the UNCCD

Expected impact 4.1 Sustainable land management and the combating of desertification/land degradation contribute to the conservation and sustainable use of biodiversity and addressing climate change.
Expected impact 4.2 Synergies with other multilateral environmental agreements and processes are enhanced.

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[1] RMI has not yet developed national level plans or reports on land degradation in accordance with the UNCCD.

8. Knowledge Management

Elaborate the "Knowledge Management Approach" for the project, including a budget, key deliverables and a timeline, and explain how it will contribute to the project's overall impact.

8. Knowledge Management.
The project has particular potential to act as a regionally replicable model of how to link the delivery of global environmental benefits with sustainable, healthy food systems. The project implementation team will include a dedicated specialist responsible for monitoring, evaluation and outreach in order to ensure that knowledge is managed and disseminated effectively at national and regional levels. Under Output 4.1.1, the project will (i) develop a communications strategy incorporating the development of communication products and outreach program to share lessons learned and good practices and case studies from the project sites; (ii) design and develop a website as an online Knowledge Management Platform to facilitate and support implementation and share knowledge; and (iii) prepare and document case studies in how implementation of Atoll Food Systems Pathway Integrated

Action Plans, aligned with Local Resources Management Plans under the Reimaanlok Conservation Framework to meet the Micronesia Challenge, impact positively on food systems.

The project will ensure that project formulation and implementation adequately consider relevant experiences generated to date in the region and globally (for example in relation to land/seascape management and sustainable food systems in small island contexts); and, on the other, how the project will share the experiences that it generates at national, regional and global levels. The project will coordinate closely with national partner institutions, other GEF agencies, regional entities including the Secretariat of the Pacific Regional Environment Programme (SPREP), the Pacific Community (SPC) and the University of the South Pacific (USP), and FAO specialists at regional and HQ levels on relevant experiences and lessons to be taken into account in project implementation. The project will work with these regional entities, as well as with global mechanisms such as the Agroecology Knowledge Hub and the World Overview of Conservation Approaches and Technologies (WOCAT) (Section 1(7) above) as hubs for continuous knowledge exchange across the Pacific and across SIDS globally. It is particularly important for the project to learn from the multi-focal Ridge to Reef (R2R) projects initiated during GEF-5 across the Pacific, led by UNDP and in which FAO also participated as implementing agency. Exchange will also be sought with other relevant GEF projects in the region and globally, including the UNDP GEF-7 Securing Climate-Resilient Sustainable Land Management and Progress Towards Land Degradation Neutrality in the Federated States of Micronesia (GEF ID 10858) and the FAO GEF-7 BIOREACH: Biodiversity Conservation and Agroecological Land Restoration in Productive Landscapes of Trinidad and Tobago (GEF ID 10188).

At ground level, emphasis will be placed on the participatory review, discussion, sharing and management of traditional knowledge regarding food system and natural resource management, in line with the provisions of the NBSAP (Strategic Theme C on Traditional Culture and Practices) and in accordance with the provisions of the Nagoya Protocol on Access and Benefit Sharing.

The relevant KM budget and key deliverables are shown below, as reflected in the budget in Annex A2.

Deliverable	Timeline	Budget (USD)
1. Development and implementation of communications strategy: Communications Specialist & KM support	Years 1-5	35,000
2. Development and implementation of data and information management system: Data & Information Management Officer	Years 1-5	20,000
3. Communications materials & Publications	Years 2-4	10,000
4. Project Inception Workshop	Year 1	1,500
5. Project Steering Committee (PSC) meetings	Years 1-4	2,000
Total Budget		**68,500**

9. Monitoring and Evaluation

Describe the budgeted M and E plan

1. The project results, as outlined in the project results framework (Annex A1), will be monitored regularly, reported annually and assessed during project implementation to ensure the project effectively achieves these results. Monitoring and evaluation activities will follow FAO and GEF?s policies and guidelines for monitoring and evaluation. The M&E system will also facilitate learning, replication of the project?s results and lessons which will feed the project?s knowledge management strategy.

Monitoring Arrangements

2. Project oversight and supervision will be carried out by the Budget Holder (BH) with the support of the Project Task Force (PTF), Lead Technical Officer (LTO) and Funding Liaison Officer (FLO) and relevant FAO technical units in FAO headquarters. Oversight will ensure that: (i) project outputs are produced in accordance with the project results framework and leading to the achievement of project outcomes; (ii) project outcomes are leading to the achievement of the project objective; (iii) risks are continuously identified and monitored and appropriate mitigation strategies are applied; and (iv) agreed project global environmental benefits / adaptation benefits are being delivered.

3. The FAO-GEF Coordination Unit and HQ Technical units will provide oversight of GEF financed activities, outputs and outcomes largely through the annual Project Implementation Reports (PIRs), periodic backstopping and supervision missions.

4. Day-to-day project monitoring will be carried out by the Project Management Unit (PMU)/Operational Partner (OP). Project performance will be monitored using the project results matrix, including indicators (baseline and targets) and annual work plans and budgets. At inception phase, the results matrix will be reviewed to finalize the identification of i) outputs ii) indicators iii) targets and iv) any missing baseline information

5. A detailed M&E plan, which builds on the results matrix and defines specific requirements for each indicator (data collection methods, frequency, responsibilities for data collection and analysis, etc) will also be developed during project inception by the PMU?s/OP?s National Project Coordinator / M&E Specialist.

The timeline of key M&E activities, a budget, and roles and responsibilities are presented in the table below.

Project Monitoring and Evaluation Plan

M&E Activity	Responsible Parties	Timeframe	GEF Budget (USD)
Inception Workshop	PMU/OP	Within two months of project document/OPA signature	n/a (included in National Project Coordinator TOR
Project Inception Report	PMU/OP	Within two weeks of inception workshop	10,000 (M&E Specialist)
Project Progress Reports (PPRs)	PMU/OP, LTO/BH	6 monthly	
Project Implementation Review reports (PIRs)	PMU/OP, LTO/BH	Annually in July	

M&E Activity	Responsible Parties	Timeframe	GEF Budget (USD)
Mid-term review	BH	At mid-point of project implementation	50,000
Terminal Evaluation	The BH will be responsible to contact the Regional Evaluation Specialist (RES) within six months prior to the actual completion date (NTE date). The RES will manage the decentralized independent terminal evaluation of this project under the guidance and support of OED.	To be launched within six months prior to the actual project completion date	50,000
Terminal Report	PMU/OP, BH, LTO	Two months before the end date of the project	6,550
Mid-term evaluation workshop	PMU/OP, BH, LTO	During mid-term review	1,500
Final evaluation workshop	PMU/OP, BH, LTO	During terminal evaluation	1,500
Total Budget			**119,550**

Monitoring and Reporting

6. In compliance with FAO and GEF M&E policies and requirements, the PMU/OP, in consultation with the Project Steering Committee (PSC) and PTF will prepare the following i) Project inception report; (ii) Annual Work Plan and Budget (AWP/B); (iii) 6 monthly Project Progress Reports (PPRs); (iv) annual Project Implementation Review (PIR); (v) Technical Reports; (vi) Co-financing reports; and (vii) Terminal Report. In addition, the Core Indicators included in Annex A1 will be used to monitor Global Environmental Benefits and updated regularly by the PMU/OP.

7. **Project Inception Report**. A project inception workshop will be held within two months of project start date and signature of relevant agreements with partners. During this workshop the following will be reviewed and agreed:

? The proposed implementation arrangement, the roles and responsibilities of each stakeholder and project partners;

? An update of any changed external conditions that may affect project implementation;

? The results framework, the SMART indicators and targets, the means of verification, and monitoring plan;

? The responsibilities for monitoring the various project plans and strategies, including the risk matrix, the gender strategy, the knowledge management strategy, and other relevant strategies;

? Finalize the preparation of the first year AWP/B, the financial reporting and audit procedures;

? Schedule the PSC meetings;

? Prepare a detailed first year AWP/B.

8. The PMU/OP will draft the inception report based on the agreement reached during the workshop and circulate among PSC members, BH (i.e., FAO-RAP), LTO and FLO for review within one month. The final report will be cleared by the FAO BH, LTO and the FAO GEF Coordination Unit and uploaded in FAO?s Field Program Management Information System (FPMIS) by the BH.

9. **Results-based Annual Work Plan and Budget (AWP/B)**. The draft of the first AWP/B will be prepared by the PMU/OP in consultation with the project partners and the FAO Project Task Force, reviewed at the project Inception Workshop, and submitted to the Project Steering Committee (PSC). The Inception Workshop and PSC inputs will be incorporated and subsequently, the PMU/OP after approval by the PSC will submit a final draft AWP/B to the BH within two weeks after the first PSC meeting. For subsequent AWP/B, the PMU/OP will organize a project progress review and planning meeting for its progress review and adaptive management. Once PSC comments have been incorporated and after approval by the PSC, the PMU/OP will submit the AWP/B to the FAO BH for non-objection, LTO and the FAO GEF Coordination Unit for comments and for clearance by BH and LTO prior to uploading in FPMIS by the BH. The AWP/B must be linked to the project?s Results Framework indicators to ensure that the project?s work and activities are contributing to the achievement of the indicators. The AWP/B should include detailed activities to be implemented to achieve the project outputs and output targets and divided into monthly timeframes and targets and milestone dates for output indicators to be achieved during the year. A detailed project budget for the activities to be implemented during the year should also be included together with all monitoring and supervision activities required during the year.

10. **Project Progress Reports (PPR)**: The PPRs are used to identify constraints, problems or bottlenecks that impede timely implementation and to take appropriate remedial action. PPRs will be prepared based on the systematic monitoring of output and outcome indicators identified in the Project Results Framework (Annex A1), AWP/B and M&E Plan. Each semester the National Project Coordinator / M&E Specialist will prepare a draft PPR, will collect and consolidate any comments from the National Project Director, the Project Executive Members and FAO PTF. The PMU/OP will submit the final PPRs to the PSC and to FAO-RAP every six months, prior to 31 July (covering the period between January and June) and before 31 January (covering the period between July and December). The July-December report should be accompanied by the updated AWP/B for the following Project Year (PY) for review and no-objection by the FAO PTF. The Budget Holder has the responsibility to coordinate the preparation and finalization of the PPR, in consultation with the PMU/OP, LTO and the FLO. After LTO, BH and FLO clearance, the FLO will ensure that project progress reports are uploaded in FPMIS in a timely manner.

11. **Annual Project Implementation Report (PIR)**: The PIR is a key self-assessment tool used by GEF Agencies for reporting every year on project implementation status. It helps to assess progress toward achieving the project objective and implementation progress and challenges, risks and actions that need to be taken. Under the lead of the BH, the National Project Coordinator / M&E Specialist in consultation with the National Project Director and the Project Executive Members will prepare a consolidated annual PIR report covering the period July (the previous year) through June (current year) for each year of implementation, in collaboration with national project partners (including the GEF OFP), the Lead Technical Officer, and the FLO. The National Project Coordinator / M&E Specialist will ensure that the indicators included in the project results framework are monitored annually in advance of the PIR submission and report these results in the draft PIR. The PMU/OP will submit the final PIRs to the PSC and to the BH (FAO-RAP).

12. The BH will be responsible for consolidating and submitting the PIR report to the FAO-GEF Coordination Unit for review by the date specified each year. The FAO-GEF Funding Liaison Officer (FLO) reviews the PIR and discusses the progress reported with the BH and LTO as required. The BH will submit the final version of the PIR to the FAO-GEF Coordination Unit for final approval. The FAO-GEF Coordination Unit will then submit the PIR to the GEF Secretariat as part of the Annual Monitoring Review of the FAO-GEF portfolio.

13. **Technical Reports**: Technical reports will be prepared as part of project outputs and to document and share project outcomes and lessons learned. The LTO will be responsible for ensuring appropriate technical review and clearance of technical reports. Copies of the technical reports will be distributed to project partners and the Project Steering Committee as appropriate.

14. **Co-financing Reports**: The PMU/OP will be responsible for tracking co-financing materialized against the confirmed amounts at project approval and reporting. The co-financing report, which covers the GEF fiscal year 1 July through 30 June, is to be submitted on or before 31 July and will be incorporated into the annual PIR. The co-financing report needs to include the activities that were financed by the contribution of the partners.

15. **Tracking and reporting on results across the GEF 7 core indicators and sub-indicators**: As of July 1, 2018, the GEF Secretariat requires FAO as a GEF Agency, in collaboration with recipient country governments, executing partners and other stakeholders to provide indicative, expected results across applicable core indicators and sub-indicators for all new GEF projects submitted for Approval. During the approval process of the project, expected results against the relevant indicators and sub-indicators were provided to the GEF Secretariat. Throughout the implementation period of the project, the PMU/OP is required to track the project?s progress in achieving these results across applicable core indicators and sub-indicators. At project mid-term and project completion stage, the project team in consultation with the PTF and the FAO-GEF Coordination Unit are required to report achieved results against the core indicators and sub-indicators used at CEO Endorsement.

16. **Terminal Report**: Within two months before the end date of the project, and one month before the Terminal Evaluation, the PMU/OP will submit to FAO Headquarters a draft Terminal Report. The main purpose of the Terminal Report is to give guidance at ministerial or senior government level on the policy decisions required for the follow-up of the project, and to provide the donor with information on how the funds were utilized. The Terminal Report is accordingly a concise account of the main products, results, conclusions and recommendations of the project. The target readership consists of persons who are not necessarily technical specialists but who need to understand the policy implications of technical findings and needs for insuring sustainability of project results.

MTR and Evaluation provisions

17. **Mid-Term Review**: As outlined in the GEF Evaluation Policy, Mid-Term Reviews (MTRs) or mid-term evaluations (MTEs) are mandatory for all GEF-financed full-sized projects (FSPs). The Mid-Term review will (i) assess the progress made towards achievement of planned results (ii) identify problems and make recommendations to redress the project (iii) highlight good practices, lessons learned and areas with the potential for upscaling.

18. The Budget Holder is responsible for the conduct of the MTR of the project in consultation with the FAO-GEF Coordination Unit halfway through implementation. He/she will contact the FAO-GEF Coordination Unit about 3 months before the project half-point (within three years of project CEO Endorsement) to initiate the MTR exercise.

19. To support the planning and conduct of the MTR, the FAO GEF Coordination Unit has developed a guidance document ?The Guide for planning and conducting Mid-Term Reviews of FAO-GEF projects and programmes?. The FAO-GEF Coordination Unit will appoint an MTR focal point who will provide guidance on GEF specific requirements, quality assurance on the review process and overall backstopping support for the effective management of the exercise and for timely the submission of the MTR report to the GEF Secretariat.

20. After the completion of the Mid-Term Review, the BH will be responsible for the distribution of the MTR report at country level (including to the GEF OFP) and for the preparation of the **Management Response** within 4 weeks and share it with national partners, GEF OFP and the FAO-GEF CU. The BH will also send the updated core indicators used during the MTR to the FAO-GEF CU for their submission to the GEF Secretariat.

21. **Terminal Evaluation**: The GEF evaluation policy foresees that all Medium and Full-sized projects require a separate terminal evaluation. Such evaluation provides: i) accountability on results, processes, and performance ii) recommendations to improve the sustainability of the results achieved and iii) lessons learned as an evidence-base for decision-making to be shared with all stakeholders (government, execution agency, other national partners, the GEF and FAO) to improve the performance of future projects.

22. The Budget Holder will be responsible to contact the **Regional Evaluation Specialist (RES)** within six months prior to the actual completion date (NTE date). The RES will manage the decentralized independent terminal evaluation of this project under the guidance and support of OED and will be responsible for quality assurance. Independent external evaluators will conduct the terminal evaluation of the project taking into account the ?GEF Guidelines for GEF Agencies in Conducting Terminal Evaluation for Full-sized Projects?. FAO Office of Evaluation (OED) will provide technical assistance throughout the evaluation process, via the OED Decentralized Evaluation Support team ? in particular, it will also give quality assurance feedback on: selection of the external evaluators, Terms of Reference of the evaluation, draft and final report. OED will be responsible for the quality assessment of the terminal evaluation report, including the GEF ratings.

23. After the completion of the terminal evaluation, the BH will be responsible to prepare the management response to the evaluation within 4 weeks and share it with national partners, GEF OFP, OED and the FAO-GEF CU. The BH will also send the updated core indicators used during the TE to the FAO-GEF CU for their submission to the GEF Secretariat.

24. The evaluations will also assess how the OPA implementation and partnership agreement influenced the achievement and sustainability of results while contributing to enhance capacities of the OP/s. In doing so, the evaluation will consider the brief guidance note and evaluation questions OED has developed in consultation with the OPIM unit.

Disclosure

25. The project will ensure transparency in the preparation, conduct, reporting and evaluation of its activities. This includes full disclosure of all non-confidential information, and consultation with major groups and representatives of local communities. The disclosure of information shall be ensured through posting on websites and dissemination of findings through knowledge products and events. Project reports will be broadly and freely shared, and findings and lessons learned made available.

10. Benefits

Describe the socioeconomic benefits to be delivered by the project at the national and local levels, as appropriate. How do these benefits translate in supporting the achievement of global environment benefits (GEF Trust Fund) or adaptation benefits (LDCF/SCCF)?

It is anticipated that the project will generate benefits for 5,000 farmers, fishers, and other local community members (with an estimated 50% women, at least 25% youth), who will have access to sustainable livelihood options. This will be achieved, in particular, through the following outputs:

? Output 2.1.1 Demonstration models for sustainable ?Blue? food production and consumption pathways, featuring landscape concepts, seascape management, aquaculture, sustainable harvesting of in-shore species, nature-based solutions and circular economy solutions

? Output 2.1.2 Demonstration models for sustainable ?Green? food production, featuring landscape concepts, landscape resources management, sustainable land management, integrated farming systems, nature-based solutions and circular economy solutions
? Output 3.1.3 Establish and strengthen, including training (both formal and informal), value-chains for local produce and local food products markets, including import substitutes
? Output 3.1.4 Strategy for improvements of transport infrastructure and services as related to food systems

The project incorporates specific measures to support women empowerment, as well as youth empowerment and employment in agriculture (see Annex K). Under output 1.2.2 the project will implement a program for the enhancement of human capacities including targeting youth who are currently not in formal employment but contributing to family subsistence living. Complementary measures have been included aiming at training youth, engaging them and their associations in the value-chain, facilitating their access to productive resources, credit and markets, and stimulating youth-friendly business development services.

Note: FAO holds a zero-tolerance policy toward child labour. The project will ensure compliance with FAO?s Framework on Ending Child Labour in Agriculture.[1] In line with this framework, youth (15-17 years) can be engaged as beneficiaries for non-hazardous work in line with the definition of the framework. Age-appropriate job training could be provided to youth that are ?Not in Education, Employment, or Training? (NEET) to provide opportunities for livelihood improvement. Before undertaking any activities that engage youth aged 15-17 years in job training or any other work-related activities, the PMU will seek additional guidance from the child labour focal point in FAO HQ.

Internationally, youth is typically defined as age group between 15-24 years. In RMI, youth is defined as 16-24 years old (in the context of National Vocational Training).[2] The project will aim to collect age- (and sex-) disaggregated data where feasible.

Decent Rural Employment

The project will support households currently involved in subsistence production only and provide options for local food production that potentially allow them to become involved in commercial activities. Hence, the project is intended to bring about positive changes for local livelihoods. The project will ensure that its activities do not perpetuate poverty and inequality in socially unsustainable agriculture and food systems. Socio-economic surveys and beneficiary surveys and interviews will be conducted by the project team to ensure that the project benefits the vulnerable and the poor, in particular.

Also, as noted above, women and youth are identified as focus beneficiaries with specific indicator: 50% women and 25% youth of total direct beneficiaries at the field level.

While identified health and safety risks are considered as minor, the project will ensure that adequate measures are taken to endure safety of workers and farmers during these activities (as noted in Annex I1 ESMF) aligned with FAO social and environment guidelines.

Finally, through the project life-cycle, the project will apply principles, practices and techniques that are best suited to avoiding the violation of, and promoting the application of core international labour standards, other international labour standards relevant to the agri-food sectors, and national employment and labour laws.

[1] FAO (2020). FAO Framework on Ending Child Labour in Agriculture.

[2] Ministry of the Education Republic of Marshall Islands (2014). Education for All National Review.

11. Environmental and Social Safeguard (ESS) Risks

Provide information on the identified environmental and social risks and potential impacts associated with the project/program based on your organization's ESS systems and procedures

Overall Project/Program Risk Classification*

PIF	CEO Endorsement/Approval	MTR	TE
Medium/Moderate	Medium/Moderate		

Measures to address identified risks and impacts

Elaborate on the types and risk classifications/ratings of any identified environmental and social risks and impacts (considering the GEF ESS Minimum Standards) and any measures undertaken as well as planned management measures to address these risks during implementation.

Section B: Environmental and Social risks from the project

Corresponding to section 11 in CEO Endorsement module of the GEF Portal.

In line with FAO?s Environmental and Social Management Guidelines, the proposed project?s risk is classified as **Moderate**. The following ESS Standards have been triggered by this project (see ESS risk screening in separate document). The moderate risks identified are addressed in the following section. Please refer to Annex I1 ESMF for details.

FAO Environmental and Social Safeguard Standards	Triggered	Safeguard Instruments & Mitigation Measures
ESS 1 ? Natural Resources Management	No	Non-Eligible Activities (Annex 1)
ESS2 ? Biodiversity, Ecosystems, and Natural Habitats	YES	ESMF, Site-Specific ESIA and Non-Eligible Activities (Annex 1)
ESS3 ? Plant Genetic Resources for Food and Agriculture	YES	ESMF, and Non-Eligible Activities (Annex 1)
ESS4 ? Animal ? Livestock and Aquatic Genetic Resources for Food and Agriculture	No	n/a
ESS5 ? Pest and Pesticide Management	No	Non-Eligible Activities (Annex 1)
ESS6 ? Involuntary Resettlement and Displacement	No	Non-Eligible Activities (Annex 1)
ESS7 ? Decent Work	YES	ESMF, and Non-Eligible Activities (Annex 1)
ESS8 ? Gender Equality	No	Gender Analysis and Action Plan
ESS9 ? Indigenous Peoples and Cultural Heritage	YES	ESMF, Annex J

Risk Management Plan

The actions proposed for the project to manage and effectively mitigate the identified environmental and social risks are summarized below. All identified risks are considered small in scale, localized and manageable. The project will ensure that it has a functional Grievance Redress Mechanism (GRM) in place and will prepare an Environmental and Social Management Plan (ESMP), based on the existing ESMF, when the project sites are known and before the activities are implemented.

Social & Environmental Risks and Impacts	Mitigation measures	Cost (USD)	Timeline
ESS 1: Natural Resource Management			
Would this project aim at improving an irrigation scheme? Yes: The project may be working to improve some existing small-scale irrigation systems based on rainwater.	There are no existing small-scale irrigation systems based on groundwater. The project will however install some small-scale irrigation systems based on stored rainwater off roofs of piggery housing. Where these are installed, Environmental Impact Assessments would be carried out in line with national regulations.	25,000 budgeted for EIAs	*Years 1-4*

Would this project include the usage of wastewater? Yes: The project will generate waste or wastewater/effluents from its small-scale livestock (piggery) operations.	The project will apply and adhere to the applicable national regulations, including the Solid Waste Regulations (1989, 1994 amendment), the Toilet Facilities and Sewage Disposal Regulations (1990) and the Pollutant Discharge Elimination System Regulations (1992). Furthermore, it will follow the WHO/FAO/UNEP Guidelines on Safe Usage of Waste Water in Agriculture. The project will promote livestock-crop integrated farming systems to utilise effluent as organic fertilisers. Under Activity 2.1.2.7 the project will install livestock waste management technologies such as biodigesters which will reduce the nutrient loads of effluent and dry litter technology) to produce organic fertiliser and reduce volumes of wastewater.	25,000 budgeted for EIAs	*Years 1-4*
Could this project result in a negative change to existing legitimate tenure rights? No. Customary rights will be respected.	The project will apply and adhere to the principles/framework of the Voluntary Guidelines on the Responsible Governance of Tenure of Land, Fisheries and Forests in the Context of National Food Security (VGGT). Please refer to Annex J for details. Under output 1.1.2, the project will support the development of Atoll Food System Pathway Integrated Action Plans. The oversight of these IAPs will be provided by Local Government and Traditional Leaders of the 6 Atolls which will ensure project interventions are carried out in a manner that respect customary land tenure rights.	See Annex J	*Years 1-4*
ESS 2: Biodiversity, Ecosystems and Natural Habitats			

Would this project be implemented within a legally designated protected area or its buffer zone? Yes. The project interventions will involve Marine Protected Areas as part of the seascapes/ landscapes it operates in. As shown in Table 2 in section 2 above, the LRMPs for 3 of the 6 atolls are being drafted and LRCs not yet established. As such, the exact sites where activities will be implemented could not be finalised during the design phase and will be determined during implementation, in particular in the development of Atoll Food System Integrated Actions Plans under 1.1.2.	Activities 2.1.1.5 and 2.1.2.10 propose to carry out site-specific environmental and social impact assessments to be conducted during implementation once the exact sites are identified.	25,000 budgeted for EIAs	*Years 1 -2*
ESS 3: Plant Genetic Resources for Food and Agriculture			

Would this project involve access to genetic resources for their utilization and/or access to traditional knowledge associated with genetic resources that is held by indigenous, local communities and/or farmers? Yes: The project will support the participatory recording, analysis and dissemination of traditional knowledge on food production and natural resource management, with the full consent of the knowledge owners in accordance with principles of free, prior and informed consent (FPIC) and the Nagoya Protocol on Access and Benefit Sharing.	The project may support exchange of genetic resources (planting material) and associated traditional knowledge among Atoll communities in the Marshall Islands. It is not anticipated that the project would involve any exchange of genetic resources *internationally.* In addition, it is expected that most genetic resources and associated traditional knowledge relevant to this project are already in the public domain (see Annex J for details). Nevertheless, the project will undertake a separate analysis in each instance where project activities involve genetic resources. Access to and documentation of genetic resources and associated traditional knowledge will only be done with the full consent of the knowledge owners in accordance with principles of free, prior and informed consent (FPIC), the Nagoya Protocol on Access and Benefit Sharing, and the International Treaty on Plant Genetic Resources for Food and Agriculture. Furthermore, the project in activity 2.1.2.9 will support the propagation and planting of plant trees and crops of high cultural, medicinal and nutritional values and those that are becoming rare.	No extra costs, part of activities budget	*Years 1-4*

Would this project involve the importing or transfer of seeds and/or planting materials for cultivation? Yes. The project will potentially support exchanges of planting material among farmers, in some cases between different islands/atolls, and also from SPC/LRD?s Centre Pacific Crops and Trees (CePACT), which aims to assist Pacific Island countries and territories (PICTs) to conserve the region?s genetic resources, and to provide access to the diversity they need, when they need it.	The project will ensure the following: ? Avoid undermining local seed and planting material production and supply systems, and instead plan the activities closely with local government and farmers. ? Ensure that the seeds and planting materials are from locally adapted crops and varieties that are accepted by farmers and consumers. ? Ensure that the seeds and planting materials are free from pests and diseases according to agreed norms, especially the International Plant Protection Convention (IPPC). ? Internal clearance from FAO?s Plant Production and Protection Division (AGPMG) is required for all procurement of seeds and planting materials. Clearance from AGPMC is also required for chemical treatment of seeds and planting materials. ? Clarify that the seed or planting material can be legally used in the RMI. ? Clarify whether seed saving is permitted under the RMI?s existing laws and/or regulations and advise the counterparts accordingly. ? Ensure, according to applicable national laws and/or regulations, that farmers? rights to PGRFA and over associated traditional knowledge are respected in the access to PGRFA and the sharing of the benefits accruing from their use. Refer to ESS9: Indigenous peoples and cultural heritage.	Gender and ESS Specialist 30,000	*Years 1-4*

Would this project establish or manage planted forests? Yes: The project will potentially invest in the restoration of coastal ecosystems, through planting and strengthening of coconut and breadfruit agro-forestry systems.	The project will ensure the following: ? Adhere to existing national policies, in particular the National Environmental Protection Act. ? Observance of principles 9-12 of the Voluntary Guidelines on Planted Forests: o *Principle 9: Maintenance and conservation of environmental services.* o *Principle 10: Conservation of biological diversity.* o *Principle 11: Maintenance of forest health and productivity.* o *Principle 12: Management of landscapes for social, economic and environmental benefits.* ? Planners and managers must incorporate conservation of biological diversity as fundamental in their planning, management, utilization and monitoring of planted forest resources. ? In order to reduce the environmental risk, incidence and impact of abiotic and biotic damaging agents and to maintain and improve planted forest health and productivity, FAO will work together with stakeholders to develop and derive appropriate and efficient response options in planted forest management. Furthermore, the project will exchange with the UNDP GEF-5 Reimaanlok project (GEF ID 5544)[1] and other relevant projects promoting sustainable agro-forestry practices in the Marshall Islands.	Forestry &Tree Resources Specialist 17,000	*Years 1-4*
ESS 4: Animal - Livestock and Aquatic - Genetic Resources for Food and Agriculture			
n/a			
ESS 5: Pest and Pesticide Management			

n/a There is the potential that some participating farmers will use pesticides, but this will not be supported by the project. The project will promote Integrated Pest Management (IPM) and Integrated Nutrient Management (INM) practices to reduce the unsustainable use of pesticides, maintain a negative list of highly hazardous pesticides (HHPs) and government banned pesticides, and, if farmers use pesticides, promote their safe handling, storage and disposal of pesticide used containers.	n/a The project will promote agroecosystems-based alternatives to the use of pesticides such as using *mucuna pruriens* as ground cover for weed management and for improving soil heath and soil condition.	n/a	*Years 1-4*
ESS 6: Involuntary Resettlement and Displacement			
n/a			
ESS 7: Decent Work			
Would this project operate in sectors or value chains that are dominated by subsistence producers and other vulnerable informal agricultural workers, and more generally characterized by high levels ?working poverty?? Yes. The project will support households currently involved in subsistence production only and provide options for local food production that potentially allow them to become involved in commercial activities.	The project is intended to bring about positive changes for local livelihoods. The project will ensure that its activities do not perpetuate poverty and inequality in socially unsustainable agriculture and food systems. Socio-economic surveys and beneficiary surveys and interviews will be conducted by the project team to ensure that the project benefits the vulnerable and the poor, in particular. Through the project life-cycle, the project will apply principles, practices and techniques that are best suited to avoiding the violation of, and promoting the application of core international labour standards, other international labour standards relevant to the agri-food sectors, and national employment and labour laws.	Gender and ESS Specialist 30,000	*Years 1-4*

Would this project operate in situations where youth work mostly as unpaid contributing family workers, lack access to decent jobs and are increasingly abandoning agriculture and rural areas? Yes	The project incorporates specific measures to support youth empowerment and employment in agriculture (see Annex K). Under output 1.2.2 the project will implement a program for the enhancement of human capacities including targeting youth who are currently not in formal employment but contributing to family subsistence living. Complementary measures have been included aiming at training youth, engaging them and their associations in the value chain, facilitating their access to productive resources, credit and markets, and stimulating youth-friendly business development services. Note: FAO holds a zero-tolerance policy toward child labour. The project will ensure compliance with FAO?s Framework on Ending Child Labour in Agriculture.[2] In line with this framework, youth (15-17 years) can be engaged as beneficiaries for non-hazardous work in line with the definition of the framework. Age-appropriate job training could be provided to youth that are ?Not in Education, Employment, or Training? (NEET) to provide opportunities for livelihood improvement. Before undertaking any activities that engage youth aged 15-17 years in job training or any other work-related activities, the PMU will seek additional guidance from the child labour focal point in FAO HQ. Internationally, youth is typically defined as age group between 15-24 years. In RMI, youth is defined as 16-24 years old (in the context of National Vocational Training).[3] The project will aim to collect age- (and sex-) disaggregated data where feasible.	Budgeted as part of Outcome 1.2	*Years 1-4*
Would this project operate in situations where major gender inequality in the labour market prevails? Yes	Please refer to separate Annex K.	See Annex K	*Years 1-4*

Would this project involve sub-contracting? Yes: The project may implement some activities through letters of agreement.	The project will promote, to the extent possible, subcontracting to local entrepreneurs ? particularly to rural women and youth ? to maximize employment creation under decent working conditions. Also, FAO and the Executing Agency will monitor and eventually support contractors to fulfil the standards of performance and quality, taking into account national and international social and labour standards.	No extra cost	*Years 1-4*
Would this project provide or promote technologies or practices that pose occupational safety and health (OSH) risks for farmers, other rural workers or rural populations in general? No	Health and safety risks from any small-scale structures provided by the project are considered minor. Tools and equipment provided will also be small scale. The project will ensure that adequate measures are taken to ensure safety of workers and farmers during these activities.	No extra costs	*Years 1-4*
ESS 8: Gender Equality			
Gender equality	The project incorporates a Gender Analysis and Action Plan, with specific gender-targeted activities built into the project design. Please refer to Annex K for details.	See Annex K	*Years 1-4*
ESS 9: Indigenous Peoples and Cultural Heritage			
The project has Indigenous Peoples living in the project areas where activities will take place.	The majority of the population of the Marshall Islands is indigenous, however, they are not marginalized or subject to discrimination. Please refer to Annex J for details. A Free, Prior and Informed Consent (FPIC) process will be applied during project implementation.	See Annex J	*Year 1*
Cultural heritage	As noted in Annex J, it is not anticipated that the project will have any negative impacts on tangible or intangible cultural heritage. As explained above, no infrastructure work will be undertaken; only minor structures may be financed by the GEF grant. The project will regularly communicate with the Historic Preservation Office, Local Governments and Traditional Leaders during project implementation.	See Annex J	*Years 1-4*

[1] Reimaanlok ? Looking to the Future: Strengthening natural resource management in atoll communities in the Republic of Marshall Islands employing integrated approaches (RMI R2R).

[2] FAO (2020). FAO Framework on Ending Child Labour in Agriculture.

[3] Ministry of the Education Republic of Marshall Islands (2014). Education for All National Review.

Supporting Documents

Upload available ESS supporting documents.

Title	Module	Submitted
PPG_RMI_Indigenous Peoples Plan_GEF-7	**CEO Endorsement ESS**	
PPG_Annex I1ESMF_RMI_GEF-7	**CEO Endorsement ESS**	
PPG_ESS Risk screening FAO template RMI GEF-7	**CEO Endorsement ESS**	
Climate Risk Screening_FAO-GEF_Marshall Islands	**Project PIF ESS**	
ESS_Screening checklist	**Project PIF ESS**	
FAO Environmental Risk Certification Sept 2021	**Project PIF ESS**	

ANNEX A: PROJECT RESULTS FRAMEWORK (either copy and paste here the framework from the Agency document, or provide reference to the page in the project document where the framework could be found).

Annex A1: Project Results Framework

Results chain	Indicators	Baseline	Mid-term target	Final target	Means of verification	Assumptions	Responsible for data collection
OBJECTIVE: To transform food systems and land/seascape management in the Marshall Islands to deliver integrated global environmental benefits and health benefits							
Objective-level indicators / Global Environmental Benefits (GEBs)							
Core Indicator 3: Area of land restored (Hectares)		*0*	*25 ha of degraded agricultural land restored* *12.5 ha of forest and forest land restored*	*100 ha of degraded agricultural land restored* *50 ha of forest and forest land restored*	*M&E database*		*MNRC, EPA, CCD, PMU*
Core Indicator 4: Area of landscapes under improved practices (excluding protected areas) (Hectares)		*0*	*50 ha under SLM in production systems* *50 ha under improved mgmt. to benefit biodiversity*	*225 ha under SLM in production systems* *200 ha under improved management to benefit biodiversity*	*M&E database*		*MNRC, EPA, CCD, PMU*
Core Indicator 5: Area of marine habitat under improved practices (excluding protected areas) (Hectares)		*0*	*500 ha of marine habitat**[1]** with reduced threats*	*3,500 ha of marine habitat1 with reduced threats*	*M&E database*		*MNRC, EPA, CCD, PMU*

Results chain	Indicators	Baseline	Mid-term target	Final target	Means of verification	Assumptions	Responsible for data collection
Core Indicator 6: Greenhouse Gas Emissions Mitigated (metric tons of CO2e)		*0*	*- (monitored)*	*34,808 tCO2 eq sequestered through improved farming practices and ecosystem restoration (24,863 tons direct and 9,945 tons indirect)*	*EX-ACT calculation*		*MNRC, EPA, CCD, PMU*
Core Indicator 11: Number of direct beneficiaries disaggregated by gender as co-benefit of GEF investment *(farmers, fishers and other local community members with access to sustainable options)*		*0*	*1,250 (50% women, 25% youth)*	*5,000 (50% women, 25% youth)*	*M&E database*		*MNRC, EPA, CCD, PMU*
Component 1: Favourable enabling conditions for integrated environmental and food system management.							

Results chain	Indicators	Baseline	Mid-term target	Final target	Means of verification	Assumptions	Responsible for data collection
<u>Outcome 1.1:</u> Considerations of integrated environmental management and food system management are mainstreamed into policies, strategies and planning in the RMI.	1. Extent of mainstreaming integration of food systems and landscape/seascape management of BD and ES in sector policies, strategies and planning, through integration of ?land degradation neutrality? and ?food systems? in, but not limited to: i. UNCCD National Action Plan (UNCCD NAP), ii. 5-year review of the ASP, and *iii.* next review of the NBSAP.	Awareness of landscape/Seascape management of natural resources have been introduced through the R2R GEF Project, but the concepts have not been mainstreamed. The concepts of land degradation neutrality have not been introduced into RMI policy development.	Concept Notes & Agendas for Workshops to: update of UNCCD NAP; and 5-year review of the ASP, include the terms and feature concepts of ?food system? and ?landscape/seascape? approaches and LDN concepts	The new UNCCD NAP feature concepts of food systems and landscape/seascape approaches. The 5-year review of the ASP feature concepts of land degradation neutrality Review of the NBSAP include at least one paragraph on integration of ?food system? and ?landscape/seascape approaches?	Concept Notes & Agendas for Workshops to: update of UNCCD NAP; and 5-year review of the ASP. Draft of new UNCCD NAP. Report of 5-year review of the ASP. New NBSAP document.	The processes for updating the UNCCD NAP, review of the ASP and NBSAP are fully participatory, multi-sectoral and involve inter-ministerial collaboration.	NRC, EPA, CCD, PMU

Results chain	Indicators	Baseline	Mid-term target	Final target	Means of verification	Assumptions	Responsible for data collection
Output 1.1.1. National Food Systems Pathway (NFSP) - Transforming the Marshall Islands Food System by 2030: Implementation Framework	2. National Food Systems Pathway approved by Cabinet.	A draft NFSP document was developed as a culmination of the National Dialogues for the 2021 World Food Summit. Cabinet approval process has commenced.	At least two multi-stakeholder consultations carried out to raise awareness on the NFSP.	The NFSP is approved by Cabinet with key priorities implemented.	Cabinet approval document of the NFSP.	Political leadership is secured to support multi-sectoral participatory processes and coordination.	NRC, EPA, CCD, PMU
	3. Implementation Framework for the National Food Systems Pathway approved by Government	Three Concept notes have been prepared to support implementation of the NFSP: (i) Incentives for Ecosystem Services in Blue and Green Food Systems (ii) Atoll Food System Officer Program (iii) Inter-ministerial Collaboration Toolkit	A draft Implementation Framework prepared building and expanding on the 3 Concept Notes prepared, with clear linkages to Atolls Food Systems Pathway Integrated Action Plans (1.1.2) and include clear institutional coordination arrangements.	An Implementation Framework document approved by Government.	Implementation Framework document	Inter-ministerial collaboration is secured to support multi-sectoral participatory processes and coordination.	MNRC

Results chain	Indicators	Baseline	Mid-term target	Final target	Means of verification	Assumptions	Responsible for data collection
Output 1.1.2: Atolls Food Systems Pathway Integrated Action Plans (AFSP IAP)	4. Number of atolls with Atolls Food System Pathway - Integrated Action Plans (AFSP-IAP) developed and endorsed by their Local Governments.	During PPG, Local Government and Traditional Leaders of the 6 Atolls endorsed the idea of developing AFSP-IAPs as an output of the project to operationalise the NFSP at the Atolls level, linked to and aligned with their LRMPs.	A template with key elements developed and used by at least 3 target atolls to facilitate participatory development of draft AFSP-IAP.	All 6 target atolls have their AFSP-IAP, linked to their LRMPs endorsed by their Local Governments	AFSP-IAP documents	Traditional Leaders and Local Governments have buy-in and ownership of the AFSP-IAP	MNRC, MIMRA, MCIA, PMU
Output 1.1.3: Multi-sector Working Group and Inter-ministerial Collaboration Toolkit for integration of SLM and landscape/ seascape management approaches in the	5. Inter-Ministerial Collaboration Toolkit for the Multi-sector Working Group	A Concept Note for development of an Inter-Ministerial Collaboration Toolkit has been developed by MNRC.	Process for development of the Toolkit initiated and stakeholder engagement carried out. Procedures for coordinating the Working Group, and the materials to support Working Group engagement developed.	The Inter-Ministerial Collaboration Toolkit developed, tested and used by the Multi-sector Working Group for Food Systems Pathway & Integrated Landscape/Seascape Management.	Procedural Guidance documents and suite of support Materials	Government will provide permission to establish the Working Group. Clear linkages will be established with CMAC.	MNRC, CCD, MIMRA

Results chain	Indicators	Baseline	Mid-term target	Final target	Means of verification	Assumptions	Responsible for data collection
Food Systems Pathway	6. Multi-sector Working Group for Food Systems Pathway & Integrated Landscape/Seascape Management established and number of meetings held.	No inter-ministerial coordination mechanism in place for integrating food systems and landscape/seascape management.	Permissions sought from within Government to form a Food Pathways Working Group. Inception Workshop held. At least 3 meetings held	Multi-sector Working established, with at least 6 meetings held.	Working Group Meeting Reports.	Government will provide permission to establish the Working Group. Clear linkages will be established with CMAC.	MNRC, CCD, MIMRA
Output 1.1.4: Review and update of sector policies, strategies/action plans, and regulatory framework to ensure coherence with the NFSP	7. Updated UNCCD NAP aligned with the new Convention Strategic Framework feature concepts of LDN and food systems.	The UNCCD NAP 2012 does not include the concepts of LDN. The UNCCD NAP 2012 recognised the importance of land resources for food security but does not extend to concepts of food systems.	The concepts of food systems are recognised in the participatory process for updating the UNCCD NAP under the UNEP-GEF Enabling Activity project	Concepts of food systems feature in the updated UNCCD NAP.	Meeting minutes UNCCD NAP publication	There is synergistic implementation and collaboration with the UNEP-GEF Enabling Activity project.	CCD, PMU

Results chain	Indicators	Baseline	Mid-term target	Final target	Means of verification	Assumptions	Responsible for data collection
Output 1.1.5: Land Degradation Neutrality (LDN) Strategy and Target Setting Program to support planning and decision-making as related to the Food System Pathway	8. Land Degradation Neutrality (LDN) Strategy developed with locally-relevant LDN indicators[2] and targets as related to food systems and value-chain.	The LDN concept, as per the 2030 Sustainable Development Agenda (SDGs) and new Convention Strategic Framework has not been introduced in RMI.	LDN Strategy with specific LDN indicators drafted.	LDN Strategy with specific LDN indicators finalized and adopted/ submitted for adoption.	LDN Strategy publication.	There will be clarity in the respective roles of CCD, EPA and MNRC in the Strategy development process.	CCD, EPA, MNRC
<u>Outcome 1.2:</u> Capacities and instruments for environmental policies, spatial planning and decision-making, in support of the integrated environmental and agri-food system management, are enhanced	9. Percentage increase in kilograms of locally produced foods in each Atoll, in the context of their AFSP-IAPs.	Food Consumption based on the 2019/2020 Household Income and Expenditures Survey (HIES) does not provide quantitative data on food locally produced (kg). Baseline to be established by end of year 2 of the project.	Methodology on data collection finalised and quantitative baseline established in kilograms, linked to the AFSO program.	Methodology on data collection institutionalized and shows 10% increase in locally produced food from baseline.	Technical Statistical Reports and outputs of the AFSO program (1.2.1)	There will be adequate technical support for the AFSO program.	MNRC, PMU

Results chain	Indicators	Baseline	Mid-term target	Final target	Means of verification	Assumptions	Responsible for data collection
	10. A functional Knowledge recording and reporting system in place as a living national census, populated with food production and consumption-related datasets, traditional ecological knowledge and agro-ecosystem datasets relevant to locally-relevant LDN indicators.	No data and information system in place to provide accurate recording and reporting of local knowledge and to provide a living census on local food production and consumption	Data recording and reporting tools developed and AFSOs trained on their use-	Knowledge recording and reporting system in place linked to the LDN indicators database	Data recording and reporting system reports and database	AFSO project staff able to work independently in the Atolls	MNRC, CCD, MOHHS,
Output 1.2.1: Atoll Food System Officer (AFSO) Program for food system natural resource base and local knowledge data recording and reporting to inform planning an decision-making	11. Number of Atoll Food System Officers trained and deployed to the 6 Atolls (disaggregated by gender)	There is currently very limited/ almost no capacity for agricultural extension services in RMI. NRC has limited presence in the outer Atolls	At least 6 (50% women) trained	At least 6 (50% women) deployed	Project M&E	There is a pool of qualified people willing to be based in, and can work independently in the Atolls	MNRC, Local Governments, PMU

Results chain	Indicators	Baseline	Mid-term target	Final target	Means of verification	Assumptions	Responsible for data collection
Output 1.2.2: Toolkits and training program for the enhancement of human capacities in mainstreaming agro-ecosystem approaches, landscape/seascape approaches and SLM practices for implementation of the National Food System Pathway and Atoll-specific Food System Pathway Action Plans	12. Number of new Manuals and Toolkits developed to support SLM and ecosystem restorative practices for integration of food systems and land/seascape natural resources management, made available as digital products and accessible through digital platforms.	Several 'How-to" Manuals and Toolkits related to local food production and marketing, developed under baseline programmes and previous initiatives, such as R2R and GCCA+/SUPA.	Existing Manuals and Toolkits reviewed. A Training Needs Assessment completed. At least one (1) new Manual developed	At least three (3) new Manuals developed and made available online and used for training.	TNA report. New Manuals documents	TNA takes into account lessons learned from the development and use of existing ?How to? Manuals and Toolkits	PMU. MNRC
	13. Number of Trainers trained, number of people trained (disaggregated by gender, age group) and Number of Training and Farmer Field School events carried out across the 6 Atolls	There is currently very limited/ almost no capacity for agricultural extension services in RMI.	10 Trainers trained: 4 NRC staff + 6 AFSO (50% women) At least 6 FFS events carried out.	10 Trainers trained: 4 NRC staff + 6 AFSO (50% women) At least 60 people trained (50% women, 25% youth[3]) (10 per Atoll) At least 12 FFS events carried out.	Project Progress Reports: 6 monthly PPR and annual PIR.	AFSO project staff able to work independently in the Atolls	PMU, MNRC

Results chain	Indicators	Baseline	Mid-term target	Final target	Means of verification	Assumptions	Responsible for data collection
Output 1.2.3: Incentives for Ecosystem Services (IES) as enabling policy framework and coordination of policy instruments for strategic planning towards protection of BD and ES in Blue and Green Food Systems Project Designs	14. Number of Incentives for Ecosystem Services Schemes project designs approved.	A concept note for three potential IES schemes has been prepared by MNRC: - Aquaculture-IES scheme - IES scheme that link off-shore and in-shore fisheries IES scheme linking agriculture with copra production	Draft elements and detailed timelines for the designs of the 3 potential IES schemes developed through participatory and gender inclusive consultations with potential stakeholders and partners	Project designs of at least 2 of the 3 potential IES schemes developed through participatory and gender inclusive consultations with potential stakeholders and partners	IES Specialist Technical Reports. IES Scheme Project design documents	Government will approve to proceed with participatory and gender inclusive process for designing the potential IES schemes	MNRC, MIMRA, SOEs (Tobolar)

Results chain	Indicators	Baseline	Mid-term target	Final target	Means of verification	Assumptions	Responsible for data collection
Output 1.2.4: Ecosystems restorative measures to reverse loss of ES from coastal land-based contaminants affecting Food Safety	15. Number of sites with soil, and/or plants, and/or fish and/or runoff water tested and analysed for contamination by a reputable laboratory and recommended ecosystem restorative measures identified for inclusion in AFSP_IAPs.	Several studies have been carried out on radioactive contamination of fruit trees and fish in northern Atolls where the US nuclear weapons testing program was carried out. None of the 6 Atolls is in this northern region. IAEA carried out a program to analyse for pesticides, other organic chemicals and toxic metals contaminants in fish and runoff-water between 2015-2019. No local scientific capacity was sustained from this program.	At least two (2)	At least six (6)	Technical Reports by Food Safety Specialist Project M&E	A Food Safety Specialist from a reputable laboratory is available at affordable cost	NRC, MOHHS, PMU
Component 2. Enhanced sustainable food production systems in sustainably managed landscapes/seascapes							

Results chain	Indicators	Baseline	Mid-term target	Final target	Means of verification	Assumptions	Responsible for data collection
Outcome 2.1 Institutional and local stakeholders (including farmers, fishers and other local community members) have access to feasible and attractive options for resource management and restoration and food production that contribute to land degradation neutrality, and ecosystem conditions and services	16. Total areas (terrestrial and in-shore) where ecosystem restorative measures have been implemented for positive impacts on food systems, including, but not limited to: coral gardens; tree plantings for coastal erosion and coastal reinforcement; and replacements of senile coconuts in agro-forestry systems	To be estimated during inception phase and as per the AFSP-IAPs activities Total of the 6 Atolls areas = 4,872km2 (487,200ha)	At least 0.01% or 48.7ha of total 6 Atolls area covered in ecosystem restorative measures	At least 0.02% or 97.4ha of total 6 Atolls area covered in ecosystem restorative measures	Spatial mapping	MNRC will foster cooperative partnerships with USDA Forestry Services (USFS) and MI Conservation Society (MICS) on spatial mapping programs	PMU, MNRC, USFS, MICS
	17. Percentage increase in number of households involved in local food production: vegetables, root crops and fruits.	The 2019/2020 HIES Survey reported: < 1% of private HHs were harvesting vegetables; <1% of were growing root crops (taro); 10% participating in the production of fruits.	At atolls level, at least: - 2.5% of HHs involved in vegetables and root crops production - 12.5% involved in fruits production	At atolls level, at least: - 7.5% of HHs involved in vegetables and root crops production; - 15% involved in fruits production	AFSO program database (indicator 12) Project Progress Reports: 6 monthly PPR and annual PIR	Strong community interest in local food production. AFSOs well equipped with tools for data collection.	PMU, AFSO

Results chain	Indicators	Baseline	Mid-term target	Final target	Means of verification	Assumptions	Responsible for data collection
Output 2.1.1 Demonstration models for sustainable ?Blue? food production and consumption pathways, featuring landscape concepts, seascape management, aquaculture, sustainable harvesting of in-shore species, nature-based solutions and circular economy solutions	18. Number of aquaculture and mariculture initiatives established or strengthened.	An aquaculture hatchery is established in the CMI Arrak Campus. Pearl farms established in Rongelap and Namdrik atolls but not in any of the 6 project Atolls. Seaweed has been identified as having potential in both the Fisheries and Trade Policies.	At least two (2) aquaculture and/or mariculture initiatives receive Local Government approval and supported in terms of strengthening existing initiatives or new establishment.	At least four (4) aquaculture and/or mariculture initiatives strengthened or established.	Project Progress Reports: 6 monthly PPR and annual PIR	ES impact assessments carried out if in Protected Areas or in buffer zones.	MIMRA, PMU

Results chain	Indicators	Baseline	Mid-term target	Final target	Means of verification	Assumptions	Responsible for data collection
Output 2.1.2: Demonstration models for sustainable ?Green? food production, featuring landscape concepts, landscape resources management, su stainable land management, integrated farming systems, nature-based solutions and circular economy solutions	19. Percentage increase in land area utilized for food production in terms of agriculture and agro-forestry systems.	One of the objectives for agricultural development in the NSP is to minimize the percentage of underutilized land for agricultural purposes Total land area in the 6 Atolls is 60.3km2 but data on how much is underutilized. Baseline to be established during inception phase to verify how much of the total land area is arable land and what % of arable land currently in production as baseline vs underutilized.	Baseline established including areas currently in use for: ? agro-forestry systems ? Home Gardens ? taro pits and other traditional agricultural systems At least 5% increase in land area use for local food production activities above the baseline.	At least 15% increase in land area use for local food production activities above the baseline.	M&E database. Vegetation cover analysis Project Progress Reports (PPR, PIR).	AFSO equipped with the right tools for data collection and field validation.	PMU

Results chain	Indicators	Baseline	Mid-term target	Final target	Means of verification	Assumptions	Responsible for data collection
	20. Number of households with a piggery waste management technology (biodigester, dry litter) producing biogas and organic fertiliser, contributing to greenhouse gas mitigation and reduction in nutrients load of wastewater effluent.	HHs raising pigs were also fairly numerous with a national rate of 21%. There were brief small-scale demonstrations of biogas when the RMI was under US administration, but there have apparently been no further developments.	At least six (6) HHs ? one per Atoll ? have pig pens installed ready to be connected to a biodigester or to operate with dry litter for waste management	At least six (6) HHs ? one per Atoll ? have pig pens connected to a biodigester generating biogas, or operating with dry litter and producing organic fertiliser	Project Progress Reports: 6 monthly PPR and annual PIR	The HHs selected based on availability of labour for operation and maintenance of chosen technology	MNRC, PMU
	21. Number of Home Gardens of various systems established at homes, schools and by Women Groups, such as: on the ground gardens, raised-bed systems (standard, wicking, keyhole), or aquaponics.	Various models of raised bed gardens (standard, wicking key-hole) and aquaponics have been introduced to RMI but there is a general lack of interest and motivation in communities to adopt them	At least 18 (3 per Atoll)	At least 36 (6 per Atoll)	Project Progress Reports: 6 monthly PPR and annual PIR.	Strong community interest in various home gardening systems	PMU, AFSOs

Results chain	Indicators	Baseline	Mid-term target	Final target	Means of verification	Assumptions	Responsible for data collection
	22. Number of (non-invasive) introduced exotic plants varieties and number of seedlings produced and distributed for food production	A Land Grant program with CMI conducted four field trials to evaluate the resiliency and survival of soursop, sweet lime (calamansi), cacao, and Gliricida (green manure). In 2021, there were 105 Gliricidia, 175 Papaya, 70 Moringa and 35 Soursop seedlings produced and distributed.	Add mucuna pruriens to the list of exotic plants for soil health. At least 100 mucuna pruriens, 100 Gliricidia, 150 Papaya, 100 Moringa oleifera and 50 Soursop seedlings distributed.	At least 250 mucuna pruriens, 200 Gliricidia, 300 Papaya, 200 Moringa oleifera and 100 Soursop seedlings distributed.	Project Progress Reports: 6 monthly PPR and annual PIR.	Strong community interest in new plants for food production.	
	23. Number of varieties of plants, trees and crops of high cultural and medicinal values and those that are becoming rare, to be propagated and seedlings produced and distributed to communities.	The LRC of each Atoll to decide on priority list of plants considered high cultural and medicinal values and those that are becoming rare to be propagated and produce seedlings.	At least two (2) varieties in each Atoll considered priority by their LRCs to be propagated and at least 25 seedlings produced and distributed	At least four (4) varieties in each Atoll considered priority by their LRCs to be propagated and at least 25 seedlings per variety produced and distributed.	AFSO program database (indicator 12) Project Progress Reports: 6 monthly PPR and annual PIR	LRCs will take a fully inclusive participatory process in deciding on their priority lists. Propagation techniques will be effective in producing seedlings.	MNRC, AFSOs

Results chain	Indicators	Baseline	Mid-term target	Final target	Means of verification	Assumptions	Responsible for data collection
Output 2.1.3: Reviving traditional nature-based food production systems and share of food consumption from local production for Nutrition and Health through public outreach/education programme (including school education) focused on sustainably-produced and nutritious food, including traditional crops	24. A public awareness campaign to promote nutritious local food production and consumption, including recipe books and cooking demonstrations	Some local foods recipe books have been prepared and cooking demonstrations have been conducted by USP.	Campaign designed and launched.	Campaign implemented/ conducted. At least one new local food recipe book published. At least six (6) cooking demonstration events held.	Recipe books Media coverage Awareness and communication materials		
	25. Number of demonstrations and training events on traditional food preservation techniques provided by community Elders targeting youth and schools	Zero number of events. The USP publication in 2003 called ?Marshallese Preservation Projects? can be used as a starting point.	At least six (6), i.e., one (1) event per Atoll	At least twelve (12), i.e., two (2) events per Atoll	Project Progress Reports: 6 monthly PPR and annual PIR	Traditional Leaders support the demonstration and training events.	USP, MOHHS, PMU
Component 3. Favourable value chain conditions for sustainably-produced and nutritious food							
<u>Outcome 3.1</u> Value chain/market conditions in the RMI favour sustainably produced and nutritious food	26. Number of types of food import substitutions products produced and developed from local production and available in local markets, such as breadfruit flour, preserved foods, snacks, etc.	The RMI Food Security Policy 2013 estimated 80-90% of food is imported. Some breadfruit chips as snack food are sold by Women from Laura	At least two (2)	At least four (4)	Project Progress Reports: 6 monthly PPR and annual PIR	Transport limitations to markets in urban areas not a disincentive to production in rural communities	PMU, MOHHS

Results chain	Indicators	Baseline	Mid-term target	Final target	Means of verification	Assumptions	Responsible for data collection
Output 3.1.1 Value-chain Analysis and Strategy that ensure no new land degradation and losses in BD&ES and implement restorative measures for supporting markets and value chains for sustainably-produced and nutritious GREEN food	27. Number of Value-chain analyses and Value-chain Strategies conducted for example for, but not limited to: - handicrafts such as woven flowers by Wotje women - breadfruit flour - papaya jam - coconut virgin oil - pandanus products	Limited understanding of the value-chains for any of the products.	At least two (2)	At least three (3)	Publications of Value-chain analyses and value chain strategies.	Private sector engagement secured.	NRC, Division of Trade&Investment, OCIT, PMU,

Results chain	Indicators	Baseline	Mid-term target	Final target	Means of verification	Assumptions	Responsible for data collection
Output 3.1.2. Strategy for Value-chain Analysis and Strategy that ensure no new losses in biodiversity and ecosystem services and implement restorative measures for supporting markets and value chains for sustainably-produced and nutritious BLUE food.	28. Number of Value-chain analyses and Value-chain Strategies conducted for example for, but not limited to, the following Blue foods: - seaweed - fish - giant clams - aquaculture products	Value-chain analysis has been carried out under the EU funded and FAO executed FISH4ACP project, working with MIMRA to increase the domestic value added of the tuna value chain. Same approach can be applied to other blue foods.	At least two (2)	At least three (3)	Publications of Value-chain analyses and value chain strategies.	Private sector engagement is secured.	NRC, Division of Trade&Investment, OCIT, PMU
Output 3.1.3. Establish and strengthen, including training (both formal and informal), value chains for local produce and local food products markets, including import substitutes	29. Number of training events and number of people trained (disaggregated by gender, age group) on food processing and packaging and labelling of food products for markets.	Very limited knowledge and capacity for packaging and labelling food products for markets and marketing purposes	At least one (1) training event completed At least 20 trained (50% women, 25% youth)	At least three (3) training events completed At least 60 trained (50% women, 25% youth[4])	Project Progress Reports: 6 monthly PPR and annual PIR	Private sector involvement and buy-in is secured.	NRC, Division of Trade&Investment, OCIT, PMU

Results chain	Indicators	Baseline	Mid-term target	Final target	Means of verification	Assumptions	Responsible for data collection
Output 3.1.4. Strategy for improvements of transport infrastructure and services for food systems	30. Strategy for improvements of transport infrastructure and services as related to food systems	Transport services is one of the key hurdles to food security and in supporting markets for local foods in the Food Security Policy and Trade Policy. MIMRA provides transport services for artisanal fishers? catches from the Outer Islands to Majuro market	A draft Strategy with clear Elements developed.	A Strategy on Transport Services for Food is completed and endorsed by Government	Strategy publication	MoTC&IT support the importance of, and has buy-in for, developing a Strategy	MoTC&IT, MNRC, MIMRA, PMU
Component 4. Project coordination, monitoring and evaluation							

Results chain	Indicators	Baseline	Mid-term target	Final target	Means of verification	Assumptions	Responsible for data collection
<u>Outcome 4.1:</u> Knowledge on options for integrated environmental and food system management is effectively managed to permit scaling elsewhere in the country, and in other atoll states and elsewhere (particularly SIDS)	31. Number of documented case studies in how implementation of Atoll Food Systems Pathway Integrated Action Plans, aligned with Local Resources Management Plans under the Reimaanlok Conservation Framework to meet the Micronesia Challenge, impact positively on food systems.	The Micronesia Challenge has been presented as Bright Spots to showcase successful solutions to island resilience and sustainability resulting from community partnerships. The LRMPs towards the MC identify conservation of priority food species but do not capture concepts of food systems.	At least two (2) case studies documented	At least six (6) case studies documented	Case studies as videos or written articles	A Communications Specialist is recruited in the PMU from the beginning and will remain in the project throughout its duration	PMU, Communications Specialist
Output 4.1.1 Knowledge management system supporting sustainability, replication and scaling out of results.	32. A Communications Strategy and online Knowledge Management Platform	n/a	Draft Communications Strategy including an online platform (website) as a key element, designed and some key priorities implemented	Communications Strategy implemented, including an online platform (website)	Communications Strategy publication and live website	A Communications Specialist is recruited in the PMU from the beginning and will remain in the project throughout its duration.	PMU, Communications Specialist.

Results chain	Indicators	Baseline	Mid-term target	Final target	Means of verification	Assumptions	Responsible for data collection
	33. A Project M&E Strategy developed and implemented.	n/a	Draft M&E Strategy designed and some key priorities implemented	M&E Strategy successfully implemented and inform the Exit Strategy	M&E Strategy database linked with the AFSO program?s ?living national census? of food production and consumption database	AFSO well equipped with the tools to support the collection of data.	PMU, M&E Specialist.
Output 4.1.2 Programme for outreach to other Pacific SIDS (on e.g. LDN, integrated landscape management, reconciling environmental and dietary considerations)	34. Number of times the case studies from the project are presented in regional and international fora such as those organized by the Local2030 Islands Network and Global Islands Partnership (GLISPA) events in international meetings.	The President of Marshall Islands is the current Chair of GLISPA.	A project case study is presented as Bright Spots in at least one regional or international meeting	At least two (2) case studies presented as Bright Spots in at least two (2) regional or international meeting	Media coverage of regional or international meeting	Links are established between the local activities and global efforts by RMI.	PMU, Communications Specialist, Ministry of Foreign Affairs

[1] This may include existing marine protected areas (MPAs) ? details to be established during implementation.

[2] In the 3 LDN categories of, and related metrics for; Land Productivity, Land Cover, Soil Organic Carbon Stock.

[3] 16-24 years old.

[4] 16-24 years old.

ANNEX B: RESPONSES TO PROJECT REVIEWS (from GEF Secretariat and GEF Agencies, and Responses to Comments from Council at work program inclusion and the Convention Secretariat and STAP at PIF).

GEF Secretariat comments at PIF stage	Responses
1) Health and safety ? Noting previous nuclear tests in the areas surrounding RMI, it will be important to ensure that increasing local agriculture and livestock production does not create a health risk. Perhaps this is an area for the US government to provide co-financing, in addition to larger opportunities for engagement including with systems and programs from Hawaii. The USFS typically has someone posted in RMI who could provide a good conduit to mobilizing technical support among other ways to collaborate with the US government.	This issue was discussed in more detail during PPG (please refer to Annex I1 ESMF). Under Output 1.2.4, the project will support laboratory analysis for contamination at selected sites. Given that there was no nuclear testing in the 6 Atolls selected as project sites, it is not anticipated that this would involve nuclear contamination and would mostly involve contamination from wastewater runoffs in high population density areas. Collaborative partnership with USFS is incorporated in Output 1.1.5 including provision for technical support in spatial planning tools, building on work already carried out by MNRC and MICS, with support of USFS. More detailed consultations with USFS is proposed to be undertaken during implementation once the exact intervention sites are identified.
2) Learning from FSM and Trinidad and Tobago (TT)? FSM has, with GEF support, had a successful program called ?Go Local!? focused on local foods for health and sustainability. There could be some good lessons to learn from that well-established initiative. At the same time, the recently endorsed FAO project in TT has some similar elements and could provide a good opportunity to share, particularly in relation to building internal supply chains and demand, learning from these three projects together could be very helpful to disseminate.	Lessons from these two GEF projects have been taken into account in the design of the activities, especially those under Component 2. A reference has been added in Section 6.b Coordination with other initiatives.
3) Reduced shipping and carbon emissions ? While this may not be possible, it would be insightful to try to understand the impact on reduced shipping and importation of goods whether in terms of carbon emissions or economically/ health/purchasing power.	The reduced shipping and carbon emissions due to increased domestic food production is difficult to estimate at this point. This could be looked into in more detail during project implementation, also taking into account the potentially increased domestic transportation.

4) Coordination ? Travel expenses and time are significant in RMI. It is vital to ensure project coordination to make the best use of trips and work that staff are doing. In addition, FAO should look for ways to simplify accounting and bureaucracy to support the small team in RMI in this regard.	Most of the project team will be hired within RMI directly under OPIM. Local coordinators (Atoll Food Systems Officers) will be deployed on the six target Atolls. The budget allocations to support the high demand for travel has taken to account the realities of the RMI with limited transport services to the outer islands and neighbouring Atolls. FAO will provide training to the PMU staff on FAO procurement processes and systems and to support them in fulfilling reporting requirements under OPIM for processing transfer of funds.
GEFSEC Comments at CEO Endorsement Request	
1. Alignment with the LD focal area- we expect a stronger alignment and application of the LDN concept (including the mitigation hierarchy of avoid, reduce and reverse) and the LD focal area during the project design stage. Both need to be fully integrated into the project and central to achieving the goal/objective of the project along with mainstreaming biodiversity. We expect the narrative on both to be strengthened in the Theory of Change, Outcomes, Outputs and Results framework of the project, which currently still refer broadly to ?environment? and ?natural resources management? and ?food production? with only some mention of SLM, ecosystems and LDN.	The TOC, Outcome and Outputs and Results Framework have been revised and strengthened in terms of alignment and elaboration on the application of LDN in the project design focusing on integration of SLM and landscape/seascape approaches in the food system pathway. A new Figure has been added to the TOC depicting how the project design takes the key features and guiding principles of the LDN-SCF into consideration, and illustrates how the various outputs contribute to, or impact/drive the flow of, land-based natural capital and ecosystem-services in transforming the food system. The Outputs and Results Framework indicators have been revised accordingly, to focus more on how the outputs facilitate and support the adoption of SLM practices to avoid and reduce new land degradation and losses in ecosystem services, and implementation of restoration and rehabilitation measures to reverse past land degradation and losses in ecosystem services, as per the LDN response hierarchy of avoid > reduce > reverse, outlined in the LDN-SCF.

2. Context- Please ensure additional and specific details as it relates to challenges of land degradation and biodiversity loss are provided. We recommend conducting an assessment of land degradation to inform the appropriate mix of SLM measures to be applied and we also recommend that RMI consider using this information from the assessment, to set LDN targets. Please refer to the UNCCD Checklist for Land Degradation Neutrality Transformative Projects and Programmes (LDN TPP) https://knowledge.unccd.int/knowledge-products-and-pillars/land-degradation-neutrality/ldn-tools/checklist-land-degradation and the STAP Guidelines for Land Degradation Neutrality- https://stapgef.org/sites/default/files/2021-02/STAP%20LDN%20Guidelines%2016-pager%20web%20version%20%281%29_0.pdf. You may also refer to the UNCCD publication Land Degradation Neutrality in SIDS https://catalogue.unccd.int/1476_UNCCD_LDN_SIDS_technical_report-hires.pdf	2. Additional details have been added to elaborate and provide more context in terms of the challenges of land degradation and biodiversity loss. A full assessment of land degradation in proposed to be carried out under Output 1.1.5 as one of the initial steps in the development of a LDN Strategy and target setting program. As mentioned in the project document, the LDN concepts have not yet been introduced in the RMI and the latest version of the RMI UNCCD National Action Plan is dated 2012, prior to the adoption of the SDGs and the new Convention Strategic Framework.

STAP comments at PIF stage	Responses
1) Given the drivers and pressures identified and the responses that the project intends to bring to the population and environment, STAP strongly recommends considering behavioral change in the design of the PPG. The recent STAP guidance and insights into how social and behavioral science influence project outcomes can be a starting point to that end.	The project will support a Communications and Knowledge Management Specialist who will lead campaigns with behavioural change components, to encourage participation and interest in sustainable production and consumption of blue and green foods.
2) The STAP also recommends building capacity in spatial land use planning, and to explore an ecosystem-based framework to marine spatial planning (given the planned output 2.1.3).	The project will build on baseline activities already being carried out by MNRC under co-financing as related to spatial planning tools, such as the coconut census and land vegetation assessments, in partnership with USFS and MICS using satellite and drone imageries. The project will also collaborate with MIMRA on marine spatial planning to promote ecosystem-based management

3) The PIF notes that less than one half of the total land area is considered as potential agricultural area. Housing, infrastructure and US military needs compete with cropping in this land area. Therefore, STAP recommends the PPG considers the LDN logical framework as an overarching umbrella. The LDN approach considers such important aspects as land potential, and integrated land use planning as a process to address trade-offs and minimize land use conflicts. The neutrality mechanism for LDN could also accommodate for unavoidable losses and could help designing alternative income (e.g. PES) that would ultimately enhance the adaptive capacity of people and the land.	As explained in Section 3) Alternative scenario, the project proposes the LDN indicators for measuring the globally defined LDN metrics for SDG15.3 have to be based on datasets that contribute to the ?food sovereignty? of Marshallese people. It means the datasets have to include traditional knowledge of the communities and their knowledge of people-nature interactions that have defined their identity and cultures. The datasets in this regard need to include data and ethnobiological knowledge such as varieties of traditional crops (breadfruits and pandanus) in local language. Towards this end, there is good baseline activities already being carried out by MNRC under co-financing, such as the coconut census and land vegetation assessments, in partnership with USFS and MICS, as mentioned above.
4) Climate change has been identified as a high risk and therefore the STAP supports all recommendations arising from the climate risk screening, to build resilience and enhance adaptation.	The climate risks identified in the climate risk screening have been addressed during project design. Please refer to Annex I1 ESMF for details (table in Section 3) Climate change).
5) STAP also suggests considering the role of behavioral and social science in designing interventions for achieving outcome 3.1.	The project recognizes the need to bring about a change in mindset regarding food purchasing and dietary habits. Under outcome 3.1, the project will support the development of communications and advertising materials with behavioural change aspects to highlight the environmental benefits and promote improvements in nutritional habits, through purchasing decisions. This work will be led by the Communications and Knowledge Management Specialist with background in social sciences, as per the prepared ToR.
6) The STAP congratulates the team on the Theory of Change developed for the PIF and encourages to include identified risks such as climate change as one of the ?external factors? that could affect outputs and project outcomes.	The project?s TOC (Figure 3) shows the external pressures and threats as risk factors that impact on outputs, namely: climate change and sea-level rise; urbanization; and socio-economic and socio-cultural changes.
7) The STAP recommends to tap into the considerable experience, knowledge and learning of other projects undertaken in The Pacific on similar themes (e.g. by the Australian Research Agricultural Centre).	As shown in the Stakeholder Engagement Plan (Annex I2), the project plans to consult with Australian Centre for International Agricultural Research (ACIAR) during inception.

8) STAP suggests complementing the core indicators with sub-national indicators that can monitor and track progress on sustainable land management, biodiversity conservation, and the local benefits the project aims to achieve ? namely, improved nutritional health, improved food system resilience.	The project?s Result Framework include indicators to measure and track improvements in nutritional health: - *Indicator #24 -A public awareness campaign to promote nutritious local food production and consumption, including recipe books and cooking demonstrations* The project?s Result Framework also include indicators to measure and track improvements in the food system resilience, covering resilience building adaptation measures such as livestock waste management (*Indicators #20),* home-gardening (*Indicator #21*), invasive species (*Indicator #22*), propagation and conservation of rare plants and plants with high medicinal and cultural values (*Indicator #21*).
9) STAP recommends elaborating one, or two, simple additional pathways that deal with the long-term drivers of population growth, climate change (e.g. sea level rise), and increased pests and disease affecting crop production to ensure the project benefits endure beyond the project?s lifetime.	The project proposes to facilitate and support pathways for: - *blue foods:* moi fish, seaweed, clams. - *green foods:* pandunus juice, breadfruit flour, banana jam, coconut virgin oil.
10) On circular economy, STAP welcomes Figure 2 depicting the circular economy approach the project intends to apply to enhance an integrated land and seascape food system. During the project design, STAP recommends revisiting the figure with key stakeholders, and making amendments as needed to specify: 1) the system boundaries for each targeted landscape or aquaculture (if aquaculture is decided as option during the PPG); 2) the causal connections between ecology, governance and cultural context, economy, and other systems that influence each targeted landscape (possibly combined with aquaculture) 3) trade-offs and positive synergies between the various types of policies/regulations, environmental management strategies ? including those strategies focused on strengthening resilience.	The PPG consultations were severely affected by the covid travel restrictions, in particular the State of Emergency declared during the August outbreak when community cases were first discovered in Majuro. It was therefore not possible to identify specific sites for activities with clear boundaries. The project strategy is to identify these sites through the participatory process in developing Atoll Food System Pathway Integrated Action Plans. The sites and activities will be outlined in these Action Plans during implementation. Figure 2 has been revised now Figure 4, which try to specify the causal connections between ecology, governance, economy and other systems in the production landscape. It also identifies the link with sector policies in sectors that rely on ecosystem services.

Council comments at PIF stage	Responses

N) ***Germany Comments*** Germany requests that the following requirements are taken into account during the design of the final project proposal:	
? Mix-up and no clear boundaries between agriculture, aquaculture and mariculture: management of resources from land and from sea are dealt with very similarly in the proposal however current policies and legal frameworks in RMI (and globally) are very different. Benefits as well as challenges need to be specified and separately explained.	The outputs now separate out green foods from blue foods. This helps differentiate landscape from seascape activities. The benefits and challenges are addressed separately under the blue foods and green foods outputs respectively.
? Point 30. Highlights challenges for sustainable agriculture development in the country as identified in the Agriculture Sector Plan 2021-2031. The proposal misses out to explain that one major challenge is access to land. Land tenure and user rights are determined by traditional land inheritance patterns and systems of land use controls. Land tenure is composed of four levels of tenure systems, consisting of the paramount Chief (who owns land), lesser Chief (who acts as intermediary), the head of a communal set of lands, and the actual worker on the land. Conservation requires involvement of the three governance systems and four tenure systems. All these entities/individuals need to be included and come to an agreement when decision and access to land is decided on.	Land tenure and access rights are specifically addressed with access rights to be addressed in the AFSP-IAPs of each Atoll.
? Challenges of food imports needs to be highlighted further as the whole country heavily relies an imported goods for healthy nutrition. Although this project aims to provide better access to food for local population, the main challenge of access to fresh food is prices. Imported food (e.g. cheap ramen/Asian noodles and soda drinks are much cheaper than local fruits and vegetables)	The project proposes many activities to reduce reliance on imported foods, including campaigns to promote ?eat local?, support development of import substitutions, and supporting training of youth by Elders on traditional food production and preservations.
? In order to ensure local ownership, the proposal should further elaborate on the access to food products to ensure sustainable livelihoods, e.g. food production in the outer islands need to serve local markets first to ensure survival in rural areas and minimize internal migration.	The project supports government policies, including the ASP, which promotes production and incentivize production in outer islands through creating value-chain to support options for sustainable livelihood in outer islands and to minimize internal migration to urban areas.
? The approach of LDN is not integrated in a stringent manner. The proposal should further elaborate on how LDN monitoring will function together with the other decision support tools mentioned in order to enable transparent, coherent and efficient land-use decisions. This also involves alignment of related planning processes and involved institutions.	The project proposes to establish a LDN Working Group to lead the update of the UNCCD NAP and coordinate the development of a National LDN Strategy and target setting program.

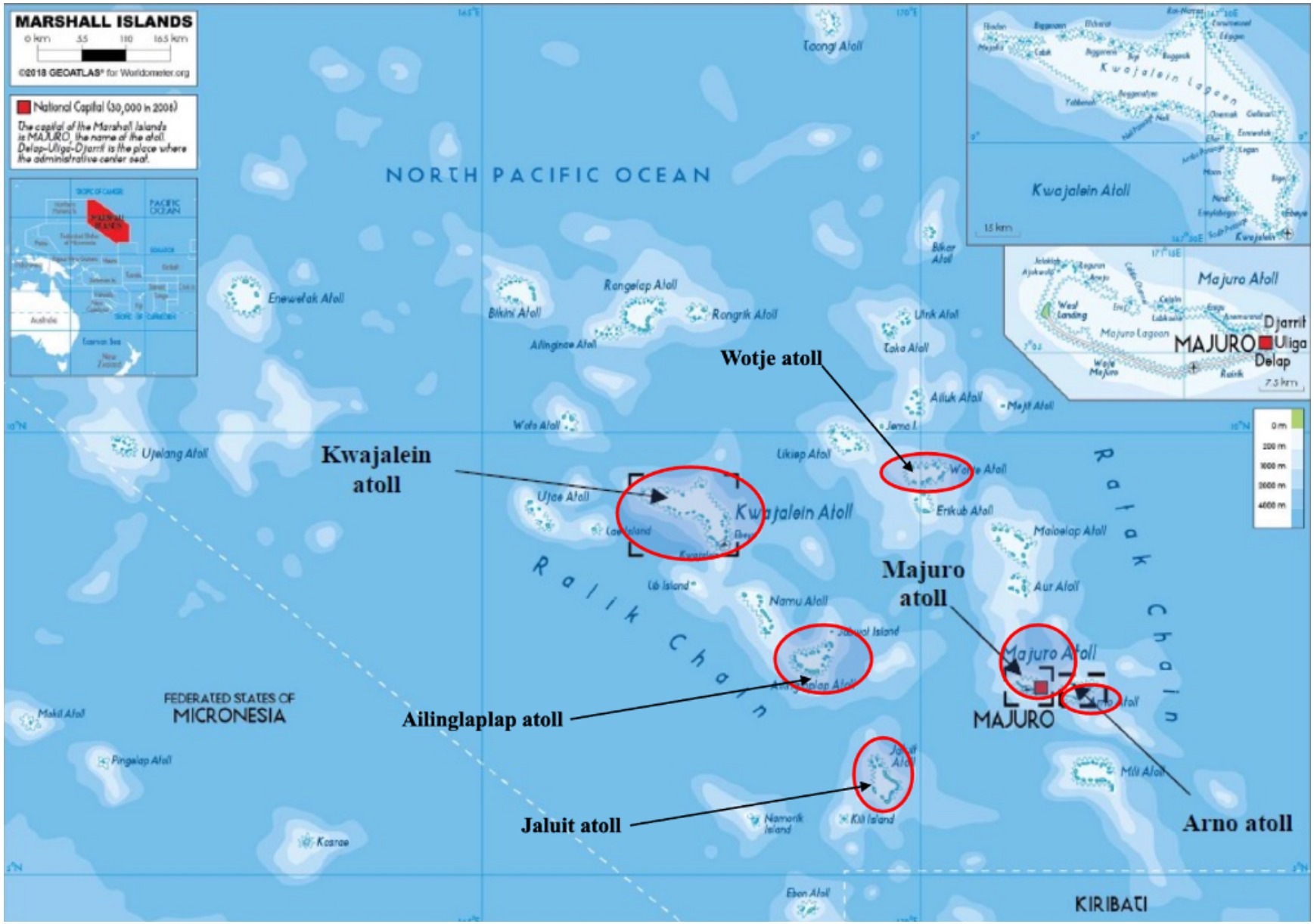
ANNEX C: Status of Utilization of Project Preparation Grant (PPG). (Provide detailed funding amount of the PPG activities financing status in the table below:

Project Preparation Activities	*Original budget*	*Amount Spent to date*	*Amount Committed*
Consultants	78,500	31,002	22,336
Contracts	5,550	0	3,561
Travel	8,000	16,467	0
Training/workshop	4,500	0	3,561
Procurement (Capacity Assessment)	3,450	0	5,225
General Operating Expenses	0	945	300
Total	**100,000**	**48,414**	**34,983**

Project Preparation Activities	*Remaining balance*
Consultants	25,162
Contracts	1,989
Travel	-8,467
Training/workshop	939
Procurement (Capacity Assessment)	-1,775
General Operating Expenses	-1,245
Total	**16,603**

ANNEX D: Project Map(s) and Coordinates

Please attach the geographical location of the project area, if possible.


MARSHALL ISLANDS
0 km 55 110 165 km
©2018 GEOATLAS® for Worldometer.org
National Capital (30,000 in 2016)
The capital of the Marshall Islands is MAJURO, the name of the atoll. Delap-Uliga-Djarrit is the place where the administrative center seat.
NORTH PACIFIC OCEAN
Toongi Atoll
Enewetak Atoll
Bikini Atoll
Rongelap Atoll
Rongrik Atoll
Ailinginae Atoll
Utrik Atoll
Taka Atoll
Bikar Atoll
Wotje atoll
Ailuk Atoll
Majit Atoll
Wotu Atoll
Jemo I.
Likiep Atoll
Wotje Atoll
Erikub Atoll
Maloelap Atoll
Aur Atoll
Ujelang Atoll
Kwajalein atoll
Ujae Atoll
Kwajalein Atoll
Lae Island
Lib Island
Namu Atoll
Jabwot Island
Ailinglaplap Atoll
Majuro atoll
Majuro Atoll
MAJURO
Ralik Chain
Kwajalein Lagoon
Kwajalein Atoll
Majuro Atoll
Majuro Lagoon
MAJURO
Djarrit
Uliga
Delap
West Landing
Wotje Majuro
Ailinglaplap atoll
FEDERATED STATES OF MICRONESIA
Makil Atoll
Pingelap Atoll
Kosrae
Jaluit atoll
Namorik Island
Kili Island
Arno atoll
Mili Atoll
Ebon Atoll
KIRIBATI

ANNEX E: Project Budget Table

Please attach a project budget table.

FAO Cost Categories	Unit	No. of units	Unit cost (in USD)	Total GEF (in USD)	Component 1 Total	Component 2 Total	Component 3 Total	Component 4 Total	M&E	PMC	Executing Entity	FAO-managed	Total GEF (in USD)
5011 Salaries professionals													
Operations Support	Month	1	9,500	9,500	-	-	-	-		9,500	-	9,500	9,500
5011 Sub-total salaries professionals				**9,500**	-	-		-		**9,500**	-	**9,500**	**9,500**
5013 Consultants					-								
International Consultants					-								
Senior Technical Adviser	months	20	9,500	190,000	**68,400**	**39,743**	**49,000**	**32,857**		-	190,000		190,000
Value Chain Specialist	months	2	8,500	17,000	-	-	**17,000**	-		-	17,000		17,000
Food Systems Policy Specialist: Review and drafting of Policies, Strategies and Action Plans.	months	2	8,500	17,000	**17,000**	-	-	-		-	17,000		17,000
Land Degradation Neutrality (LDN) Specialist: LDN Strategy and Target setting	months	2	8,500	17,000	**17,000**	-	-	-		-	17,000		17,000
Incentive for Ecosystem Services (IES) Specialist	months	4	8,500	34,000	**34,000**	-	-	-		-	34,000		34,000
Forestry &Tree Resources Specialist	months	2	8,500	17,000	-	**17,000**	-	-		-	17,000		17,000
Sub-total international Consultants				**292,000**	**136,400**	**56,743**	**66,000**	**32,857**	-	-	**292,000**	-	292,000
National Consultants					-								-
National Project Coordinator (NPC)	month	48	3,500	168,000	**35,200**	**35,000**	**64,200**	**16,800**		16,800	168,000		168,000
Administration and Finance Officer	month	48	2,300	110,400	**27,600**	**27,600**	**27,600**	**18,600**		9,000	110,400		110,400
6 x Atoll Food Systems Officers/Project Field Officers	month	240	1,250	300,000	**90,000**	**170,000**	**40,000**	-			300,000		300,000
Communications Specialist, KM & M&E Specialist	month	18	2,500	45,000	-	-	-	**35,000**	10,000		45,000		45,000
Data & Information Management Officer	month	4	5,000	20,000	-	-	-	**20,000**			20,000		20,000
Food Systems Policy - Local Specialist	month	2	5,000	10,000	**10,000**	-	-	-			10,000		10,000
Sub-total national Consultants				**653,400**	**162,800**	**232,600**	**131,800**	**90,400**	**10,000**	**25,800**	**653,400**	-	653,400
5013 Sub-total consultants				**945,400**	**299,200**	**289,343**	**197,800**	**123,257**	**10,000**	**25,800**	**945,400**	-	**945,400**
5650 Contracts					-								
Food Systems Working Group - Multi-sectoral&Inter-ministerial Coordination Toolkit	Lump sum	1	10,000	10,000	**10,000**	-	-	-			10,000		10,000
AFSO Program Curriculum & Data Collection and Reporting Tools	Lump sum	1	10,000	10,000	**10,000**	-	-	-			10,000		10,000
Campaign - 'Eat Local' & 'One Island One Product'	Lump sum	1	25,000	25,000	-	-	**25,000**	-			25,000		25,000
Production of local foods recipes	Lump sum	1	10,000	10,000	-	**10,000**	-	-			10,000		10,000
Small-scale Piggery Biogas system design and installation	Lump sum	1	20,000	20,000	-	**20,000**	-	-			20,000		20,000
Technical advisory services and capacity development in LDN Strategy and Target setting	Lump sum	1	50,000	50,000	**50,000**	-	-	-			50,000		50,000
Formal training in agro-forestry systems	Lump sum	1	20,000	20,000	-	**20,000**	-	-			20,000		20,000
GIS Services	months	2.5	5,000	12,500	**12,500**	-	-	-			12,500		12,500
Gender & ESS - Contractual services	months	9	5,000	45,000	-	**22,500**	**22,500**	-			45,000		45,000
Audits and spot checks	Lump sum	1	50,000	50,000	-	-	-	-		50,000		50,000	50,000
Midterm evaluation	Lump sum	1	50,000	50,000	-	-	-	-	50,000			50,000	50,000
Final evaluation	Lump sum	1	50,000	50,000	-	-	-	-	50,000			50,000	50,000
Terminal report	Lump sum	1	6,550	6,550	-	-	-	-	6,550			6,550	6,550
5650 Sub-total Contracts				**359,050**	**82,500**	**72,500**	**47,500**	-	**106,550**	**50,000**	**202,500**	**156,550**	**359,050**
5021 Travel					-								
Airfare - International	trips	22	3,000	66,000	**16,500**	**7,500**	**16,500**	**25,500**				66,000	66,000
Domestic trips - national	trips	240	300	72,000	**22,500**	**6,000**	**36,000**	**7,500**			72,000		72,000
DSA - Consultant	lump sum	120	300	36,000	**6,000**	**6,000**	**12,000**	**12,000**			6,000	30,000	36,000
DSA - National/Domestic	lump sum	300	175	52,500	**13,125**	**13,125**	**13,125**	**13,125**			52,500		52,500
5021 Sub-total travel				**226,500**	**58,125**	**32,625**	**77,625**	**58,125**	-	-	**130,500**	**96,000**	**226,500**

ANNEX F: (For NGI only) Termsheet

Instructions. Please submit an finalized termsheet in this section. The NGI Program Call for Proposals provided a template in Annex A of the Call for Proposals that can be used by the Agency. Agencies can use their own termsheets but must add sections on Currency Risk, Co-financing Ratio and Financial Additionality as defined in the template provided in Annex A of the Call for proposals. Termsheets submitted at CEO endorsement stage should include final terms and conditions of the financing.

ANNEX G: (For NGI only) Reflows

Instructions. Please submit a reflows table as provided in Annex B of the NGI Program Call for Proposals and the Trustee excel sheet for reflows (as provided by the Secretariat or the Trustee) in the Document Section of the CEO endorsement. The Agencys is required to quantify any expected financial return/gains/interests earned on non-grant instruments that will be transferred to the GEF Trust Fund as noted in the Guidelines on the Project and Program Cycle Policy. Partner Agencies will be required to comply with the reflows procedures established in their respective Financial Procedures Agreement with the GEF Trustee. Agencies are welcomed to provide assumptions that explain expected financial reflow schedules.

ANNEX H: (For NGI only) Agency Capacity to generate reflows

Instructions. The GEF Agency submitting the CEO endorsement request is required to respond to any questions raised as part of the PIF review process that required clarifications on the Agency Capacity to manage reflows. This Annex seeks to demonstrate Agencies? capacity and eligibility to administer NGI resources as established in the Guidelines on the Project and Program Cycle Policy, GEF/C.52/Inf.06/Rev.01, June 9, 2017 (Annex 5).