



Project title: Securing Climate-Resilient Sustainable Land Management and Progress Towards Land Degradation	n
Neutrality in the Federated States of Micronesia.	711

Country: Federated States of Micronesia	Implementing Partner (GEF Executing Entity):	Execution Modality:
	Department of Environment, Climate Change & Emergency Management (DECEM)	UNDP Support Services to National Implementation (NIM)

Contributing Outcome (UNDAF/CPD, RPD, GPD): Climate Change, Disaster Resilience, and Environmental Protection (Outcome 1): By 2022 People and ecosystems in the Pacific are more resilient to the impacts of climate change, climate variability, disasters and environment protection is strengthened

Substantial	UNDP Gender Marker: 2
Quantum Award ID: 1102017	Quantum Project/Output ID: 01000658
UNDP-GEF PIMS ID number: 6567	GEF Project ID number: 10858

LPAC meeting date: 20 September 2023

Last possible date to submit to GEF: June 27, 2023

Latest possible CEO endorsement date: September 27, 2023

Project duration in months: 72

Planned start date: February 8, 2024

Planned start date: February 8, 2024	Planned completion date: February 07, 2030	
Expected date of Mid-Term Review: February 07, 2027	Expected date of Terminal evaluation: November 07, 2029	
Expected Operational Closure Date: November 07, 2030	Expected Financial Closure date: May 07, 2031	

Brief project description: The proposed project aims to secure critical ecosystem services in the Federal States of Micronesia's (FSM) through climate-resilient sustainable land and coastal management contributing to Land Degradation Neutrality (LDN). The long-term goal is to support achievement of all five objectives of LDN which are to: maintain or improve the sustainable delivery of ecosystem services; maintain or improve productivity in order to enhance food security; increase resilience of the land and populations dependent on the land; seek synergies with other social, economic and environmental objectives; and reinforce responsible and inclusive governance of land. The project's incremental value lies in demonstrating the application of integrated landscape interventions to sustainable land and coastal management and resource use applying communitybased resource governance and management approaches. This will entail that communities are actively engaged in planning and decision-making on best approaches to manage and use agricultural and forest land

and coastal ecosystems so as to help conserve native biodiversity and natural ecosystems, as well as to prevent land degradation and restore land and natural resource so as to safeguard food production systems. It will also help develop capacities and the required enabling frameworks through "learning-by-doing" approaches in the selected target catchments (to raise awareness of the benefits of Sustainable Land Management/Climate Smart Agriculture). The project will be able to develop and demonstrate a matrix of best restoration practices for protection and strengthening of FSM's ecosystems and native biodiversity for scaling up and replication in other catchments in the country. The objective will be achieved through the following components:

Component 1. Strengthening the strategic (institutional, policy, regulatory) framework for addressing land degradation

Component 2. Enhancing information, decision support tools and capacity for addressing land degradation Component 3. Embedding climate-smart sustainable land management in critical landscapes and coastal zones (demonstration activities)

Component 4. Effective knowledge management, gender mainstreaming, and M&E FINANCING PLAN

GEF Trust Fund grant		USD 5,155,255		
(1) Total Budget administered by UNDP		P USD 5,155,255		
(2) Total confirmed co-financing to this pr not administered by L	oject JNDP	USD 33,492,	144	
(3) Grand-Total Project Financing (1	(3) Grand-Total Project Financing (1)+(2) U		USD 38,647,399	
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UNDP Pacific Office in Fiji				



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Acronyms and Abbreviations:

BD	Biodiversity Conservation
BIORAP	Biological Rapid Assessment
BMP	Best Management Practice
BPPS NCE	Bureau for Policy and Program Support, Nature, Climate and Energy
СВО	Community Based Organization
CHEEF	Culture, Health, Environment, Economy and Food security
CLMWG	Community Land Management Working Group
СОМ	College of Micronesia
CRE	Cooperative Research and Extension
CSA	Climate Smart Agriculture
DECEM	Department of Environment, Climate Change & Emergency Management
DSLMP	Demonstration Site Land Management Plan
EIA	Environmental Impact Assessment
ENSO	El Niño-Southern Oscillation
ESC	Yap Environmental Stewardship Consortium
ESMF	Environment and Social Management Framework
FAO	Food and Agricultural Organization
FSM	Federated States of Micronesia
FSM R&D	Federated States of Micronesia Research and Development
FSP	Full Sized Project
GCF	Green Climate Fund
GDP	Gross Domestic Product
GEF	Global Environment Facility
GEFSEC	Global Environment Facility Secretariat
GIS	Geographic Information System
GPS	Geographic Positioning System
IAS	Invasive Alien Species
IBA	Important Bird Areas
IUCN	International Union for the Conservation of Nature
IW	International Waters
JSAP	Joint State Action Plans
КАР	Knowledge, Attitudes, and Practices
KBA	Key Biodiversity Areas
LCC	indicators on land cover
LD	Land Degradation
LDN	Land Degradation Neutrality
LDN TTP	Land Degradation Neutrality Transformative Projects and Programs
LUP	Land Use Planning
MCEF	Micronesia Challenge Endowment Fund
MIC	Micronesians in Island Conservation
MMAI	Micronesia Mangrove Adaptation Initiative
MSP	Medium Sized Project
MTR	Mid Term Review
NAP	National Action Plan

NBSAP	National Biodiversity Strategy and Action Plan
NGO	Non-Government Organization
NLMWG	National Land Management Working Group
NISSAP	National Invasive Species Strategy and Action Plan
NPP	Land Productivity
NRCS	Natural Resources Conservation Service
PAN	Protected Area Network
PCCCSD	President's Council on Climate Change and Sustainable Development
PIF	Project Identification Form
PIMPAC	Pacific Islands Managed and Protected Areas Community
PIR	GEF Project Implementation Report
PMU	Project Management Unit
POPP	Program and Operations Policies and Procedures
PPG	Project Preparation Grant
PSIDS	Pacific Small Island Development States
SAP	SLM State Action Plan
SES	Social and Environment Screening
SEWG	Chuuk State Environmental Working Group
SGP	GEF Small Grants Program
SIDS	Small Island Developing States
SLM	Sustainable Land Management
SLM WG	State Land Management Working Group
SOC	Soil Organic Carbon
SPC	Pacific Community
SPREP	Secretariat of the Pacific Region Environmental Program
STAP	Science and Technical Advisory Panel
SWM	Solid Waste Management
TOR	Terms of Reference
UAV	Unmanned Aerial Vehicle
UNCCD	United Nations Convention on Combatting Desertification
WWF	World Wide Fund for Nature

II. DEVELOPMENT CHALLENGE

1) Introduction

1. The Federated States of Micronesia (FSM) comprises 607 islands in the western Pacific¹, with an exclusive economic area of 2.98 million km² and a total land area of 702 km². The country comprises four semi-autonomous States (Chuuk, Kosrae, Pohnpei and Yap) with a total population of around 105,000²,³ which has declined since 2000 due to out-migration. The States have a significant level of autonomy with ownership of land and aquatic areas varying between the States. In Kosrae and Pohnpei, land is both privately and state owned, with aquatic areas being managed by the state as public trusts. In Chuuk, most land and aquatic areas are privately owned and acquired through inheritance, gift, or more recently, by purchase. In Yap almost all land and aquatic areas are owned or managed by individual estates and usage is subject to traditional control. These land and aquatic tenure systems have critical bearing on the strategies and actions required to sustainably manage and protect the natural resources of these islands. Responsibility for environmental issues is shared between the national government and the individual state governments. Almost a third of the population live in poverty⁴, particularly affecting children and female-headed households. The country's low annual Gross Domestic Product (GDP) growth⁵ is constrained by extreme remoteness from major markets, small population and landmass, geographic dispersion and vulnerability to external shocks and environmental fragility. The domestic economy is highly dependent on imports, with foreign aid and the selling of fishing rights being the main economic drivers.





2. Globally significant environmental features include: an astonishing range of terrestrial, coastal and marine ecosystems lying within the Polynesia-Micronesia global biodiversity hotspot and comprising part of two Global 200

¹ Also known as the Caroline Islands, along with Palau

²2015 UN Demographic Yearbook

³ approximately 50% live on Chuuk, 33% on Pohnpei, 10% in Yap and 7% in Kosrae, based on census data from 2010

⁴ Household Income and Expenditure Survey (HIES), 2013/14

⁵ Averaging -0.2% since 2004 - FSM Office of Budget & Economic Management, 2017

World Wide Fund for Nature (WWF) ecoregions⁶; two endemic bird areas⁷ and 58 Key Biodiversity Areas (KBAs)⁸; one of the world's most endangered rainforests on the peak of Mt. Winipot (Chuuk State); the largest green turtle Chelonia mydas rookery in the insular Pacific; globally rare montane cloud forests at just 450 m on Pohnpei and Kosrae; and a diversity of marine ecosystems from high volcano islands of more than 80km² with fringing and barrier reefs to coral atolls including Chuuk Lagoon, among the world's largest (3,130 km²) and deepest (60 m), as well as the world's deepest trench (Marianas). The diversity of terrestrial plants and animals within the FSM varies from east to west due to differences in climate (particularly rainfall), geology, topography and geographical isolation. Major vegetation types in the FSM are: cloud forest, native upland forest, palm forest, agroforest, secondary vegetation, savanna, grass and fern lands, freshwater marsh, swamp forest, mangroves, atoll forest, limestone forest of rocky coasts and beach strand. The area covered by each vegetation type varies between the States and some types may not occur on all islands. Cloud forests are restricted to the cloud shrouded mountainous peaks of Pohnpei and Kosrae, which are absent in Chuuk and Yap. Upland forest and agroforest are the major vegetation types in all States, but the area of relatively intact native forest is very limited in Chuuk and Yap. Over 1,239 species of ferns and flowering plants have been described for the FSM. Approximately 782 species are native, including about 145 species of ferns, 267 species of monocots and 370 species of dicots. Each State of the FSM is represented by their unique biodiversity (refer Table 1). The diversity of marine organisms and their assemblages within the FSM is high. Species richness and diversity for all inshore marine habitats decrease from west to east. Marine habitats and associated species compositions, due to the small geographic scale of the shallow water marine areas, function on small spatial scales. This condition provides a wide range of habitats within a small geographical location, which directly increases species biodiversity, but it also increases the potential for loss of biodiversity if the environment is under threat. The coral reef ecosystems are the dominant shallow marine feature of the nation. Coral reef biodiversity and complexity is high within the FSM and this diversity diminishes notably from west to east within the region. All major types of coral reefs are found within the FSM, including barriers reefs, fringing reefs, atolls and submerged reefs. Common reef habitats in the FSM include lagoon reefs (pinnacle, patch), passes, channels, shallow reef flats, terraces, submerged reefs, slopes, reef holes, embayment, quasi estuaries, seagrass beds, mangroves, mud flats and sand flats. In addition, mangrove forests and seagrass beds are well developed especially along the fringes of the high islands and some atolls, and they are essential habitats to a very wide range of marine organisms. The condition of reefs and inshore marine environments within the FSM are healthy with natural processes controlling reef condition and marine biodiversity. However, reef and marine degradation and the loss of biodiversity (especially among food fishes) are attributed to various anthropogenic sources within urban centers.

3. Endemism is very high, a result of a unique combination of distance and isolation. Over 200 of the fern and flowering plants are known to be endemic, with the highest endemism in Pohnpei. Native terrestrial mammals are limited to six taxa of fruit bats, of which five are endemic. A total of 240 species of birds (of which 128 are native species) are recorded in Avibase, of which 22 species are endemic⁹. There are fifteen Important Bird Areas (IBAs) across the FSM, totaling 148,500 km² of land and ocean. Amphibians are not native to FSM, while of the 27 species of reptiles, five are endemic. The International Union for the Conservation of Nature (IUCN) Red List for the FSM¹⁰ includes 107 globally threatened species [2 mammals, 16 birds, 5 reptiles, 27 fishes, 55 invertebrates (mainly corals) and 1 plant species], demonstrating the great vulnerability of the country's biodiversity.

⁶ namely the Yap Tropical Dry Forest and the Caroline Tropical Moist Forest Ecoregion: Olson, D.M. & Dinerstein, E. 2002. *The Global 200: Priority Ecoregions for Global Conservation*. Ann. Missouri Bot. Gard. 89:199 – 224.

⁷ East Caroline Islands EBA and Yap Islands EBA, <u>http://datazone.birdlife.org/eba/factsheet/190</u>

⁸ http://www.keybiodiversityareas.org/kba-data accessed December 2020

⁹ https://avibase.bsc-eoc.org/checklist.jsp?region=FM

¹⁰ https://www.iucnredlist.org/search?landRegions=FM&searchType=species

State	Biological Significance
Kosrae	The steep mountainous interior is covered with tropical rainforest. Around much of the island there are continuous mangrove swamp forests and seaward coastal strands. The island is surrounded by a broad shallow carbonate platform much of which is covered by freshwater swamps, mangrove forests and low coral land and beach strand.). In the nearshore coastal environment, seagrass beds sensitive to development are present in some locations and further offshore, coral reef habitat. There are over 322 plant species in Kosrae of which 250 species are native, many of which are endemic to one or more islands in the FSM. Three species are identified as IUCN listed 'threatened' (one 'endangered' and two 'vulnerable') and one 'near threatened' flora species. Kosrae has six endemic bird species, two of which are now extinct. Two restricted-range bird species including the 'critically endangered' migratory species Beck's petrel (<i>Pseudobulweria becki</i>) and the Micronesian Imperial pigeon (<i>Ducula oceanica</i>) which is considered 'near threatened' is also present. Other rare, regionally significant or protected faunal species include tow endemic species of bats, three threatened reptiles and two endangered freshwater fish species.
Pohnpei	Key terrestrial habitat sensitive to development disturbance as a proportion of total area ranges includes Mangrove (15.6%), Swamp forest (0.6%), Upland forest (35.4%) and Marsh (0.4%). A total of 729 species plants have been described with approximately 438 species being native. A total of 291 introduced plant species are present. A range of avian, mammalian, reptilian species are present including 73 bird species. A number of mammals (including bats), reptiles (skinks, geckos, snakes), amphibians and freshwater fish are also likely to be present. Approximately 4,403.6 ha of predominately intertidal and shallow (<3 m) subtidal seagrass meadow are present the waters around Pohnpei Island (and Atoll) of varying levels of coverage (continuous, aggregated, and isolated).
Chuuk	Key terrestrial habitat sensitive to development disturbance as a proportion of total area includes mangrove (7%), upland forest (16.2%) and marsh (5.6%). A total of 470 species have been described of which approximately 298 species are native. A total of 172 species of plants have been introduced. A range of avian, mammalian, reptilian species are present including 73 species of bird and number of mammals (including bats), reptiles (skinks, geckos, snakes), amphibians and freshwater fish are likely present
Үар	The major land class/habitat types are: non-forest (28%), agroforest (26%) and secondary vegetation (6%). The vegetation of Yap has been greatly modified; other than mangroves, little native forest remains. There are four threated (one 'Endangered' and three 'Vulnerable') and one "Near Threatened' (NT) floral species in Yap. All of the threatened species are trees. Yap contains four endemic bird species: the Yap cicada bird is considered to be 'Endangered' and the other three are 'Near Threatened'.

Table 1: Biological Significance at State level

- 4. Land degradation, largely from human activities is the main threat to the FSM's remarkable terrestrial, freshwater, and coastal ecosystems, their biodiversity and the vital ecosystem services they provide to communities throughout the four States and is the focus of this proposed GEF-7 project which will be implemented on the "High" islands of each State, where most people reside. The project builds strongly on the achievements of previous GEF interventions (see project baseline) and addresses national and state priorities by focusing on mainstreaming of sustainable land management and biodiversity into the agriculture and infrastructure sectors and building the foundations for achieving land degradation neutrality. There is a complex traditional systems of land tenure that still predominate, with individual states having separate and distinct land tenure arrangements, including group and communal ownership of land.
- 5. The terrestrial ecosystems of FSM's high islands are dominated by forests (87.1% of the land area), primarily upland/montane rainforest (29.4% of the total) and agroforest (27.3%). These forests harbor important biodiversity and provide critical ecosystem services in particular the provision of water (quality and quantity), clean air and

carbon sequestration. Coastal (strand) forests also help to stabilize the coastal dunes, reduce the extent of beach erosion, and provide a windbreak from strong winds, desiccation, and salt spray. Forest cover in 2016 was estimated to be 54,386 ha¹¹, with the largest expanse in Pohnpei (33,000 ha), and the smallest in Yap (almost 7,000 ha). Agroforestry is integral to the culture and subsistence economy on which 60% of the population depends¹², and the agriculture sector provides food, livelihoods, and employment for a significant proportion of the population. 90% of households engage in agriculture¹³ and 63% in agroforestry¹⁴, with agriculture and livestock accounting for 14% of household income¹⁵. Due to the small land area and tenure systems, farm production is generally small scale for local consumption and to support relatively small export sales. Traditional agro-forest systems are based on biotic diversity and polyculture and have served as the main source of indigenous food crops, for culture, health, environment, economic and food security over generations. There are many varieties and cultivars of staple food crops, such as 55 banana, 133 breadfruit and 171 yam cultivars for Pohnpei alone¹⁶, all of which are potentially important for food security and more so in the face of climate change. Properly managed, these home garden /agroforestry systems can be highly productive whilst also delivering important environmental services such as soil stabilization, carbon sequestration, clean water, and air. More than half of the crops cultivated are tree crops (e.g., papaya, breadfruit, banana, coconut) and root crops (e.g., taro, yam, tapioca, sweet potatoes) followed by cash crops (mainly kava in Pohnpei and betel nut in Yap). Farmstead livestock production (particularly pigs and chickens) is also important for subsistence and cultural use¹⁷. Despite this production, 35% of household budget is spent on imported processed food and non-alcoholic beverages. Recent changes in lifestyle and diet have been accompanied by a shift from subsistence to a cash economy and increases in non-communicable diseases / decline in health which is promoting a return to local fresh island foods¹⁸

- 6. The major coastal habitats of the high islands (mangroves, seagrass beds, lagoons, and coral reefs) form highly integrated ecosystems between the offshore marine and terrestrial areas, supporting multiple ecosystem services and rich biodiversity. Coral reefs cover 4,925 km² across the country, serving as breakwaters and providing the sand and sediment in which mangroves and seagrasses grow. At the same time, the mangroves (covering 9,112 ha) and seagrass beds sequester large amounts of carbon^{19,20}, stabilize currents, settle sediments from the land (potentially with a strong capacity to offset sea level rise²¹) and provide nutrient inputs (detritus) into the coastal ecosystem, as well as habitat / nursery grounds for many species of invertebrates, fish, and turtles. Mangroves are particularly important to coastal protection from erosion and storm waves and provide products for subsistence economies such as firewood and building material as well as regulating water quality (buffering the effects of runoff sedimentation and pollution). Inshore fisheries in mangroves, reefs, and lagoons are vital to livelihoods and food security. They are particularly important to subsistence (artisanal) fishers who utilize small-scale fisheries for sale at local, small markets, generally using traditional fishing techniques and small boats.
- 7. While responsibility for environmental issues is shared between the national and individual state governments, the States have significant autonomy, with the national Government providing guidance and technical assistance when needed and requested on matters related to planning, economic development, natural resources, fisheries, and the environment. Land tenure can be complex and varies between the states, greatly influencing the use and management of natural resources and options for facilitating Sustainable Land Management (SLM)²². In Yap,

¹¹ FSM Forest Inventory Analysis, 2016. This showed a large reduction since the previous Analysis for 2006 (65,526 ha) but the differences are thought to be largely due to methodology.

¹² https://www.adb.org/sites/default/files/publication/29736/hardship-micronesia.pdf

¹³ Agriculture census, 2016

¹⁴ Household census data, 2013/14

¹⁵ Household income and expenditure survey 2013/2014 Factsheet

¹⁶FSM (2010), Fourth National Report to the CBD

¹⁷ In 2017, 67.2% of households owned livestock, of which 48.7% was for household consumption and the remaining 18.5% for selling. In a 2013/2014 household survey, pigs represented 94% of the total value of livestock production sold, consumed or gifted, the remaining 6% were chickens and other livestock.

¹⁸ FSM Fifth National Report to the Convention on Biological Diversity, 2014

¹⁹ <u>https://www.sciencedirect.com/science/article/pii/S0301479711004294</u>

²⁰ https://www.researchgate.net/publication/226471547 Ecosystem Carbon Stocks of Micronesian Mangrove Forests

²¹ https://www.fs.fed.us/psw/publications/4154/psw_2010_krauss001.pdf

²² https://scholar.law.colorado.edu/cgi/viewcontent.cgi?article=1166&context=books_reports_studies_

approximately 98% of land (including reef systems) is privately owned by family and clan groups or managed by individual estates. In Chuuk, most land and nearshore marine areas are owned by families, and customary rights are still followed. In Kosrae and Pohnpei, land is both privately and state owned, while marine areas are owned by the State. Group and communal ownership of land is the prevalent form of private ownership, influenced to varying degrees by customary land tenure systems

- 8. Overall, biodiversity and natural resources in FSM face a number of threats, with selected amphibians, birds, mammals and plants affected by different threats resulting in 90% of assessed species in the FSM area affected by habitat loss, 38% by invasive species, 48% by over-exploitation and 10% by pollution. Overfishing/overhunting is recognized as the biggest threat to the Areas of Biodiversity Significance identified in the ecoregional approach to conservation adopted in the FSM. In the period 2006–2015, catch per unit effort for coastal fishing in Pohnpei decreased, while marketed reef fish volume declined approximately 20%, demonstrating the impact of unsustainable fishing practices.²³
- 9. This proposed project has therefore put a strong focus on building resilience (through reducing land degradation) and promoting green economic recovery and improved livelihoods particularly for small holder farmers. This will be achieved by skills training, promoting local, healthy added value products for local markets and business diversification.

Human Context

- 10. The importance of biodiversity to the FSM cannot be overstated. It is an intrinsic part of the country's many traditional cultures and practices, and is the foundation for a secure, sustainable and economically independent future. A number of priority areas for economic development have been identified by the national government, including agriculture, fisheries, renewable energy and tourism. Healthy biodiversity is essential to the success of each of these endeavors, ensuring long-term food and nutrition security and opportunities for securing revenue streams in the face of ongoing pressures such as climate change. Biodiversity and traditional culture in the FSM cannot be considered in isolation from each other. Many native and endemic species are utilized in various aspects of daily living, including customary practices and traditional medicine, amongst many others. Historically, traditional knowledge, practices and modes of resource management have protected and conserved the FSM's biodiversity. This sustainable management has undergone a huge shift as the FSM's societies have changed over the past decades. The role of traditional knowledge is, however, increasingly recognized as playing an essential part in the conservation of biodiversity. Naturally, the biodiversity of the FSM has huge intrinsic value, locally, regionally and globally. First and foremost, subsistence activities reliant on biodiversity are vital to the economy as a whole and to individual household incomes. The vast majority of households are engaged in some form of subsistence activity. The 2010 Census of Population and Housing demonstrates that 94.6% of households are engaged in agricultural activity for household or family purposes, with 81.8% engaged in livestock raising activities and 71% of households engaged in fishing activities. Approximately 10% of households engage in these activities for commercial purposes²⁴. While an average of 47% of household income across the four states is from wages and salaries, receipts from subsistence activities provide an average of 8% of household income in Pohnpei, 9% in Kosrae, 26% in Chuuk and 29% in Yap.²⁵
- 11. The project will focus on integrated planning and delivery of measures to achieve Land Degradation Neutrality (LDN) through demonstrating approaches for SLM and biodiversity conservation across 4,144 hectares in five landscapes representative of the terrestrial, coastal and agro-ecosystems of the FSM. The five landscapes are:
 - Chuuk State- Wichen River Waterhed, Weno Island (237 ha)
 - Kosrae State Tofol-Innem Watersheds (1,075 ha)

²³ Rhodes, K.L etal. (2018) A 10-year comparison of Pohnpei, commercial inshore fishery reveals an increasing unsustainable fishery. Fisheries Research 204

²⁴ FSM Office of Statistics, Budget, Overseas Development Assistance and Compact Management

²⁵ FSM Office of Statistics, Budget, Overseas Development Assistance and Compact Management

- Pohnpei State Pehleng Landscape (1,247 ha)
- Pohnpei State Awak River Watershed (368 ha)
- Yap State Tomil -Gagil (1,187 ha)
- 12. This project aims to strengthen National/State efforts to address land degradation in terrestrial and coastal ecosystems that support critical ecosystem services and biodiversity, through embedding of United Nations Convention on Combatting Desertification (UNCCD's) Land Degradation Neutrality (LDN) approach which is a GEF priority. It will target two sectors: a) agriculture reducing the impacts of unsustainable agricultural practices and encroachment into critical forested/watershed areas; b) infrastructure reducing the impacts of infrastructure development and dredging on critical coastal ecosystems (mangroves, lagoons and reefs). The demonstration sites are ecosystem-based areas (watershed and/or associated coastal zone) which is subject to threat from land degradation from unsustainable agriculture and/or infrastructure development. The demonstration sites were selected based on criteria such as extent of land degradation due to unsustainable agriculture and/or infrastructure development, potential to address land degradation and drivers to achieve multiple benefits in terms of carbon, biodiversity, water, livelihoods and resilience, clear tenure arrangements and manageable land disputes, presence of critical ecosystems threatened by land degradation, potential for community-based management, presence of key KBA areas, habitat for endemic or threatened species or habitats, government and community support, potential for state or private sector collaboration and co-financing and feasibility and implementation efficiency.

Threats and root causes of biodiversity loss and land degradation

- 13. On the high islands, the key challenges come from economic development activities, changing cultural practices, demographic shifts and climate change that are placing major pressures on sustainable resource management. On these islands with small landmasses, there is a clear link between ecosystem health and services and goods for the communities. Critical ecosystem services and biodiversity that ensure clean and adequate water supply, food production, productive inshore fisheries, storm protection and carbon sequestration are being lost and degraded, with impacts particularly affecting the poorest and most vulnerable. The key threats to FSM's terrestrial, freshwater and coastal ecosystems and their critical ecosystem services are²⁶:
- 14. Land degradation: Although FSM is covered with extensive forests, there has been a long history of disturbance from human settlement and use primarily through conversion of native forest for agroforestry. While, it is unclear what extent of forest cover has been lost recently, disturbances have influenced forest structure and species composition over time particularly in the lowlands, but also in the uplands of Pohnpei and to a lesser degree Chuuk and Kosrae. Whilst well managed agroforestry following traditional practices can sustain communities with limited impacts on ecosystem services, recent trends and practices that are shifting away from traditional practices are resulting in more apparent land degradation and negative impacts on critical ecosystem services and biodiversity. These trends have been exacerbated on some islands by demand for farmland for cash crops and because of migration of people from outer islands or lagoon islands to the high islands (e.g., in Pohnpei and Yap). While, shrinking job opportunities in the public sector are spurring some individuals to return to subsistence agriculture, in some cases moving to relatively intact forest areas to farm. Additional causes of land degradation are changing agricultural practices and include the increased use of chemical fertilizers and pesticides and an increased focus on cash crop monocultures. Declining soil fertility is a key concern for all states exemplified by depleting essential soil nutrients and soil organic carbon content and decreasing the infiltration capacity of the soil. By 2016, 45% of forest area showed signs of disturbance from human activities and climate events, and in 2020 it was estimated that only 6,213 ha of intact forest remained²⁷. For instance, in Pohnpei, encroachment of sakau *Piper methysticum* (a high-value cash crop) into the upper watershed severely reduced the area of primary forest from 15,000 ha in 1975 to 4,200 ha in 2002 with direct impact on biodiversity and ecosystem services, affecting vulnerable and endemic species, facilitating expansion of invasive plants, and increasing erosion, diminishing soil fertility and water quality²⁸. This is clear

²⁶ Unsustainable fishing is also a major threat to the FSM's marine ecosystems which also impinges on coastal zone management, but was considered to be out of scope for this project

²⁷ From PIR 2020 for the GEF-5 R2R project

²⁸ FSM Fifth National Report to the Convention on Biological Diversity, 2014

evidence of recent impacts to relatively intact forest systems on a large scale and a subsequent change in forest cover. These areas may still have some type of forest cover but it is different than that of the more pristine remaining forest in the highlands. Forests in all four states are also being degraded by other activities such as bulldozing, unsustainable timber harvests (for firewood and logging), conversion to other uses and wildfires (particularly Yap). Degradation of watersheds on high islands increases erosion and sediments entering waterways and eventually lagoons, affecting surface freshwater quality as well as leading to siltation of the fringing reefs surrounding the islands and causing significant damage to critical inshore fisheries and biodiversity. This, combined with poor wastewater control due to inappropriate management of livestock (particularly piggeries) and a lack of proper sanitary systems, brings increased risk of bacterial contamination and impacts on the health of the population. This is of particular concern in Pohnpei and Kosrae where communities use surface water from small streams as sources of drinking water. Solid Waste Management (SWM) also contributes to land degradation in all four states due to the lack of a strategic approach through regulations and enforcement and provision of proper facilities for recycling and landfill.

- 15. Invasive alien also contributes to land degradation, threatening local ecosystems, agricultural production, human and animal health, food security and biodiversity²⁹. 592 introduced species are considered invasive or potentially invasive³⁰ in the FSM of which 89% are plant species, about 10% are animals³¹. Disturbance of natural habitats, shifting agriculture or abandonment of traditionally cultivated land as a result of out-migration or loss of soil fertility is allowing invasive species to flourish³² so that they do not revert to forest, making this gardening system even less sustainable.
- 16. Infrastructure development: The limited land area, high population density and shift from subsistence to a cashbased economy have impacted land use and increased the need for services and therefore need for infrastructure in all four States. Movements from the outer islands to the main islands, and of high island residents to urban areas³³ or inland, are increasing the demand for housing, roads, airstrips, utilities, and community facilities³⁴. This demand, the availability of modern machinery, and (now declining) funding for infrastructure improvements under the Compact of Free Association with the United States has resulted in considerable and ongoing degradation and fragmentation of natural habitats. Roads pose direct threats by their "footprint" but can also impound and divert freshwater flows. The poor design of drainage systems contributes to erosion and sedimentation affecting homes and infrastructures. They also provide access to forests and extend the reach of secondary and private roads, opening land to further agricultural and other development. Roads also serve as a primary pathway for many invasive weeds and other pest expanding their ranges. On the high islands, mangroves and freshwater wetlands are also under severe threat from new developments and are often being destroyed illegally for development land (fragmentation, channels, landfill and conversion, harvesting and pollution³⁵), and are often used as waste dumps. The hydrological functioning of these wetlands can be greatly impacted by poorly constructed roads that bisect them without properly located culverts. This threatens biodiversity and food security as mangroves support fisheries and adjacent freshwater wetlands provide habitat for traditional taro patches.
- 17. Infrastructure development also dramatically increases the demand for natural resources such as freshwater, timber, sand/coral, and gravel for construction. These demands compound the problems of land degradation from agriculture in the watersheds and have a particular impact on sensitive coastal habitats where loss and degradation of mangroves, coral reefs, seagrass beds and lagoons are having serious impacts on coastal protection, inshore fisheries, and biodiversity in all four states. Coral reefs are mined for limestone and construction materials for use

²⁹ Federated States of Micronesia Agriculture Policy, 2012-2016

³⁰ IUCN Invasive Species Specialist Group

³¹ <u>http://www.griis.org/about.php</u> (2018)

³² https://www.cbd.int/doc/world/fm/fm-nr-05-en.pdf

 $^{^{\}rm 33}$ Urbanisation is increasing at 1.05% per year.

³⁴ (FSM Fifth National Report to the Convention on Biological Diversity 2014).

³⁵ Cannon P.G., Falanruw M., Ruegorong F., MacKenzie R., Friday K., Ross-Davis A.L., Ashiglar S.M., Klopfenstein, NB, Liu Z., Golabi M., Iyekar C.T. (2014). The causes of mangrove death on Yap, Palau, Pohnpei and Kosrae [Chapter II]. In: Cannon, Phil. 2014. Forest pathology in Yap, Palau, Pohnpei, Kosrae, Guam and Saipan, Sept. 2013. Trip Report. Vallejo, CA: U.S. Department of Agriculture, Forest Service, Region 5, Forest Health Protection. p. 13–37.

as bricks or road-fill or added to dredged sand from lagoons to make concrete for construction. Mining destroys reefs which are unlikely to recover for centuries³⁶ and causes other indirect impacts such as sand erosion, land retreat, sedimentation and affects water circulation. The cost of destroying or mismanaging 1 km² of reef results in losses estimated between US \$137,000 and US \$1.2 million over a 25-year period³⁷. 30% of the FSM's coral reefs are estimated to be under medium to high threat from local pressures^{38,39} including coral dredging and sand mining. Rapid Ecological Assessments conducted in Pohnpei (2005)⁴⁰, Yap (2007)⁴¹, Kosrae (2006)⁴² and Chuuk (2008) indicate that fish populations in reefs close to the larger, more urbanized areas are severely depleted. In some areas, reef destruction from over-fishing, road building, dynamiting, and dredging is extensive. For example, blasting had already damaged about 10% of the reefs in Chuuk lagoon (the largest single barrier reef in Micronesia) according to a 1994 survey and since then heavy urbanization, especially on Tonowas and Weno, has spurred dredging and filling for land expansion and development⁴³. Large volumes of dredged coralline materials (~40,000-120,000 m³/ project) are also regularly used for construction projects in Yap⁴⁴. On Kosrae, dredging of the reef to use as fill in the construction of the airstrip may have caused coastal erosion. Physical damage to the coral reef framework is also caused by anchoring.

- 18. Sedimentation from land-based construction activities as well as agriculture has contributed to the degradation of nearshore coral reef ecosystems in all four states⁴⁵. Coastal development is the lead cause of soil erosion and sedimentation in Kosrae. The construction of the circumferential road connecting Utwe and Walung exacerbated the impacts of soil erosion and sedimentation on the corals along Kosrae's southern reefs. Housing developments for residential and business purposes along the coast also contribute a great deal to the problem of sedimentation. Coastal development is one of the biggest stressors to the coral reefs of Pohnpei as well, with more than 50 dredge sites and mangrove clearings (man-made channels) surrounding the coast.
- 19. <u>Climate change</u>: The Global Climate Risk Index ranks FSM as the third most at risk of the Pacific Island countries⁴⁶. The main concern at the community level is rising sea-levels and increasing frequency/severity of typhoons with the resulting loss of agricultural capacity, pollution of drinking water and impacts on infrastructure and critical natural habitats such as mangroves. Sea levels are rising by 10mm per year⁴⁷, more than three times the global average, leading to more aggressive 'king tides' and coastal erosion. Climate change scenarios suggest a real possibility of islands (particularly the low-lying atolls) reducing in landmass, with increased land fragmentation, impact to coastal infrastructures and limited access to traditional agricultural sites e.g., coastal taro swamps and this is also a severe problem around the coast of all the high islands. For example, most of mainland Yap's most fertile (alluvial) soils are vulnerable to storm surge and recent high waters have damaged or destroyed taro production areas in low lying areas and most taro patches in the outer islands. Access to wetlands which are used in many cases to raise taro may be an issue, but a bigger issue is the salt water intrusion into wetlands, changing their structure including reducing

³⁶ https://coral.org/wordpress/wp-content/uploads/2014/02/coralmining.pdf

³⁷ Robert Richmond, 1994. "Coral Reef Resources: Pollution's Impacts," Forum for Applied Research and Public Policy 9, no., 55–56.

³⁸ Chin, A., Lison De Loma, T., Reytar, K., Planes, S., Gerhardt, K., Clua, E., and Burke, L., Wilkinson, C. (2011). Status of Coral Reefs of the Pacific and Outlook: 2011. Publishers Global Coral Reef Monitoring Network. 260pp.

³⁹ Houk, P., Camacho, R., Johnson, S., McLean, M., Maxin, S., Anson, J., et al. (2015) The Micronesia Challenge: Assessing the Relative Contribution of Stressors on Coral Reefs to Facilitate Science-to Management Feedback. PLoS ONE 10(6): e0130823. doi:10.1371.

⁴⁰ Allen, G. R. (2005). Final Report: Reef Fishes of Pohnpei, Federated States of Micronesia. The Conservation Society of Pohnpei. AND Turak, E., & De Vantier, L. (2005). Reef-building corals and coral communities of Pohnpei, Federated States of Micronesia: Rapid ecological assessment of biodiversity and status. Conservation Society of Pohnpei.

⁴¹ Allen, G. R. (2007). Final Report: Reef Fishes of Yap, Federated States of Micronesia.

⁴² Donaldson, T.J., J. M. Maragos, M Luckymis, S. Palik, and O. Nedlic., 2007. Coral and fish surveys at Kosrae Island, July-August 2006, Federated States of Micronesia: a Preliminary Report prepared for the Kosrae Rapid Ecological Assessment. Prepared for Kosrae Conservation and Safety Organization and The Nature Conservancy. Pohnpei, Federated States of Micronesia. 36 pp.

⁴³ <u>http://pdf.wri.org/reefs.pdf</u>

⁴⁴ according to Yap Environmental Protection Agency (YEPA). <u>https://reefresilience.org/wp-content/uploads/State-of-Coral-Reef-Ecosystems-in-the-Federated-States-of-Micronesia-2008.pdf</u>

⁴⁵ The Nature Conservancy. 2003. A Blueprint for Conserving the Biodiversity of the Federated States of Micronesia. Micronesia Office, The Nature Conservancy. Arlington, VA. 104 pp.

⁴⁶ The Global CRI analyzes quantified impacts of extreme weather events – both in terms of fatalities as well as economic losses that occurred. The countries ranking highest are the ones most impacted and should consider the CRI as a warning sign that they are at risk of either frequent events or rare, but extraordinary catastrophes. <u>https://www.germanwatch.org/en/16046</u>

⁴⁷ www.pacificclimatechangescience.org

their potential for use in growing corps such as taro. What is more, the taro patches being impacted or which can be potentially impacted by rising sea levels, higher tides or storm generated waves are not only coastal but also include wetlands located away from the coasts. In many of the small lagoon islands, this is very true as there generally is a coast strip around the circumference of the island with some limited forest and a wetland in the center. Given the small size of many of these islands, even these centrally located wetlands are at high risk of impact/destruction by salt water intrusion due to climate change. And in many of these smaller islands, even today, these taro swamps are a primary source of food.

- 20. Due to the traditional land tenure system for some states, loss of landmass can potentially trigger inequalities among the communities and migration to other countries or other islands. Indeed, residents of high islands are increasingly moving inland as a result of coastal erosion and shifting weather patterns, contributing to land degradation due to the increasing demand for housing and infrastructure⁴⁸. What is more is that this is exacerbated due to increasing migration from outer islands to the main high islands, often due at least in part to similar climate induced impacts reducing the viability of human settlement, agriculture and near shore fishing on the outer islands. Therefore main high islands are being impacted both by increase human populations but also by populations moving in land away from traditional coastal areas. And these changes are impacting watersheds and land productivity across the islands.
- 21. Therefore, climate change is impacting people, infrastructure and ecosystem services, affecting water and food resources, and the coastal protection provided by coral reefs and mangroves. Droughts, wildfires, and storms associated with more frequent typhoons and severe El Niño-Southern Oscillation (ENSO) activity are having increasingly serious impacts on watersheds and forests, posing a great threat to traditional agroforestry systems (including through saltwater intrusion near the coast), which on many small islands, the entire island, including its interior is near the coast and has the potential to be impacted. On two occasions in the last 30 years, at least 22% of Yap has been burnt during drought periods. Agroforestry was impacted by typhoon Maysak and the El Niño-induced drought of 2016–17, considerably affecting FSM's household subsistence economy. In addition, by 2030, projections for thermal stress and ocean acidification suggest that all FSM reefs will be threatened with about 50% at high, very high, or critical threat levels⁴⁹. These impacts provide a glimpse of impacts of climate change.
- 22. The overall root cause of biodiversity loss and ecosystem and land degradation in FSM arises from the slow progress in mainstreaming biodiversity and ecosystem services into different sectors (including those that bring high risk of Invasive Alien Species incursions and impacts, as well as cause land degradation) as well as the rising economic and social aspirations of the expanding population which put increasing pressure on natural resources. It is essential to find a sustainable development path around a nature-based economy and resilient, diversified livelihoods that deliver social and economic benefits from the sustainable use of natural resources, minimizing the risk of IAS incursions, reducing impacts from established IAS and securing the integrity of land and seascapes for the benefit of current and future generations.

Barriers to achieving this vision are:

23. Insufficient policy, regulations, resources and coordination to promote sustainable land management and achieve land degradation neutrality: Although the FSM ratified the UNCCD in 1996, no National Action Program (NAP) is in place to implement the Convention and policies and practices to promote sustainable land management are in need of improvement. Furthermore, Land degradation Neutrality (LDN) is a relatively new concept, about which there remains little awareness or adoption and thus little or no understanding of the goal, objectives, how to set the baseline, mechanisms identified/achieved, enabling environment (*inter alia* adoption into policies and plans, financial resources, system for monitoring progress towards LDN targets). Lack of an overarching policy, legal and regulatory framework for addressing land degradation inhibits strategic action and dissipates the already limited human and financial resources, which are a barrier in themselves. This is compounded by the sharing of responsibility for the legislative framework at the national, state, and municipal levels that can result in duplications, gaps, and

⁴⁸ <u>https://www.cbd.int/doc/world/fm/fm-nr-05-en.pdf</u>

⁴⁹ https://pdf.wri.org/reefs_at_risk_revisited.pdf

lack of clarity. There are specific policy and regulatory gaps and institutional differences in all four states to address land degradation and related losses of ecosystem services and biodiversity including for: watershed protection; coastal development (zoning plans, dredging for sand/coral materials for construction, mangrove management and harvesting); animal husbandry (to ensure proper safeguards to prevent negative impacts). Stringent permit requirements (e.g., for extending agriculture into forests, dredging of coastal habitats or infrastructure development) and effective enforcement are seriously lacking, and government funding to tackle these stressors is reducing. Complex political and institutional structures, and bureaucratic channels for communication also hinder progress. Effective policy implementation to address land degradation will require multiple agencies and groups to work in concert on clear policies and plans that mainstream SLM and biodiversity that are agreed by all. Although some states have joint enforcement agreements between national, state, and local government, this is not the case for all. There is a need to focus and coordinate functions across agencies and with non-government and private sector stakeholders - a key role at national level for the national Department of Resources and Development. Although cross-sector working groups for sustainable natural resources management exist in some FSM states, their capacity is low and they need to be nurtured to achieve self-sufficiency. Land use plans need to be developed or improved and areas in need of rehabilitation need to be accurately mapped for the purposes of planning and budgeting.

- 24. Lack of information, tools and capacity in government: Even though natural resources are being degraded at a rapid rate, there is no system to monitor land degradation, no agreed indicators, targets or baseline against which to measure progress. Without a proper assessment, monitoring, and planning regime for the maintenance of ecosystem services and biodiversity, managers will continue to struggle to integrate environmental information and risk assessments into decision-making. Vegetation maps are considerably out of date and there is an urgent need to access up to date high resolution remote sensing imagery to determine degradation of watersheds and coastal zones and to produce updated vegetation /degradation maps to determine trends and prioritize areas for rehabilitation⁵⁰. There is an urgent need for best practice protocols and technical guidelines to assist the states to effectively plan land-use and development so as to avoid and mitigate land degradation in watersheds and the coastal zone through the application of ecologically acceptable norms and standards as well as the Environmental Impact Assessment (EIA) process. Expert advice, protocols and technical guidelines are particularly needed to guide planning and development activities on the coast where inssensitive engineering and infrastructure development is frequent. Dredging of lagoons for aggregates also has severe impacts and requires clear protocols. Practical expertise is also required in the maintenance and restoration of mangroves to protect coasts. Similarly, there is a lack of ecologically acceptable rehabilitation protocols relating to agriculture and infrastructure development in watersheds which can lead to inappropriate practices in rehabilitation. There is a lack of best practice guides for managing watersheds, forests, agroforest, and mangroves as well as for sustainable infrastructure.
- 25. Capacity at all levels, from government and policy-making to implementation at the community level, is an ongoing challenge. Limited human resource capacity and budgets in the natural resources sector severely constrain leadership, coordination and the level of support services provided by government agencies. Extension services provided by the College of Micronesia (COM) are constrained by a lack of technical and vocational training, lack of appropriate methods, inadequate budgets, and limited human resources. As a result, farmers lack vital extension services information on sustainable land management and food production, and opportunities for improving their livelihoods leading to further land degradation. There is a need to increase the capacity and equipment of the designated Geographic Information System (GIS) practitioners in each state so they can enhance spatial analyses on land degradation using new technologies.
- 26. Insufficient demonstration to combat land degradation at landscape scale, and the benefits of conserving ecosystem services and biodiversity by adopting sustainable land management practices: Although there are some examples of community-based natural resources management in FSM, few have the conservation of globally significant biodiversity, the achievement of land degradation neutrality or the effective prevention and management of IAS among their primary objectives. None have been implemented in a concerted way to meet targets for achieving land degradation neutrality at landscape level. While the customary system is widely quoted as one of the main

⁵⁰ https://fsm-data.sprep.org/dataset/fsm-state-wide-assessment-and-resource-strategy-swars-2010-%E2%80%93-2015

challenges for governance and implementation of policies, it also provides significant opportunities for communitybased management approaches that can help address the lack of resources in government. However, farmers lack knowledge and experience to adopt sustainable land management (SLM) approaches and technologies which could contribute to maintaining (or increasing) crop yields thus food security and incomes. Climate change is further exacerbating the latter, with increasing frequency of high intensity of rainfall events.

- 27. Land Use Planning (LUP) is becoming increasingly important in the Pacific, to match land systems, soil types and land uses in the most rational way possible, to optimize sustainable resource development and management to meet the needs of increasing populations including work towards achieving LDN. Land-use planning at landscape scale is largely lacking. There has been a degeneration of traditional land ownership and land use decision making systems and lack of strong bottom-up approaches for community planning. This is a major constraint to catalyze the required participatory 'bottom up' planning processes, beginning at the local level, to fully utilize the experience and local knowledge of land users to identify priorities and to draw up and implement plans towards FSM achieving LDN. An integrated approach to problem solving including land use, as they face the impacts of climate change and the frequency of natural disasters which confront communities, particularly affecting food production.
- 28. Increase in demand for land for subsistence and commercial production, as well as ongoing infrastructure development raises urgent issues about carrying capacity of the land, further encroachment into watersheds and sustainable production methods⁵¹. As strategies for climate change adaptation, the Joint State Action Plans (JSAPs) from the four states highlight the need to protect ecosystems and biodiversity through landscape level management as well as enhancing coastal protection, rehabilitation, and management (including mangroves⁵²). Land use plans exist for only two of the four states, are not yet being implemented effectively and they do not incorporate targets for achieving land degradation neutrality. The diverse and complex arrangements around land tenure (including customary traditions) also make landscape level working more complex and demand a high degree of public participation. There is a need for a stronger consultative process for environmental planning, including children, elders, women, and communities in order to effectively develop or enforce management plans⁵³.
- 29. There has been a degeneration of traditional land ownership and land use decision making systems and lack of strong bottom-up approaches for community planning. This is a major constraint to catalyze the required participatory 'bottom up' planning processes, beginning at the local level, to fully utilize the experience and local knowledge of land users to identify priorities and to draw up and implement plans towards FSM achieving LDN. An integrated landscape approach to problem solving including land use planning at all levels would allow communities to make informed choices about their future sustainable land use, as they face the impacts of climate change and the frequency of natural disasters which confront communities, particularly affecting food production. Farmers are only likely to change to more sustainable practices if there are economic or resilience benefits from doing so legislation is unlikely to be successful because of the challenges of enforcement due to weak government capacity and contradictions with cultural norms. Efforts to promote sustainable agriculture and land management must focus on improving profitability and resilience by reducing costs to farmers as well as supporting value chains that can supply local markets. There is a need therefore to demonstrate such approaches and re-align extension services to help farmers address soil fertility, crop production, pest control and post-harvest management in ways that reduce the need for expensive chemicals and seeds. Similarly, the culture of entrepreneurship with associated skills in business practice is lacking. As a result, processing and value-adding of agricultural products is very limited.
- 30. <u>Inadequate awareness and knowledge exchange and mainstreaming of women and youth to achieve LDN and protect ecosystem services</u>: The tremendous global significance of the biodiversity of FSM, the threats (many of which may remain undocumented), and the wide range of ecosystem services provided by terrestrial, coastal and

⁵³ https://fsm-data.sprep.org/dataset/fsm-state-environment-report-

⁵¹ https://fsm-data.sprep.org/dataset/fsm-agriculture-policy-2012-2016

⁵² Yap does not specifically state mangrove ecosystems, but it plans an ecosystem management approach for natural resources and the use of Ecosystem-Based Adaptation (EbA) strategies for adapting to climate change.

^{2018#:~:}text=The%20FSM%20SoE%20Report%20reveals,environment%2C%20and%20culture%20and%20heritage.

marine ecosystems remain poorly appreciated by most islanders, particularly by rural people who have high rates of illiteracy, but are dependent on these ecosystem services for their food security and livelihoods. Awareness and understanding about IAS, LD, SLM and Climate Smart Agriculture (CSA) is limited at all levels and in sectors, which is still suboptimal and engagement overall lacking. There is currently no communication strategy in place to raise awareness of the benefits and need for conservation of globally threatened and endemic species, IAS management and SLM/CSAs. As a consequence, low value is accorded to these matters in fiscal policy instruments as reflected in the low funding allocations to DECEM and Department of Resources and Development, which limits the scaling up of awareness to assist the local community to adopt more sustainable lifestyles. Low awareness of risks means that there is no investment by government or by Non-Government Organizations (NGOs) or communities in SLM or IAS management in natural ecosystems. Similarly, most Government and State entities does not invest in awareness raising, training and capacity building on SLM/CSA either for staff or land users.

- 31. Mid Term Review (MTR) of the GEF-5 project reported a lack of public understanding about the linkages between terrestrial and coastal-marine systems, and therefore the ecosystem services they provide and the consequences of land degradation. As a consequence of inadequate awareness and therefore lack of advocacy by the communities, low value is accorded to sustainable land management in fiscal policy instruments. There is also poor awareness of solutions to environmental problems through sustainable land management via the agriculture and infrastructure sectors. There is a need to raise awareness in traditional community networks and among private landowners to marshal cooperative actions and sustainable practices, including watershed and coastal zone management, to address threats from land degradation. Raising awareness may also help mitigate the lack of resources in government, by reducing the need for enforcement of laws.
- 32. One of the major barriers to reversing LD and implementing SLM responses is the lack of institutional and human capacity at national and regional levels for monitoring and assessing LD and adoption of SLM, also for using results for learning, knowledge sharing and planning effective interventions. Many field practitioners have limited information about the range of either traditional or innovative SLM approaches and technologies that could be promoted and up scaled in each context. There is also poor information about the costs and benefits of SLM practices and likewise of the value of SLM in terms of sustaining ecosystem services (including crop yields).
- 33. Knowledge sharing in the FSM on best practices on sustainable land management is lacking at local, state, and national levels, and with other countries due to the lack of mechanisms and knowledge of where best practices can be found. Loss of knowledge on traditional cultivation of local crops and transfer of traditional agroforestry knowledge has become an important constraint. Although demonstration farms exist in each state they are inactive due to lack of incentives. There is also a need for more farmers' organizations in each state, run by farmers for farmers, to give farmers a voice, share best practices and engage farmers at landscape scale in sustainable land management and related livelihoods initiatives. Similarly, social media and knowledge sharing platforms need to be strengthened. Because of the cultural constraints, women and youth do not have the same opportunities as men and older people to access knowledge-sharing opportunities. Women and men both face constraints learning about sustainable agricultural practices, especially in remote areas where agricultural extension services are limited. Gender and age disaggregated information is rarely collected to monitor project outcomes. There is therefore the potential that raising awareness by project that can help in some way to mitigate the lack of resources in government for enforcement etc.



2) Baseline scenario or any associated baseline projects

34. While the overarching Constitution defines the National and State Government's roles in implementing the FSM's environmental management as well as environmental conventions, many key national and state government policies, laws and regulations, plans and initiatives underpin the targeted approach proposed by this project. Detailed information about the national and state level legal system and regulations is provided in a national database⁵⁴ and Secretariat of the Pacific Region Environmental Program (SPREP) has published a review of natural resource and environment-related legislation⁵⁵. The table below provides details of baseline activities:

Baseline Project/Activities	Key Objectives of baseline project/activities related to the GEF project	Additional Complementarity with proposed GEF project
UNDP/GEF-3 medium- sized Capacity building, policy development, and mainstreaming of sustainable land management project (2008-11) – USD 1.43M	The project objective was to strengthen capacity and the enabling environment for sustainable land management to address priority land degradation issues as well as raising awareness, building capacity and partnerships (including with NGOs) and improving the baseline understanding of SLM.	The GEF 7 project will build on the lessons learned from the SLM project in terms of awareness, capacity building and partnerships with NGOs, and identify key constraints to mainstreaming SLM into the development processes, and that fundamental improvements that are still needed
GEF-4 Micronesia Challenge: Sustainable Finance Systems for Island Protected Area Management project (2010-16) – USD 19.4M	The project success lay in being able to launch implementation of the Micronesia Challenge (see below), whose overall aim is to "effectively conserve at least 30% of the near-shore marine and 20% of the terrestrial resources across Micronesia by 2020". A key achievement was capitalization of the Micronesia Challenge Endowment Fund (MCEF) to support protected areas across the region.	The GEF 7 will attempt to capitalize on the Micronesia Challenge Endowment Fund to ensure co- financing and support for complementary long-term, sustainable funding for biodiversity conservation. The FSM Department of Resources and Development (FSM R&D) is the lead FSM organization for the Micronesia Challenge and the project will seek guidance from DRD to identify complementary priorities investments for FSM
GEF-5 project Implementing an integrated "Ridge to Reef" approach to enhance ecosystem services, to conserve globally important biodiversity and to sustain local livelihoods in the FSM (2015-2020) – USD 22.6M	Implementation of integrated ecosystem-based management through a "ridge to reef" approach on the High Islands of the four States. This project has supported the development of land use planning and strengthening the management effectiveness within new and existing Protected Areas (both marine and terrestrial) but has been challenged by the over-ambitious scope and targets of the project design	The GEF 5 project provides important experiences and learning that could be applied such as: (i) approaches to ILMP efforts to promote ecosystem-based planning that can be applied to the demonstration sites; (ii) applicable; SLM interventions and their appropriateness; (iii) measures for rehabilitation of critical ecosystems, including agricultural lands, natural habitats; (iv) methods for biological and ecological monitoring, etc.
GEF-6 project Safeguarding biodiversity from invasive alien species	The project will start implementation shortly and aims to safeguard biodiversity in terrestrial and marine ecosystems and in agricultural and fisheries production	The GEF 7 project will coordinate with this project to draw best practices, lessons learned, technical

Table 2: Summary of Baseline Activities and Additional Complementarity

⁵⁴ <u>http://fsmlaw.org/fsm/index.htm</u>

⁵⁵ See <u>https://www.sprep.org/attachments/Publications/EMG/sprep-legislative-review-fsm.pdf</u> - to be updated during the PPG

in the Federated States of Micronesia ⁵⁶ (2020-25) - US\$13M	systems from the impacts of invasive alien species. It will focus on strengthening the national biosecurity governance framework and financing, enhancing biosecurity awareness and capacity, improving biosecurity protocols and access to and management of information on IAS	support and training to help farmers and land users to address the prevention and management IAS, including identification of eradication and management measures
Strengthening and Enabling the Micronesia Challenge 2030 will build on the Micronesia Challenge 2030 (2021- 2024)	Tri-country regional program aimed at conservation, community benefit, and process targets, recognized by MC2030 partner jurisdictions. It will support coordinated strengthening of national integrated marine resource management. Develop national policies, plans and tools to support national integrated management of marine resources under Micronesia Challenge 2030 targets. It also aims to strengthen the capacities, communication, and planning to ensure regional coordination of the MC2030 and improved monitoring and evaluation, knowledge management and communication of knowledge products generated through the project, including through IW:LEARN. Conservation target is to effectively manage at least 50% of marine resources and 30% of terrestrial resources across Micronesia by 2030	The GEF project will draw on the success of the Micronesian Challenge in terms of marine resource management, in particular, looking at tools to support integrated management of marine resources, successes at strengthening capacities, communication, and planning and monitoring and evaluation, knowledge management and communication of knowledge products
UNEP/SPREP regional GEF- PAS Prevention, control and management of invasive alien species in the Pacific Islands project (2010-13) - The US\$ 7.76M	The project resulted in publication of a National Invasive Species Strategy and Action Plan 2016-21 (NISSAP), which provides extensive and detailed action items for national and state entities to engage in invasion reduction and addressing impacts/reducing presence of existing pest organisms throughout the FSM.	The NISSAP will offer measures for the prevention, control and management of IAS, including measures to keep IAS out of the project sites, deal with rapid assessment of IAs threats and emergency response mechanisms
GEF Small Grants Program (SGP)	The GEF-SGP has financed several community projects on SLM including a dry-litter piggery revolving fund on Pohnpei to finance the moving and conversion of piggeries in order to reduce contamination of the watershed	The GEF 7 will draw on lessons learned from the SGP, in particular related to community organization and collective actions for SLM and related activities
Natural Resources Conservation Service (NRCS) of the U.S. Department of Agriculture	Provides technical assistance and training for the conservation of soil and water resources to maintain productive and resilient agroforestry systems, including development of a natural resources plan, training, and implementing various agriculture, agroforestry and piggery demonstration projects and assisting individual farmers with conservation plans to protect and improve the soil resources on their farms and promote best practices.	The GEF 7 project should engage with the NRCS in supporting developing and potentially providing various training activities as well as working directly with communities both within and beyond the project demonstration sites.
Enhancing Climate Change Resilience of Vulnerable Island Communities in FSM - Adaptation Fund ⁵⁷ (2018-2023) SPREP US\$ 9.0M	The project is a comprehensive national effort to focus on increasing the resilience of FSM's most vulnerable communities to climate change-induced food insecurity. Planned measures include introducing sustainable agricultural practices and developing climate-resilient agriculture value chains aims to reduce the vulnerability of selected communities to risks of water shortage and increase their adaptive capacity to drought and flood-	The GEF 7 project should engage with these efforts and utilize knowledge on BMPs, technology transfer and linkage chains, communication, etc. as appropriate.

⁵⁶<u>https://www.thegef.org/project/safeguarding-biodiversity-invasive-alien-species-federated-states-micronesia</u>
⁵⁷ https://www.adaptation-fund.org/projects-programmes/

	related climate and disaster risks, focusing on the outer islands.	
Practical Solutions for Reducing Community Vulnerability to Climate Change in the Federated States of Micronesia project. Adaptation Fund US\$ 0.97M (2018-21) Micronesia Conservation Trust	The core focus of this project is to increase communities' resilience through ecosystem-based climate change adaptation measures. The project is to ensure there is adequate protection/rehabilitation of natural assets or ecosystems that are already under management and institutionalizing a nation-wide Protected Area Network (PAN). It works with state leaderships to put the appropriate legislations in place to support the establishment of the PAN, establishing a Technical Committee for the network, developing an Operations Manual to guide the operations of the network, and placing a State PAN Coordinator in each of the four states. It also is to increase communities' resilience through strengthened ownership and financing of climate change adaptation and risk reduction measures at the local level as well as develop a knowledge management system to facilitate future scaling-up and replication of effective Marine Protected Area Management and community-led ecosystem-based adaptation actions.	The GEF 7 project should engage with this project and may do well to review and consider mechanisms for engaging with state and national leadership to support development, adoption, and institutionalization of legislation, policies and regulations needed to support SLM and LDN activities and long-term strengthening. The project should also coordinate with these efforts for scaling up and utilization of BMPs for increasing community and landscape resilience to climate induced changes.
Climate resilient food security for farming households across the Federated States of Micronesia project proposal to the Green Climate Fund GCF (2021- 2026) USD 9.4 million	The project is a comprehensive national effort to focus on increasing the resilience of FSM's most vulnerable communities to climate change-induced food insecurity. Planned measures include introducing sustainable agricultural practices and developing climate-resilient agriculture value chains	The GEF 7 project should keep in mind the potential for this lateral project and work towards a harmonized and cross supportive role with the potential GCF project
FSM prioritized road investment management and enhancement project US\$40M (2021-28) World Bank	Aims to improve the resilience of the country's primary road network to natural disasters and climate change. It provides access to important social services like schools and health centers, as well as enabling vital economic activity through the movement of goods and services. In addition, as severe weather events increase in frequency and severity due to the realities of a climate-impacted environment, a more resilient road network will be critical to ensuring connections to services like health, education	The World Bank project is particularly relevant to the Yap demonstration site in the GEF 7 project, as it will support SLM in the Gagil-Tomil Island that might be affected by the roads project. This provides a close collaboration between the 2 projects to ensure the effects of the road project are effectively mitigated in relation to management of the foreshore, seabed, estuaries, mangroves and waterways within the project area of influence and receive stormwater run-off.
The Micronesia Mangrove Adaptation Initiative (MMAI) 2016 USD 120,000	There has been an increased focus on management of mangrove habitats resulting from wider awareness of their role in shoreline protection and as a nursery habitat for fish. The Micronesia Mangrove Adaptation Initiative (MMAI) builds local capacity on Pohnpei and throughout Micronesia to increase coastal and community resilience by providing tools for communities and local governments to determine stresses on mangroves and plan actions to alleviate these stresses given climate change. As a part of this initiative the Micronesian Conservation Trust is supporting a Pohnpei Mangrove Management Planning	The GEF 7 project will link into the MMAI project as/when feasible to utilize specific information for sites where mangrove may exist, need to be conserved and/or restored

	project incorporating findings from a comprehensive mangrove vulnerability assessment and extensive stakeholder consultations. This will ensure that Pohnpei's mangroves and communities are more resilient to climate change and inform mangrove planning in other jurisdictions. ⁵⁸	
Conservation Society of Pohnpei's Green Road Show	Over 200 classroom visits per annum to secondary schools. An environmental student summer camp takes place in Chuuk, and a Youth-to-Youth program has been established in Kosrae. Various departments of the College of Micronesia are engaged in raising awareness and expanding environmental knowledge. Such efforts have increased the willingness to plant trees for coastal and watershed protection as described above	The GEF project will benefit from collaboration with the Conservation Society of Pohnpei in supporting marine, terrestrial and education, environmental policy development and capacity building and conservation finance. CSP through its over 200 members and partners can facilitate efforts to tap Pohnpei's business community and private citizens for conservation actions

Alignment with national and global priorities:

35. The project is aligned with the following national and global strategies and plans that link directly to global conventions and related initiatives:

Alignment with national priorities

- 36. The formulation of this proposed project follows an extensive consultative process lead by DECEM with the four States to determine their priorities for GEF-7, which concluded in a commitment to focus FSM's GEF-7 resources on the critical issue of land degradation and progress towards LDN. Land degradation from unsustainable agriculture and urban (infrastructure) development is recognised as a key threat/pressure in the following national policies/plans
- 37. National Biodiversity Strategy and Action Plan 2018-23, The Government of FSM ratified the Convention on Biological Diversity (CBD) in 1994 with the focal point as FSM R&D. The principal instrument for implementing the CBD at the national level is the National Biodiversity Strategy and Action PlanThe National Biodiversity Action Plan is implemented alongside BSAP's for each state. The project is fully aligned with the NBSAP Vision: 'FSM will have more extensive, diverse, and higher quality of marine, freshwater, and terrestrial ecosystems, which meet human needs and aspirations fairly, preserve and utilize traditional knowledge and practices, and fulfil the ecosystem functions necessary for all life on Earth'. In particular it will contribute to the following NBSAP strategic goals: Theme 1 Ecosystem management: A full representation of the FSM's marine, freshwater and terrestrial ecosystems are protected, conserved and sustainably managed, including selected areas designated for total protection; Theme 4 Agrobiodiversity: The conservation and sustainable use of agrobiodiversity contributes to the nation's development and the future food security of the FSM; Theme 5 Ecological Sustainable Industry Development: Economic development activities in the FSM meet the needs of the population while sustaining resources for the benefit of future generations; Theme 9 Resource owners: Traditional resource owners and communities are fully involved in the protection, conservation, preservation and sustainable use of the nation's biodiversity; Theme 10 Mainstreaming biodiversity: All economic and social activities of the FSM take full account of impacts on and fully consider sustainability of biodiversity.
- 38. <u>National Environment Management Strategy (2019-2023)</u> recognizes the following priorities. Under <u>Theme 2</u>: Terrestrial Resources to: improve land use plans for all States, protect and conserve forest ecosystems by ensuring

⁵⁸ <u>http://piccc.net/project/micronesian-mangrove-adaptation-initiative/</u>

ecological management practices and sustainable livelihoods, implement forest and mangrove restoration programs, increase awareness and education on the importance of mangroves, forests and associated ecosystem services, watershed and river management, support farmer associations and promote sustainable agriculture. In terms of <u>Theme 3</u>: Marine, it recognizes the need for: develop fisheries management, develop alternative livelihoods to reduce fishing pressure and, improve compliance and monitoring. <u>Theme 4 Conservation of Biodiversity</u>: undertake comprehensive biological resource surveys, develop programs for conservation of nature and species, engage communities, national and state DoE to promote awareness and cooperation to conserve species and habitats. In terms of <u>Theme 5: Built Environment</u> address waste disposal, recycling, sewer infrastructure, sound waste management and ensure EIAs are conducted for all development projects. <u>Theme 7: Environment Governance mainstreaming and capacity development</u> supports the review and strengthening existing national, state and municipal government environmental legislation and acts to incorporate relevant actions from the NBSAP/NEMS and ensure integration of all themes across all relevant sectors within the nation, support enforcement of legislation, increase coordination and networking between national and state agencies, sharing and exchange of knowledge.

- 39. <u>Climate Change Policy Assessment</u> (2019) recognizes that climate change is an existential threat and made significant strides to counter it but more action and sustained international support is required. Increasing frequency and intensity of coastal storms threatens infrastructure and livelihoods, as do increased risks of coastal flooding and drought. FSM has recognized this by engaging forcefully in international discussions, setting out an ambitious agenda for mitigation and putting in place a wide range of adaptation policies and strategies. However, significant gaps remain particularly with regard to a National Adaptation Plan and a comprehensive Disaster Resilience Strategy (DRS). The challenges facing the country remain daunting and will require sustained international support along with increased private sector participation and domestic revenue mobilization. International support should focus on grant financing for adaptation investments and disaster response and capacity building to complete strategies and improve public investment management.
- 40. Accelerating adaptation investments is paramount, which requires addressing critical capacity constraints and increasing grant financing. FSM's overall planning for adaptation is fragmented and individual sectoral projects include varying levels of adaptation measures. Progress has been hindered by capacity constraints, particularly in investment project execution at the state level. The assessment identifies the following priorities that are relevant to the GEF 7 project namely: Develop an overarching National Adaptation Plan which reconciles Infrastructure Development Plan; address capacity shortage in order to accelerate infrastructure investment and integrate climate adaptation measures into sectoral strategies and develop and enforce a land use policy and a national building code that take into account climate risks, and incorporate energy efficiency requirements
- 41. <u>UNCCD.</u> The FSM ratified the UNCCD in 1996 with the focal point as DECEM. The proposed project will support the FSM in its work to achieve the objectives of the UNCCD through supporting preparation of its National Action Program to combat land degradation (NAP), engagement in the LDN target-setting processes, building capacity for achieving land degradation neutrality and demonstrating SLM approaches as well as aligning with work on the SDGs⁵⁹ and other relevant commitments for SIDS, including the Paris Agreement, the Sendai Framework for Disaster Risk Reduction, the UN Habitat Principles for Urbanization, and the SAMOA Pathway.
- 42. <u>UNFCCC:</u> The Government of FSM is party to the UN Framework Convention on Climate Change (UNFCCC), ratifying the Kyoto Protocol in 1999 and the Paris Agreement in 2016 and with the focal point in DECEM. The government submitted its first Intended Nationally Determined Contribution (INDC) in 2015, committing unconditionally to a 28% reduction by 2025 of its GHG emissions below emissions in year 2000 (35% with additional international support), and also highlighting that adaptation constitutes a priority. The project will support both mitigation and adaptation measures.

Alignment with International priorities

- 43. Within the global context, the project will contribute to achieving the **UNCBD Aichi Biodiversity Targets**, in particular:
 - Strategic Goal A Address the underlying causes of biodiversity loss by mainstreaming biodiversity across

⁵⁹ Particularly SDG 15 Life on Land (Target 15.3 Combat desertification, restore degraded land and soil, including land affected by desertification, drought and floods, and strive to achieve a land degradation-neutral world)

government and society: *Target 1*, people are aware of the values of biodiversity and steps they take to conserve and use it sustainably; *Target 3*: positive incentives for conservation and sustainable use are developed and applied and *Target 4*, Government and stakeholders at all levels take steps to implement plans for sustainable production and keep impacts on natural resource well within ecological limits

- Strategic Goal B Reduce the direct pressures on biodiversity and promote sustainable use: Target 5 By 2020 the rate of loss of all natural habitats, including forests, is at least halved and where feasible brought close to zero, and degradation and fragmentation is significantly reduced; Target 6: fish and invertebrate stocks and aquatic plants are managed and harvested sustainably, legally and applying ecosystem based approaches, so that overfishing is avoided, recovery plans and measures are in place for all depleted species, fisheries have no significant adverse impacts on threatened species and vulnerable ecosystems and the impacts of fisheries on stocks, species and ecosystems are within safe ecological limits,
- Target 8: pollution, including from excess nutrients, has been brought to levels that are not detrimental to ecosystem function and biodiversity. *Target 9* invasive alien species and pathways are identified and prioritized, priority species are controlled or eradicated, and measures are in place to manage pathways to prevent introduction and establishment; *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.
- Strategic Goal C To improve the status of biodiversity by safeguarding ecosystems, species and genetic diversity: Target 11: at least 17 per cent of terrestrial and inland water, and 10 per cent of coastal and marine areas, especially areas of particular importance for biodiversity and ecosystem services, are conserved through effectively and equitably managed, ecologically representative and well connected systems of protected areas and other effective area-based conservation measures, and integrated into the wider landscapes and seascapes. Target 12 by 2020, the extinction of known threatened species has been prevented and their conservation status, particularly of those most in decline, has improved and sustained.
- Strategic Goal D Enhance the benefits to all from biodiversity and ecosystem services: 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. 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
 percent of degraded ecosystems, thereby contributing to climate change mitigation and adaptation and to
 combating desertification.
- 44. The project also contributes to the 2030 Agenda for Sustainable development, notably with respect to the following **Sustainable Development Goals** (SDGs):
 - SDG 2 End hunger, achieve food security and improved nutrition, and promote sustainable agriculture, by enhancing food security in the Federated States of Micronesia (FSM) n Islands through managing risks from IAS and supporting sustainable agriculture;
 - SDG 5: Gender Equality: Ensure women's full and effective participation and equal opportunities for leadership at all levels of decision-making in political, economic and public life; undertake reforms to give women equal rights to economic resources, as well as access to ownership and control over land and other forms of property, financial services, inheritance and natural resources, in accordance with national laws; enhance the use of enabling technology, in particular information and communications technology, to promote the empowerment of women and adopt and strengthen sound policies and enforceable legislation for the promotion of gender equality and the empowerment of all women and girls at all levels
 - SDG 13: Climate Action: strengthen resilience and adaptive capacity to climate-related hazards and natural disasters; integrate climate change measures into national policies, strategies and planning and improve education, awareness-raising and human and institutional capacity on climate change mitigation, adaptation,

impact reduction and early warning

- SDG 14 Conserve and sustainably use the oceans, seas, and marine resources for sustainable development by testing and implementing fisheries management measures and enforcing compliance in Federated States of Micronesia (FSM) seascapes; prevent and significantly reduce marine pollution of all kinds, in particular from land-based activities, including marine debris and nutrient pollution; sustainably manage and protect marine and coastal ecosystems to avoid significant adverse impacts, including by strengthening their resilience, and take action for their restoration in order to achieve healthy and productive oceans; effectively regulate harvesting and end overfishing, illegal, unreported and unregulated fishing and destructive fishing practices and implement science-based management plans, in order to restore fish stocks in the shortest time feasible, at least to levels that can produce maximum sustainable yield as determined by their biological characteristics; conserve at least 10 per cent of coastal and marine areas, consistent with national and international law and based on the best available scientific information; and increase the economic benefits from the sustainable use of marine resources, including through sustainable management of fisheries, aquaculture and tourism
- SDG 15 Protect, restore, and promote sustainable use of terrestrial ecosystems, sustainably manage forests, combat desertification, and halt and reverse land degradation and halt biodiversity loss, by supporting conservation and sustainable management of forests in Federated States of Micronesia (FSM) n islands to reduce land degradation; and introduce measures to prevent the introduction and significantly reduce the impact of invasive alien species on land and water ecosystems and control or eradicate the priority species.
- 45. In respect to the **Post 2020 Global Biodiversity Framework** (GBF), the project will contribute to the following targets:
 - Target 1: Ensure that all land and sea areas globally are under integrated biodiversity-inclusive spatial
 planning addressing land-and sea-use change training existing intact and wilderness areas. This will be
 achieved through a ridge to reef planning exercise in the nine pilot catchments that ensures that protected
 areas and community conservation areas and community fisheries reserves are integrated at the catchment
 planning level;
 - Target 2: Ensure that at least 20 percent of degraded freshwater, marine and terrestrial ecosystems are under restoration, ensuring connectivity among them and focusing on priority ecosystems. The project will support the prevention and management of IAS in these natural areas as a means to maintain their ecological viability.
 - Target 3: Ensure that at least 30 per cent globally of land areas and of sea areas, especially areas of particular importance for biodiversity and its contributions to people, are conserved through effectively and equitably managed, ecologically representative and well-connected systems of protected areas and other effective area-based conservation measures, and integrated into the wider landscapes and seascapes.
 - Target 6: Manage pathways for the introduction of invasive alien species, preventing, or reducing their rate
 of introduction and establishment by at least 50 per cent, and control or eradicate invasive alien species to
 eliminate or reduce their impacts, focusing on priority species and priority sites. The project primary focus
 would be on the prevention and management of IAS, focusing on priority species in natural and production
 areas as well as reducing possibility of further introductions into the country through active biosecurity
 measures.
 - Target 9: Ensure benefits, including nutrition, food security, medicines, and livelihoods for people especially
 for the most vulnerable through sustainable management of wild terrestrial, freshwater and marine species
 and protecting customary sustainable use by indigenous peoples and local communities. The project will
 specifically target unsustainable land and marine use practices that promote proliferation of IAS through
 sanitary measures, reducing land use practices that favor IAS transmittal and dispersal.
 - Target 10: Ensure all areas under agriculture, aquaculture and forestry are managed sustainably, in particular through the conservation and sustainable use of biodiversity, increasing the productivity and resilience of these production systems through improved land use and marine use practices.
 - Target 20: Ensure that relevant knowledge, including the traditional knowledge, innovations and practices local communities with their free, prior, and informed consent, guides decision making for the effective

management of biodiversity, enabling monitoring, and by promoting awareness, education and research. The project will encourage the promotion of traditional practices of IAS prevention and control as well as current/traditional sustainable practices related to agriculture, fisheries and grazing

- Target 21: Ensure equitable and effective participation in decision-making related to biodiversity by indigenous peoples and local communities, and respect their rights over lands, territories and resources, as well as by women and girls, and youth.
- 46. In relation to the Paris Agreement, the project will contribute to the following adaptation targets under FSM's Nationally Determined Contributions (NDCs):
 - By 2030, effectively manage 50% of marine resources and 30% of terrestrial resources, including restricting commercial fishing in up to 30% of the FSM marine environment.

III. STRATEGY

- 47. The proposed project aims to secure the FSM's critical ecosystem services through climate-resilient sustainable land and coastal management contributing to LDN. The long-term goal is to support achievement of all five objectives of LDN which are to: maintain or improve the sustainable delivery of ecosystem services; maintain or improve productivity in order to enhance food security; increase resilience of the land and populations dependent on the land; seek synergies with other social, economic and environmental objectives; and reinforce responsible and inclusive governance of land. The project will build on the technical guidelines of GEF Science and Technical Advisory Panel (STAP)⁶⁰ and the United Nations Food and Agricultural Organization (FAO)⁶¹ for achieving LDN in Small Island Developing States (SIDS) using the LDN building blocks as a stepwise process. These are:
 - Leveraging LDN: facilitating the engagement of decision makers and stakeholders involved in land management and the LDN target-setting process
 - Assessing LDN: strengthening countries' capacities for making informed decisions on what action to take by assessing the current state of land and the drivers of land degradation, using the best available data
 - Setting LDN targets and associated measures: supporting countries to define goals and objectives in combating land degradation by defining LDN targets and measures, and
 - Achieving LDN: helping countries to create an enabling environment by integrating LDN into national policies and identifying investment opportunities along with transformative LDN programs and projects
- 48. The fundamental aim of LDN is to preserve the land resource base, by ensuring no net loss of healthy and productive land as measured at the national level by following the response hierarchy of Avoid > Reduce > Reverse land degradation. In this hierarchy, avoid and reduce have priority over reversing past degradation, so that an optimal combination of actions can be identified and pursued with the aim of achieving no net loss across the landscape. The proposed project will address each element of the response hierarchy: Avoid - through improved land use planning and stopping further encroachment and impact of agriculture and infrastructure into natural habitats; Reduce - through SLM in the agriculture sector, and by improving standards and regulations affecting new infrastructure; Reverse - through targeted rehabilitation of degraded lands using nature-based solutions (natural infrastructure as well as promoting environmental improvements to the performance of existing physical infrastructure). This is to be achieved through equipping and empowering local communities to safeguard the country's native biodiversity, natural ecosystems, ecosystem services and food production systems from unsustainable land use practices (including those practices that promote and sustain invasive species, also those which restore and maintain fertility of currently degraded agricultural lands through climate smart agriculture approaches). To achieve these objectives, knowledge needs to be both built and shared effectively throughout the country and that residents and visitors need to be aware of the impacts of unsustainable land management practices, but even more importantly engaged and empowered to play a significant role of addressing existing these issues.
- 49. The project, first off recognizes that strengthening efforts to reduce risk and impacts associated with unsustainable and destructive agricultural, coastal and land management practices and enhancing safeguarding requires addressing gaps at the national level with a focus on supporting management efforts in a harmonized, cross sectorial structured manner that is supported by legislation, policy and long term funding, enabling the strengthening of best practice tools and mechanism and the development and full and adequate implementation of the LDN (when it is developed). The GEF alternative will aim to remove the barriers to the long-term solution to restore degraded agricultural lands through SLM/CSA) through (1). Enhancing coordination and promoting improved tools, information and capacity in government to support sustainable land management, work towards the achievement of land degradation neutrality (LDN) and mainstreaming biodiversity in decision-making and planning processes; (2) Develop a national framework to catalyze implementation of LDN by articulating the goals and objectives, setting the baseline/mechanism toward LDN, creating an enabling environment and supporting development of a suitable system for monitoring neutrality; (3) Effective management of selected landscape/seascapes for biodiversity, soil

⁶⁰ https://stapgef.org/sites/default/files/publications/STAP%20LDN%20Guidelines%2016-pager%20web%20version.pdf

⁶¹ UNCCD and FAO. 2020. Land Degradation Neutrality in Small Island Developing States. Technical report. Bonn, Germany.

and water conservation and food security whilst ensuring LD risks are minimized across sectors through a holistic framework that embraces the fundamental role of ecological integrity. This is intended to be delivered primarily through the empowerment of stakeholders, including local communities to maximize ownership and long-term sustainability and promoting opportunities for nature-based economic livelihood development; and (4) Improving communication and awareness on the linkages and benefits of conservation of biodiversity and ecosystem services with the food security, economic wellbeing and prosperity of rural communities, recognizing the critical role that women and youth can play in this effort.

- 50. The project also recognizes that the demonstration landscapes/seascapes underpin the lives and livelihoods of many local communities, including women, men, youth and indigenous communities and that implementation of a coherent strategy to promote effective and sustainable land management towards LDN and development of a blue/green economy is an integral part of the solution. The project seeks to achieve this solution to improve management and conservation of forest, agricultural, coastal and marine ecosystems and livelihoods using a landscape approach. The intention of the project is also to effectively reduce risks and impacts associated with IAS, unsustainable land management and other disruptive resource use activities in that knowledge needs to be both built and shared effectively throughout the country, but even more importantly engaged and empowered to play a significant role of addressing constraints to effective land management.
- 51. In summary, the project will be implemented over a 6-year period based on the following principles:
 - Ensuring that at harmonized cross sectoral and holistic national level policy, planning, coordination and capacity are in place to support implementation of LDN, and other relevant drivers to ensure long term nationwide coordination of land management activities;
 - Introduce the goals and objectives of LDN at all levels, develop the LDN baseline (measuring the LDN indicators on land cover (LCC), land productivity (NPP) and soil organic carbon (SOC), create an enabling environment for LDN, empower communities to halt and reverse LD through rehabilitation and monitor progress towards the FSM LDN goals;
 - Furthering a *holistic and integrated land and seascape approach* for safeguarding native biodiversity, natural ecosystems and food security rather than an exclusive sector- centric approach;
 - Supporting and implementing a *participatory/consultative bottom-up project planning and implementation approach* that maximizes community ownership and long-term sustainability;
 - Supporting decentralized planning and management by communities, local administration using the existing traditional decision-making processes as the building blocks for integration of localized best practices and sustainable land and resource use that is commensurate with sustainable natural resources and climate risk management;
 - Strengthening capacities of communities, women and youth, local administration and other key stakeholders (including the private sector) within a cross-sectoral and holistic planning framework to LD related concerns;
 - Improving coordination and collaboration between local administration and national sector agencies to deliver technical expertise extension and best practices for planning, management and monitoring for achievement of LDN;
 - Mainstreaming sustainable resource use practices into key development sectors (forestry, agriculture, fisheries, etc.) and management of the interface between natural areas (terrestrial and marine) and surrounding community productive areas through strengthening of community-managed marine, terrestrial and integrated sustainable management areas;
 - Ensuring that in its development and implementation, gender is mainstreamed so that the project contributes to equality and equity, through the creation of equitable opportunities and benefits for both women and men;

- Creating an effective knowledge base that builds on successful lessons and experiences from previous and ongoing programs and projects;
- Ensuring an *adaptive management approach* that considers ecological, demographic, social, safeguards, market, technological and economic factors at LD control and management; and
- Selectivity with respect to interventions and locations within the catchments to demonstrate cost-effective SLM that at least in some cases may be replicated elsewhere.
- 52. The above expectations have informed the project's components and approach which is based on the premise that biodiversity loss and land, forest and wetland degradation are fundamentally inter-connected and can be successfully tackled by addressing them simultaneously in ways that deliver benefits to local communities.
- 53. The project objective will be achieved via four interrelated and complementary strategies (Project Components comprising Outcomes and Outputs) that focus on removing the four key barriers that constrain the accomplishment of the desired long-term solution (**Figure 1**) by means of intervention pathways shown in the theory of change diagram (**Figure 2**). Indicators and assumptions for the accomplishment of expected Outcomes under the respective Components are given in the Project Results Framework. The four planned Components of the project are:

Component 1. Strengthening the strategic (institutional, policy, regulatory) framework for addressing land degradation

Component 2. Enhancing information, decision support tools and capacity for addressing land degradation

Component 3. Embedding climate-smart sustainable land management in critical landscapes and coastal zones (demonstration activities)

Component 4. Effective knowledge management, gender mainstreaming, and M&E

Component 1 Figure 2: Project Theory of Change Outcomes SLM National Action Plan for combating land degradation for adoption by Government **Mid-Term Impacts** Outcome 1:

Loss of terrestrial and wetland biodiversity and native species Loss of natural ecosystem functions and resilience

Loss of land and coastal productivity

Current Status

Problems to be

Resolved

Deficient community livelihoods

Food insecurity

GEF Alternative Strategy

Priority gaps and weaknesses in regulatory framework and enforcement mechanisms for combating LD improved State land use plans and local management plans on Strengthened Long-Term Conservation and highlands strengthened and enhanced implementation to intersectoral **Development Targets** avoid, reduce and reverse LD and conserve biodiversity governance, capacity and strategies to mainstream SLM, BD Existing/nascent state level institutional working groups for and LDN Improved status of landscape fostered and operational to address LD native species and **Reduced threat to biodiversity** biodiversity from unsustainable use of natural resources by different Component 2 sectors and stakeholder National level spatial mapping and strengthened baseline **Functional and** information available to States to assess trends, drivers and Outcome 2: Reduced rate of land and resilient ecosystems hotspots of land degradation coastal degradation in four **Enhanced tools and** demonstration sites Government Resilience assessments of landscapes, habitats and land uses to capacity for SLM and LD and climate-induced risks to support planning and zoning LDN High biodiversity and Improved land and ecosystem value areas effectively managed covering coastal resource Protocols for monitoring LD and practical guidelines for 5 production systems mainstreaming SLM/BD in agriculture and infrastructure 8.376hectares Capacity building, technology transfer and equipment for LDN monitoring and mainstreaming SLM/BD 925 hectares of Agricultural lands, fisheries and land Strengthened resources sustainably community livelihood managed Component 3 Outcome 3: resilience Community Community led participatory integrated landscape At least 4,516 people participation in management and rehabilitation directly benefiting from measures to reduce improved land, agriculture LD, sustain wetland productivity and Strengthened food Targeted ecosystem rehabilitation through innovative ecosystem services new and improved and health security community and private sector participation and BD and improve livelihoods livelihoods Smallholder farmers on traditionally owned land support smart agriculture and climate adaptation practice Legend Outputs Project Component 4 Outcomes Conservation Outcome 4: Awareness raising on SLM and benefits of tacking LD Outputs Mid-Term and Development Increased project Outputs Targets impact, replication Knowledge management platform and program to share Assumptions and upscaling Outputs information and lessons through enhanced

Best practices and lessons shared through South-South **Cooperation and with other SIDS**

Project M&E, safeguards and gender mainstreaming to support effective project impact

awareness and knowledge management

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Number in Figure	Assumption	Notes and References
1	The increased capacities of local stakeholders, including fishers, farmers, and other coastal resource dependents ensure sustainable and appropriate use and management of land and natural resources that results in reduction of threat to endemic species and ecosystems	The FSM government is placing a strong emphasis on ensuring improved management of its land and wetlands as well as preventing, controlling and managing unsustainable and destructive natural resource use in the country. This is to be achieved through improved capacity and coordination across different sectoral agencies and between national and State entities, establishing foundation for LDN through the preparation of a National Action Plan (NAP) and State level plans to achieve LDN targets and outcomes and establishing the requisite policy and legislative frameworks to ensure complementarity among key sector policies to facilitate achieving LDN as well as develop appropriate State level land use plans to address LD and SLM practices. The government's commitment towards ensuring sustainable management of its landscapes is expressed in the National Biodiversity Strategy and Action Plan (NBSAP) as part of the strategic priorities and supported by specific actions. Since the adoption of the NBSAP, a number of government and donor funded activities have been implemented in the country.
2	There is political support for the strengthening the legal, governance and institutional framework for detection, control of unsustainable land and development activities	The FSM government recognizes that there needs to be a system to monitor land degradation, establish targets and baseline against which to measure progress. It also recognizes that without best practice protocols and technical guidelines, States will not be able to effectively plan land-use and development so as to avoid and mitigate land degradation. Capacity at all levels, from government and policy-making to implementation at the community level, is an ongoing challenge. As a result, farmers lack vital extension services information on sustainable land management and food production, and opportunities for improving their livelihoods – leading to further land degradation.
3	The developed capacities of governmental (particularly agencies that would be responsible for environment, agriculture, farming and infrastructure management) and supporting collaboration, coordination and technologies are sufficient to create a viable and effective means to prevent biodiversity and ecosystem degradation	In line with the above, there is an increasing realization that there is a need for an improved management of terrestrial and coastal habitats in the country and strengthen integrated measures for its planning and management, monitoring and enforcement. To support this, a critical aspect of the project is to ensure that there is an improved landscape management plans for the proposed landscapes, enhance community management capacities for SLM and resource conservation and sustainable use, reduction of threats and LD and prevention and management of IAS.
4	The raised awareness and increased knowledge management expand political understanding and actions supporting biodiversity and ecosystem conservation and management within the country	The importance of actively addressing LD and natural resource management and is recognized as fundamental to ensure the maintenance of native species and ecosystems in the country. The project promotes increased awareness, a monitoring system and information and knowledge promotion. If this is achieved, it will provide the country with a tested approach to direct and support natural resource conservation efforts throughout the nation.
5	There is stability in the economic and political global environment	The achievement of long-term impacts will likely be achieved if the assumptions from 1 through 4 are effective. However, this achievement is ensured based on the following assumption, namely that national and international macroeconomic conditions and other natural or man-induced factors (such a Covid-19) remain stable and manageable, so that this does not shift government priorities.

IV. RESULTS AND PARTNERSHIPS

Expected Results:

Global Environmental benefits:

- 54. The long-term goal of the project is to support the achievement of all five objectives of LDN, which is to maintain or improve the sustainable delivery of ecosystem services; maintain or improve productivity in order to enhance food security; increase resilience of the land and populations dependent on the land; seek synergies with other social, economic and environmental objectives; and reinforce responsible and inclusive governance of land. Project interventions will contribute to safeguarding globally significant indigenous species and critical coastal and terrestrial ecosystem services that are currently at risk from land and coastal wetland degradation and unsustainable resource uses that can have a significant impact on the biodiversity and productive potentials of the landscape, including the security of food production systems. First and foremost is the fundamental value of piloting an integrated landscape catchment management approach to transform sustainable management of production systems within the country. In the long-term this will require reductions in environmental impacts which can be achieved by addressing threats to native species and critical ecosystems, while also ensuring that food security systems are safeguarded from unsustainable resource use and impacts from climate, IAS, etc. This will be achieved through establishing the following institutional, legislative and technical measures to facilitate policy development, coordination and implementation to reduce risk and impacts of LD issues on a broad scale and implement specific management actions within the selected target landscapes/seascapes to improve protection of both biodiversity and food production systems from unsustainable and destructive land and wetland utilization BMPs, which can then be upscaled and applied more broadly throughout the nation:
 - A national cross-sectoral, institutional, legislative and governance SLM program that aims to strengthen decisionmaking, regulations capacity, engagement and implementation on informed and cost-effective risk management measures to address land degradation threats across sectors, inclusive of biodiversity and globally significant ecosystems and key economic production sectors (i.e. agriculture and food production), as well as improved planning, guidance and regulation of infrastructure development;
 - Improved site-level planning, monitoring and implementation framework for demonstration of integrated management approaches to safeguard indigenous species, natural ecosystems and food production systems from unsustainable resource management practices across landscapes;
 - Improved site-level sustainable management of forests, agriculture, fisheries and other production systems, as well as infrastructure development, to reduce the risks of further land degradation and implement actions to return already degraded sites, enhancing the productivity of these sites and promote a blue/green based economy; and
 - Improved awareness and knowledge for identification, risk assessment, planning and management for improved land and resource management approaches and technologies.
- 55. The five target sites covering approximately 4,114 ha includes a mix of terrestrial and wetland natural habitats and areas of agriculture, productive lands and community managed areas (Table 4). The five target sites suffer from the following threats:
 - Watershed/forest degradation due to agricultural encroachment, deforestation and infrastructure development (e.g. quarries, mining), leading to soil erosion, modifications to rain infiltration regimes and sedimentation
 - Unsustainable agriculture practices
 - Pollution of water courses from piggeries, waste, fertilizers etc.
 - Mangrove/coastal wetlands destruction through conversion, cutting and waste
 - Poorly designed coastal development (roads and infrastructure) projects and drainage systems affecting coastal erosion, homes, and natural habitats

- Dredging and sand/coral mining
- 56. These five target landscapes include globally important key biodiversity areas and endemic, threatened or keystone species habitats and ecosystems that contain some extent of intact wetland and terrestrial habitats. These target landscapes will benefit from a holistic and integrated approach to its sustainable management to safeguarding the integrity and functioning of ecosystems and production systems; and, if successful, this should be sufficient incentive to mainstream such an approach across other landscapes/seascapes in the country.
- 57. The investment will directly benefit an estimated 4,516 community members (50% female, 50% male), representing about 4% of FSM's population.

Table 4: Summary of The Federated States of Micronesia Sustainable Land Management Demonstration Landscapes

State	Municipality	Demonstration Landscape	Mid-Point Coordinates		
			Latitude	Longitude	Total (ha)
Chuuk	Weno	Wichen River Watershed	7º26'50" N	151 ⁰ 51'50" E	237
Kosrae	Lelu	Tolof-Innem Landscape	5º19'30" N	163º13'00" E	1,187
Pohnpei	Kitti	Pehleng Landscape	6º52'40" N	158º10'88" E	1,247
Pohnpei	U	Awak Watershed	6º57'12" N	158º15'30" E	368
Yap	Tomil-Gagil	Tomil-Gagil Landscape	9º32'41" N	138º09'30" E	1,075
Total (ha)					4,114

Demonstration Site Maps (additional maps in Annex 3)





36 | P a g e


6°58.140'N

6°57.450'N

6°56.760'N

158°15.090'E

158°15.780'E

158°16.470'E

Alignment with GEF focal area objectives

- 58. The project's multi-sectoral and multi-stakeholder landscape approach to safeguarding biodiversity, ecosystem and food production systems from unsustainable land use and resource use practices aligns well with the goal of the GEF-7 Biodiversity Focal Area strategies, namely: BD-1-1a: to mainstream biodiversity across sectors as well as landscapes and seascapes through biodiversity mainstreaming in priority sectors.
- 59. More specifically, in terms of GEF program BD-1-1 (*to mainstream biodiversity across sectors as well as landscapes and seascapes through biodiversity mainstreaming in priority sectors*), the project contributes to this focal area program by: (i) demonstrating how landscapes can be sustainably managed in a holistic and integrated manner across the full spectrum of stakeholders (i.e. agriculture/fisheries/forestry/infrastructure), while focusing specifically on safeguarding the natural functioning of terrestrial and coastal systems as well as food production systems; (ii) improving focus on working with local communities through existing participatory and traditional customary system, towards enhancing activities that contribute to biodiversity conservation and new blue/green income opportunities. Mainstreaming will be delivered through improved inter-sectoral coordination, sharing of information and improved tools for decision-making, technical support and capacity building, demonstration and knowledge sharing and provisions of incentives to change land and coastal management practices that degrade biodiversity.
- 60. In terms of GEF program LD1-1 (*Maintain or improve flow of agro-ecosystem services to sustain food production and* In *livelihoods through Sustainable Land Management*), under Component 3, the project will focus on smallholder farms (production landscapes subsistence and semi-subsistence farms) where traditional agricultural management practices underpin the livelihoods of rural farmers. Improved crop yields and farmer incomes will be used as indicators of project success. The project will include support for improved access to technical assistance and finance for smallholders to implement innovative agricultural practices for sustainable land management/climate smart agriculture towards achieving LDN, protecting ecosystem services, improving crop yield, food security and incomes. Project SLM interventions will target the drivers of land degradation within a framework of integrated communitylevel land use planning, governance and management at landscape scale. Upscaling will be achieved through agricultural training and extension programs and sharing of successful interventions through community exchanges and visits. Strategies pursued with the private sector will target SMEs that are promoting innovations in agriculture and livestock production systems.
- 61. In terms of GEF program LD-2-5 (Create enabling environments to support scaling up and mainstreaming of SLM and LDN), the STAP LDN Guidelines for GEF projects has been used to inform the development of this Project Document to design project activities. Key modules of the guidance have been captured within the project's outputs, e.g. building participatory multi-sector coordination around LDN goals and objectives, developing the frame of reference (baseline measured by LCC, NPP and SOC)), integration with landscape level/community land use planning and developing systems for better monitoring LDN progress. The proposed project contributes to this focal area objective by putting in place a coordination platform for promoting LDN and mainstreaming SLM in FSM and will lay the groundwork for LDN target setting. Project activities will be designed in close alignment with the UNCCD Scientific-Conceptual Framework for Land Degradation Neutrality and as summarized in the Checklist for Land Degradation Neutrality Transformative Projects and Programs (LDN TPP). This will be supported through strengthening the legal, policy and land use planning framework, in particular efforts to secure integrating LDN into national policy and catalyzing its adoption by SIG. Technical guidelines for SLM best practices (including climate smart agriculture and livestock systems) for rural communities will be prepared using appropriate media to support reversing degradation towards achieving LDN in the demonstration landscapes using appropriate approaches with a view to upscaling across other communities in the latter stages of the project. This will be supported by appropriate training and capacity building of extension officers, master trainers and lead farmers.
- 62. These global environmental benefits are reflected quantitatively in the GEF-8 Core indicator worksheet included in **Annex 13** and summarized Table 5 below:

Table 5: Project core indicators and targets

GEF-7 indicators and targets					
3. Area of land restored	925 ha				
4. Area of landscapes under improved practices (excluding protected areas)	8,376 ha				
4.1 Area of landscape under improved management to benefit biodiversity = 2,181 ha (of					
which1,681 ha within 4 demonstration sites and 500 ha outside demonstration sites in					
landscape across the remaining land area of the high islands)					
4.2 Area of landscape under sustainable land management in production systems = 6,195					
ha (of which 695 ha in the 4 demonstration sites and 5,500 ha outside demonstration					
sites in the remaining area of the high islands)					
5. Area of marine habitat under improved practices to benefit biodiversity	585 ha				
6. Greenhouse Gas Emissions Mitigated (metric tons of CO2e)	31,582 tCO ₂ -e				
11. Number of direct beneficiaries disaggregated by gender as co-benefit of GEF investment 4,516					
	Male: 2,258, Female:				
	2,258				

- 63. **Project objective**: To ensure that FSM's critical ecosystem services are secure through climate-resilient sustainable land and coastal management contributing to Land Degradation Neutrality. This will be achieved through four interlinked components.
- 64. The project's incremental value lies in demonstrating the application of integrated landscape interventions to sustainable land and coastal management and resource use applying a community-based resource governance and management approaches. This will entail that communities are actively engaged in planning and decision-making on best approaches to manage and use agricultural and forest land and coastal ecosystems so as to help conserve native biodiversity and natural ecosystems, as well as to prevent and restore land and natural resource degradation so as to safeguard food production systems. In these target landscapes, a land degradation information management and monitoring network will be strengthened, initially for the project areas, later to be extended to cover the entire country. The information system will allow for defining which habitats and ecosystems can be effectively managed and restored in terms of land degradation, in order to support retention of critical biodiversity, habitat and ecosystem integrity and support productivity of agriculture, forestry, sustainable land and coastal resource use over the long term. It will also help develop capacities and the required enabling frameworks through "learning-by-doing" approaches in the selected target catchments (to raise awareness of the benefits of SLM/CSA). The project will be able to develop and demonstrate a matrix of best restoration practices for protection and strengthening of FSM's ecosystems and native biodiversity for scaling up and replication in other catchments in the country. A series of knowledge management publications and awareness events will support the achievement of these targets.

Component 1. Strengthening the strategic (institutional, policy, regulatory) framework for addressing land degradation

(Total Cost: USD 5,483,500; GEF project grant requested: USD 731,918; Co-financing: USD 4,751,500)

Outcome 1: Strengthened inter-sectoral governance, capacity and strategies to mainstream sustainable land management, biodiversity and LDN

65. This will strengthen intersectoral governance, capacity, strategies and tools for conserving and mainstreaming biodiversity and ecosystem services to support a nature-based development pathway. This will be achieved through promotion of the voice, participation and empowerment of men and women by ensuring that they have access to information, gender sensitization and have equal representation in technical and governance committees. Potential impacts from 'upstream' project activities, which involve planning support, capacity building, policy advice and reform. This Outcome will be supported by four Outputs:

Output 1.1: A SLM NAP for combating land degradation prepared for adoption by government, incorporating indicators, targets and priority actions for achieving LDN across each state, with support for mainstreaming into priority policies

- 66. Output 1.1 will support the preparation and approval of FSM's first SLM National Action Program (NAP) for combating land degradation, which is a priority for government and key requirement under the UNCCD. This will be achieved through linked national and states intersectoral land management working groups (Output 1.4). The National Land Management Working Group (NLMWG) will be established under the President's Council on Climate Change and Sustainable Development (PCCCSD). The SLM NAP will incorporate strategies, indicators, and targets for achieving LDN (the over-arching principle of the UNCCD that deliver multiple environmental, economic, and social benefits through avoiding, reducing, and reversing land degradation to deliver improved ecosystem services using best practice guidance from STAP⁶² and FAO for SIDS)⁶³. It will integrate LDN planning and implementation with other relevant processes while minimizing trade-offs and unintended adverse impacts. The NAP (program) will be a top down, national policy for SLM that points towards how LDN goals can be set and then achieved through implementation and/or strengthening of existing efforts and plans, but also through implementation of new actions as required. The NAP would be a relatively short but comprehensive program that pulls together the various existing strategies and plans which are inclusive of SLM (or relevant to) and combines, prioritizes and strengthens efforts by all sectors to work towards a harmonized nationally directed SLM implemented through state regulations and largely by local communities (i.e. this requires that both state and local communities are engaged and have buy-in from the beginning). The underlying premise is that the FSM will set their national LDN targets for 2030. They can be as ambitious as the country would like. Initial targets are set for 2030. The expectation is not that there will be zero land degradation by 2030 but rather whatever the FSM sets its targets at, that these will be achieved by 2030 and then new targets can be developed beyond that. The project will support each State, through existing inter-sectoral working groups (further strengthened through this project) such as the State Environmental Working Groups (SEWGs) established under the R2R Phase 1 project. However, these SEWGs which are operational, with the exception of Kosrae, and which were initially established with an environmental focus, will need to be broadened to include other sectors that are involved with, or impact on natural resources and land management (such as agriculture, infrastructure, water resources and other sectors as appropriate). The Kosrae Environmental Working Group will also need to be revived and made functional and serve as a multi-stakeholder platform to cover land and natural resources management issues more broadly. The SEWGs will guide and support the GEF 7 Project PMU to facilitate the development of SLM State Action Plans (SAPs) with prioritized actions for achieving LDN through the implementation of the SLM SAPs and NAP. The SLM SAP plans will be multi-sectoral and inclusive of all key sectors. SLM planning must include all key sectors such as forestry, agricultural, environmental, infrastructure, community planning, shoreline plans, road plans, etc. Given that the FSM currently has many sectoral plans, the SLM multisectoral efforts should pull from the various plans and support the implementation of priority actions from each and every sector that is engaged. These integrated actions across all land-use types will include measures to: a) avoid future land degradation; b) reduce land degradation through promoting more sustainable agriculture and infrastructure; c) reverse existing land degradation by rehabilitating degraded areas. The SLM NAP and associated SAPs will be used to identify and target potential LDN funding frameworks for LDN transformative projects and programs to support the states in combating land degradation⁶⁴. Preparation of the SLM NAP should involve all relevant stakeholders and sectors at each level, including scientists, policy makers, practitioners, and civil society representatives. For both the preparation of the SLM NAP and the SAPs, and associated policy and plan reviews, consultants will be hired to facilitate this process.
- 67. Support will also be provided to the PCCCSD and to relevant sectoral departments of national and state governments to foster policy coherence by mainstreaming the SLM/LDN approaches and targets into overarching national and state development policies as these come up for review, so as to guide the implementation of transformative projects and programs. Priority high-level policies for consideration would include the FSM Strategic Development Plan and state development plans, the Integrated Disaster Risk Management and Climate Change Policy and Joint

⁶² https://www.unccd.int/news-events/guidelines-land-degradation-neutrality-published

⁶³ http://www.fao.org/3/ca7469en/CA7469EN.pdf

⁶⁴ See guidance on opportunities in http://www.fao.org/policy-support/tools-and-publications/resources-details/en/c/1273768/

State Action Plans, the National Biodiversity Strategy and Action Plan (NBSAP) and State BSAPs as well as Agriculture and Forestry sectoral policies.

- 68. Activities to be implemented under Output 1.1 include the following:
 - 1.1.1. <u>Recruitment of National Consultant</u>: The development of the SLM NAP will be supported by recruitment of a national consultant that will work closely with the DECEM. The International Chief Technical Advisor (CTA) will provide technical oversight and guide this process that would also involve extensive stakeholder engagement. This effort will be coordinated by the PMU and undertaken in Year 1 of the project
 - 1.1.2. SLM NAP developed, finalized and approved: The development of the SLM NAP will be overseen by the intersectoral NLMWG (see output 1.4). The NAP will set realistic and appropriate LDN goals and a framework that provides for the steps to achieve the goals set through setting national policy which is then engaged by the States through regulations to achieve implementation of actions to achieve the LDN goals. It is important that the county through the NAP develop realistic goals and national policy to support achieving these goals. The SLM national action program should set national level policy for SLM and targets for LDN and direct agencies, states, etc. to implement actions towards achieving targets. Given that the NAP is to set policy and targets, it should be approved by government. The entire process of preparation of the SLM NAP will include efforts to engage a range of stakeholders, including government, private sector, NGOs and local community organizations. The SLM NAP will serve as a guidance for determining measures for improvement of institutional capacity and training for mainstreaming of LD into relevant policies, strategies and plans, knowledge sharing systems, conduct of awareness and capacity to encourage behavioral change, maintain systematic databases with quality checks and finalization of national land policy and SLM policy, with the objective of achieving the agreed LDN goals. The SLM NAP will end of Year 1. Approval of the SLM NAP is to occur on its finalization and is anticipated in Year 2. Approval should include government endorsement that would then enable States to develop their own SLM State Action Plans (SAPs) to achieve the proposed LDN targets set by the NAP. The SLM NAP should be reviewed, updated and implemented for another 5-years with same process occurring every 5-years to ensure that SLM in the FSM is continuously advancing and building on lessons learned.
 - 1.1.3. <u>SLM State Action Plans (SAPs) developed and approved</u>: As part of the SLM NAP process the project will support each of the four States to prepare a prioritized SLM State Action Plan (SAP) for achieving LDN by 2030. These SLM SAPs will be harmonized with the SLM NAP to facilitate implementation. State SLM Action Plans (SAPs) are to provide the state level guidance for implementing the set policy and actions towards achieving targets by the NAP. These integrated actions across all land-use types will include measures to: a) avoid future land degradation; b) reduce land degradation through promoting more sustainable agriculture and infrastructure; c) reverse existing land degradation by rehabilitating degraded areas. National consultants will be recruited in each of the four States to work under oversight provided by the State Environment Working Groups (SEWGs) to facilitate the preparation of SAPs, along with key stakeholder inputs. SAPs should be finalized and approved in Year 2. Approval should include government endorsement for implementation.
 - 1.1.4. <u>SLM SAPs implemented</u>: Implementation of the SLM SAPs should commence after approval, preferable by the end of Year 2. Implementation should be overseen by the SEWGs with annual project reports to track progress. SAPs should be updated every five years to ensure they remain relevant and incorporate lessons learned while advancing SLM efforts.
 - 1.1.5. <u>Review and updating of key priority national policies, plans, programs and budgets</u> for mainstreaming of SLM/LDN principles and targets and elements for targeting and schedule developed. This review is to be conducted as part of the contracted efforts to develop the SLM NAP with results of review process incorporated into the SLM NAP (Output actions 1.1.1 & 1.1.2). From this review, at least one or two key policies should be selected for updating during the life of the project, and the others will take time beyond the project to be updated. The updating of the policies, plans, etc. should begin as soon as the NAP has been finalized. Updating is to be coordinated by the PMU under the guidance of the NLMWG and

conducted by relevant stakeholders for each element with end results being updated national level policies, plans, etc. that incorporate SLM/LDN activities and strengthen and mainstream efforts across sectors to address land degradation.

1.1.6. <u>Review and updating of key States' policies, plans, programs and budgets</u> for mainstreaming of SLM/LDN principles and targets and elements for targeting and schedule developed. This review is to be conducted as part of the contracted efforts to develop the SLM SAPs with results of review process incorporated into the SLM SAPs (Output actions 1.1.5 & 1.1.6). The updating of the policies, plans, etc. should begin as soon as the SAPs have been finalized. Updating is to be coordinated by the PMU under the guidance of the respective SEWGs and conducted by relevant stakeholders for each element with end results being updated state level policies, plans, etc. that incorporate SLM/LDN activities and strengthen and mainstream efforts across sectors to address land degradation.

Output 1.2. Priority gaps and weaknesses in the regulatory framework and enforcement mechanisms for combatting land degradation identified, and improvements achieved through technical support and advocacy leading to adoption by state and national governments

- 69. Output 1.2 directly supports the review of regulatory frameworks (laws, regulations, ordinances and standards) at National and States' levels to identify both strengths and weaknesses leading to the strengthening of existing efforts to address land degradation as well as prioritizing barriers and identifying pathways towards overcoming existing gaps, mainstreaming SLM and biodiversity into the agriculture and infrastructure sectors. To support these efforts, the project will provide technical and advocacy support to address the priority gaps through updating of existing, or drafting of new, regulations and standards (for subsequent approval by governments⁶⁵). Priorities will vary between the states but may include: mangrove and watershed protection/moratorium (anti-pollution, solid and septic waste and anti-littering; soil/earth removal; infrastructure development and sand dredging/coral mining; strengthen EIA regulations and establish coordinated project review processes; research permit regulation; and zoning. The regulatory priorities to be addressed will be informed by the robust and comprehensive LDN target setting process and resilience assessments under Outputs 2.1 and 2.2, which are to include assessments of land degradation and determination of effective and appropriate solutions. Activities under Output 1.2 include the following:
 - 1.2.1 <u>Review of States LDN regulatory frameworks</u> undertaken with gaps and weaknesses identified and prioritized. The SEWGs will provide oversight to these efforts which are to be conducted through the consultants contracted by each state to complete the SLM SAP (Output 1.1) as a component of that effort.
 - 1.2.2 Review of National LDN regulatory framework undertaken with gaps and weaknesses identified and prioritized. The NLMWG will provide oversight to these efforts which are to be conducted through the consultancy contracts to complete the SLM NAP (Output 1.1) as a component of that effort.
 - 1.2.3 <u>Review of states LDN enforcement mechanisms</u> undertaken with gaps and weaknesses identified and prioritized. The SEWGs will provide oversight to these efforts which are to be conducted through the consultants contracted by each state to complete the SLM SAP (Output 1.1) as a component of that effort. The project will support a review of current procedures, protocols and enforcement track records for existing LDN mechanisms and identify gaps as well as strengthens and weaknesses, inclusive of potential barriers to effective enforcement.
 - 1.2.4 <u>Review of national LDN enforcement mechanisms</u> undertaken with gaps and weaknesses identified and prioritized. The NLMWG will provide oversight to these efforts which are to be conducted through the consultancy contract to complete the SLM NAP (Output 1.1) as a component of that effort. The project will support a review of current procedures, protocols and enforcement track records for existing LDN

⁶⁵ Approval depends on political will and speed of government processes and cannot be promised during the project period. However, the project can facilitate these processes through advocacy and technical support.

mechanisms and identify gaps as well as strengths and weaknesses, inclusive of potential barriers to effective enforcement.

- 1.2.5 Priority gaps and weaknesses in LDN regulatory framework addressed at the states level: The SEWGs will guide these efforts within each state in coordination with key state offices and departments following guidance from the SLM SAPs and NAP to address prioritized gaps and weaknesses in LDN regulations, inclusive of provisioning of technical support and stakeholder consultations. On the basis of the reviews, technical support and advocacy will be provided to identify measures/recommendations to strengthen enforcement, that will include in particular to (i) clarifying roles and responsibilities of relevant agencies; (ii) promoting establishment of a joint enforcement agreement between National, State and local governments; (iii) establishing a harmonized approach to on-line state-level reporting of enforcement; (iv) considering options for establishment of Environmental Courts; (v) reviewing penalties; (vi) raising public awareness; and (vii) exploring other mechanisms (e.g. offsets) to mitigate the impacts of land degradation.
- 1.2.6 Priority gaps and weaknesses in LDN regulatory framework addressed at the national level: The NLMWG will oversee these efforts in coordination with key stakeholders following guidance from the SLM SAPs and NAP to address prioritized gaps and weaknesses in LDN regulations, inclusive of provisioning of technical support and stakeholder consultations. On the basis of the reviews, technical support and advocacy will be provided to identify measures/recommendations to strengthen enforcement, that will include in particular to (i) clarifying roles and responsibilities of relevant agencies; (ii) seeking opportunities for promoting joint enforcement agreements between National, State and local governments; (iii) establishing a harmonized approach to on-line state-level reporting of enforcement; (iv) reviewing current penalties; (vi) raising public awareness; and (vii) exploring other mechanisms (e.g. offsets) to mitigate the impacts of land degradation.
- 1.2.7 Priority gaps and weaknesses in LDN enforcement addressed at the states level: Offices and departments with LDN enforcement mandates with support from the SEWGs will lead these efforts or where a particular LDN enforcement entity many not already exist, then the SLMWGs will directly lead these efforts in coordination with partnering government entities to develop and emplace any needed enforcement bodies inclusive of supportive regulatory code and TORs.
- 1.2.8 Priority gaps and weaknesses in LDN enforcement addressed at the national level: Offices and departments with LDN enforcement mandates with support from the NLMWG will lead these efforts or where a particular LDN enforcement entity many not already exist, then the NLMWG will directly lead these efforts in coordination with partnering government entities to develop and emplace any needed enforcement bodies inclusive of supportive regulatory code and TORs.

Output 1.3 State level land use plans and local management plans on the high islands strengthened with enhanced implementation to avoid, reduce and reverse land degradation and conserve biodiversity

70. Currently, State level land use plans exist for only two States (the Pohnpei Integrated Environmental Management Plan and the Kosrae Land Use Plan), whereas several local, community-based management plans exist for all the high islands (e.g. forest stewardship, watershed and mangrove management plans, municipality plans, etc.). The main challenge has been the slow implementation of these plans due to lack of financial resources and capacity. The development of new plans is therefore not a priority, and indeed can be a very slow process due to land tenure issues. Based on a review undertaken, this Output will support strengthening and implementation of existing land use plans as well as local management plans for the high islands to address land degradation. Under this Output, the aim is to draw from the various sectoral plans at each level to support implementation of priorities which directly support achieving the set LDN targets and as needed, where sectoral plans may not cover, adding to the existing plans, strategies, etc. to best ensure comprehensive and effective SLM. While there are many good sectoral plans and strategies already in place within the FSM, the SLM national program and state and community plans in order to address land management must pull from various plans such as biodiversity, agriculture, infrastructure, etc. to be a comprehensive all sector inclusive device to address landscapes as a whole regardless of specific sectors. So that under SLM each sector is addressed and actions are prioritized to best suit the overall landscape recovery and protection to achieve what the FSM sets as their LDN goals. Planning at each level is required due to the differences amongst both states and communities. The NAP should set the SLM national policy for achieve realistic LDN goals by 2030. The state plans should incorporate the NAP policy directives into implementable state plans supported by either existing or to be developed state level policy and supportive regulations. The community land management plans should understand the national policy and state requirements and be the basis or road map for how on a local level through direct action national LDN targets will be achieved through implementing state regulations and policy at the local level within the demonstration sites and where these direct local efforts succeed and show promise then through state support similar efforts should be engaged across each state at sites beyond the initial demonstration areas.

- 71. Activities to be covered under Output 1.3 include the following:
 - 1.3.1 <u>Review of high island, state and local level land use plans with weaknesses and gaps identified and prioritized:</u> The SEWGs will provide oversight to these efforts which are to be conducted through the consultancy contracts by each state to complete the SLM SAP (Output actions 1.1) as a component of that effort. Reviews should identify the priority actions from existing plans that could contribute towards achieving LDN targets and response hierarchy (Avoid > Reduce > Reverse land degradation) including specifically targets for achieving land degradation neutrality under Output 2.1, as well as the SLM NAP and SAPs.
 - 1.3.2. Address priority gaps and weaknesses in high island, states and local level land use plans: The SEWGs will oversee and guide these efforts within each state in coordination with key state offices and departments and local land management bodies following guidance from the SLM SAPs and NAP to address prioritized gaps and weaknesses in states level land use plans, inclusive of provisioning of technical support and stakeholder consultations. On the basis of the reviews of existing plans and programs to draw on various sectoral plans at each level to support implementation of priorities which directly support achieving the set LDN targets. Technical support and advocacy will be provided to identify measures/recommendations to strengthen and harmonize land use planning across each state. Provide technical support for design of implementation measures to achieve LDN targets. The implementation measures will be designed through a consultative process with the relevant stakeholders (state agencies, municipalities, community groups and the private sector).
 - 1.3.3 <u>Strengthen implementation on high islands of states level land use plans:</u> The SEWGs will lead these efforts within each state in coordination with key state offices and departments following guidance from the SLM SAPs and NAP to address prioritized gaps and weaknesses in existing states level land use plans, inclusive of provisioning of technical support and stakeholder consultations. On the basis of the reviews, technical support and advocacy will be provided to identify measures/recommendations to strengthen and harmonize land use planning across each state. Provide technical support for implementation measures to achieve LDN targets.
 - 1.3.4 <u>Strengthen implementation on high islands of local level land use plans</u>: Local land management bodies will lead these efforts with support from the SLMWGs within each state in coordination with key state offices and departments. On the basis of the reviews, technical support and advocacy will be provided to identify measures/recommendations to strengthen and harmonize land use planning at localized levels. Provide technical support for implementation measures to achieve LDN targets.

Output 1.4 Existing/nascent state level intersectoral working groups for landscape management fostered and operationalized to address land degradation, and national level intersectoral working group established and supported to oversee formulation and mainstreaming of the NAP, both with engagement of the private sector.

72. To address land degradation, and national level intersectoral working group established and supported (under Output 1.1) is expected to oversee formulation and mainstreaming of the NAP, both with engagement of the private sector and other local stakeholders. The project will support and further strengthen the operation of existing/nascent State working groups that have responsibility for tackling cross-sectoral issues for improved landscape management, as a mechanism for mainstreaming SLM and biodiversity, in particular the State Environmental Working Groups established under the R2R project. The project will support these working groups to

develop and drive implementation of the state-level action plans for achieving LDN (developed under Output 1.1), including in particular (as described under Output 1.1) to be broadened to include other sectors that are involved with, or impact on natural resources and land management (such as agriculture, infrastructure, water resources and other sectors as appropriate) as well improve the functionality of the working groups.

- 73. Activities under Output 1.4 include the following:
 - 1.4.1 Ensure that all states have broadened and functional SEWGs: Existing SEWGs will be strengthened to ensure the composition, functionality and their effectiveness is in line with expectations and needs for enhancing their ability to coordinate and drive SLM actions at the State level. Provide technical assistance and training support to strengthen the functionality of these State-level working groups for taking responsibility for tackling cross-sectoral issues for improved landscape management through implementation of the SLM SAP, as a mechanism for mainstreaming SLM and biodiversity. This will in include pursuing improved institutional mechanisms (ideally a single agency for planning, coordination and M&E of the plan with other partner support); joint enforcement and monitoring, engagement of the private sector through public private partnerships, SLM improvements in the agriculture and infrastructure sectors and solid waste management (through composting and reducing waste disposal in critical areas). This will entail developing/refining TORs of the SEWGs to be composed of intersectoral stakeholders and to lead and oversee development and implementation of SLM guidance and activities at the state level and assist/enable local land management bodies with similar at local levels. Effective and comprehensive TORs for the SEWGs should be in place in Year 1
 - 1.4.2 <u>SEWGs approved at the State level</u>: The newly updated/broadened SEWGs for each state should be supported through the State Governments and provided with a mandate to work across sectors to implement national SLM policy and implementing actions at state level towards achieving LDN targets. These SEWGs should be ensured permanency and provide oversight at the state level for such as well as harmonizing policy amongst state offices and departments as well as engaging the private sector in support of state and national SLM policy through the NAP and SAPs. The SEWGs are to be fully representational through direct support from States' government working with the PMU to ensure that key stakeholders are engaged through active membership in each State's SEWG. Efforts to strengthen membership and participation in the SEWGs should be an on-going process that is tracked annually over the life of the project.
 - 1.4.3 <u>SEWGs are functional and meeting regularly</u> to advance and oversee state level land management activities, including reducing and protecting against land degradation and overseeing development and implementation of state level land management plans. The project will provide technical support, training and limited financing to strengthen the SEWGs to oversee and drive implementation of the SLM SAPs for achieving LDN (developed under Output 1.1).
 - 1.4.4 <u>NLMWG established:</u> NLMWG identified and verified established or created and placed by project month-4. Efforts are to be coordinated by the National government working with the PMU. Enhance SLM coordination at the national level across sectors through supporting the President's Council on Climate Change and Sustainable Development (PCCCSD) to establish the cross-sectoral NLMWG to oversee the SLM NAP development and implementation, LDN target setting and identification of strategic LDN interventions (Output 1.1). The project will provide technical support to this group for consensus-building on policy actions and investments for achieving LDN and strengthen institutional mechanisms for enforcement and reporting (e.g., through joint enforcement agreements (national, state and local governments, including EPAs) proposed under Output 1.2. Participation of women and private sector representatives will be strongly encouraged for both national and state level groups. AS part of ensuring the functionality of the NLMWG, TORs will be developed with oversight of the National Government working with the PMU enabling the NLMWG to be composed of intersectoral stakeholders and to lead and oversee development and implementation of SLM guidance and activities at the national level and assist/enable States to development and implement appropriate SLM oversite and actions. Effective and comprehensive TORs for the NLMWG should be in place by second half of Year 1.

- 1.4.5 <u>NLMWG approved at national level:</u> The NLMWG is to be supported and strengthened by approval within national law or appropriate directive, enabling the NLMWG to support national and state SLM activities and provide cross-sectoral oversite at the national level for such as well as harmonizing policy amongst national offices and departments as well as engaging the private sector in support of SLM policy through the NAP and SAPs. Development of MOUs between agencies/sectors to enable improved vertical and lateral SLM coordination amongst national and states entities.
- 1.4.6 <u>NLMWG oversees development and implementation of the SLM NAP as well as coordination with SEWGs at</u> <u>State level</u>

Component 2: Enhancing information, decision/support tools and capacity for addressing land degradation

(Total Cost: USD 5,874,807; GEF project grant requested: USD 774,807; Co-financing: USD 5,100,000)

Outcome 2: Enhanced tools and government capacity for SLM and LDN

74. Information currently exists in part for some of the land degradation issues with FSM, but in general this information is very limited, incomplete and/or in need of updating. Specifically, there is a dearth of information about the soils and land degradation issues across the country. While nationwide reconnaissance level assessment of soil types have been undertaken, which classified soil types and described the physical geography, climate, soils, and land cover, the information of condition of forests, land, land and agricultural productivity and agriculture opportunity areas of the country is limited or lacking. Addressing SLM requires an in-depth overview of the nation's land resources where geology, landforms, soils, climate and vegetation are emphasized. Some of these elements remain, but many are outdated/insufficient thus new surveys are needed to provide the baseline and for monitoring LDN (i.e. LCC, NPP and SOC). In addition, the collation and application of remote sensing and other data on soils and land degradation status will help assess land use changes and threats to inform priorities for achieving LDN, including the key indicators of land cover, NPP and SOC. This will also require development and testing (in the demonstration landscapes under Outcome 3 of protocols for LDN monitoring). An appropriate information system structure once established will then help to populate over the remainder of the project and should be fully operational by the end of the project, inclusive of the establishment of appropriate mechanisms for long-term updating and maintenance of this system beyond the life of the GEF project. Additionally, this information system will be regularly reviewed and types and levels of information entered modified to best support the needs of end users of the system i.e. the relevant stakeholders within FSM. The information system once established and populated should permit a detailed understanding of key established drivers and threats of LD, improved priority setting for interventions, informed decision-making on sectoral policies and investments, and easy access to information for decision makers and other users.

Output 2.1. National level spatial mapping and strengthened baseline information available to states on existing platforms to assess trends, drivers and hotspots of land degradation and targets set for LDN sub-indicators

75. Existing databases will be reviewed and combined as appropriate as part of the review processes under this project with notable gaps and updating documented and prioritized for addressing. One of the big gaps noted during the PPG period in regards to GIS data available for the FSM is that many existing plans, etc. appear to be relying on outdated GIS layers, especially in regards to areas considered forested or well forested with native forest. It was difficult if not impossible to develop explicit actions for SLM in part due to non-existence (or at least unobtained) GIS layers that even closely resembled what could be seen from satellite imagery in regards to impacted forest which again layers and plans we encountered generally referred to areas, especially in the project demonstration landscapes as native forest when much of this area from satellite imagery clearly appears impacted and in some cases with little remaining tree cover. These discrepancies should be addressed (as well as others which may exist) though a detailed updating of GIS layers for the country and then maintaining these and future updates available through an online sharing platform. In regards to SLM updating mapping along with development of national and state policy to support SLM and LDN coupled with comprehensive state regulations to support LDN are the key essentials this project should undertake beyond specific efforts within the demonstration sites.

- 76. Achieving LDN requires determining the expected cumulative impacts of land use and land management proposals, and targeting actions to minimize impacts (including possible denial of proposed actions), and counter-balancing anticipated impacts through strategically planned rehabilitation or restoration of degraded land, within the same land type. The project will follow the UNCCD's Conceptual Framework for Land Degradation Neutrality⁶⁶ which provides a scientifically-sound basis for understanding and implementing LDN and informing the development of practical guidance for pursuing LDN and monitoring achievement of LDN. Building on existing information available, the project will help improve access to up-to date high-resolution satellite imagery which will be made available to link with other spatial and non-spatial information (topography, forest/vegetation cover, hydrology, soils, land use, slope, population, agricultural production, etc.) in order to have the best possible tools for assessing proposed projects, supporting determinations and as needed selecting areas for remedial actions to conserve land and water resources, minimize impacts and when feasible support remediation of degraded areas.
- 77. Output 2.1 will support the following activities:
 - 2.1.1 <u>Full time manager for existing national spatial sharing platform:</u> Hiring of a full-time manager with clear mandate and necessary resources, in establishing an improved national mapping office so as to also help improve expertise at the national and state levels.
 - 2.1.2 <u>Full time GIS/IT specialist for existing national spatial sharing platform</u> hired and in place with necessary equipment/tools available to ensure input and updating of spatial data and functionality of technical systems
 - 2.1.3 <u>Identification and resourcing of states level spatial information offices</u>: Assessment of needs, including satellite imagery, GIS equipment and training for each State to help establishment of baseline values for core LDN indicators. The needs assessment will be undertaken through consultations with GIS Unit of DECEM, Department of Resources and Development (FSM R&D) and GIS specialists from each of the four States. Efforts overseen by DECEM and completed by end of Year 1
 - 2.1.4 <u>National level mapping of landscapes</u> completed/updated with support from states' spatial information offices inclusive of field data collection: Efforts overseen by DECEM (national mapping office) in coordination with appropriate states offices and completed in Year 2
 - 2.1.5 <u>National level spatial information consolidated</u> within existing platforms and made available to states. The existing platform should be maintained and there should be staff assist states and national entities with acquiring/searching data as well as coordinating with the states to ensure that all data is maintained updated and hence relevant. This activity will be overseen by DECEM (national mapping office) in coordination with appropriate government offices and other stakeholders as warranted. Consolidation completed by Year 2.
 - 2.1.6 <u>Updated land use information input into national spatial sharing platform:</u> Uploading of LDN indicator baseline maps and other relevant spatial data to the existing Digital Atlas of Micronesia.⁶⁷ Baseline and targets for the LDN sub-indicators, will be established to cover the following: (i) trends in land cover; (ii) trends in land productivity or functioning of the land; and (ii) trends in carbon stock above and below ground. Efforts overseen by DECEM (national mapping office) in coordination with appropriate government offices and other stakeholders as warranted. Completed by end of Year 2.
 - 2.1.7 <u>Training provided to states for using national spatial sharing platform to inform and strengthen SLM/LDN/BD</u>; Mapping training provided to the States to help establishment of baseline values for core LDN indicators. Provision of training to enable regular monitoring of the global (at approximately 4-year intervals) and local indicators to track changes relative to the baseline value for each land unit, and the results will be published. Local knowledge, citizen science and other data will help verify and interpret the monitoring data. The

⁶⁶ https://www.unccd.int/publications/scientific-conceptual-framework-land-degradation-neutrality-report-science-policy

⁶⁷ https://islandatlas.org/

LDN/SLM knowledge management portal (Output 4.2) will be populated with the required information for sharing and verification of monitoring data on the LDN indicators, particularly to assist the states. Efforts overseen by DECEM (national mapping office) in Year 3, with follow-up training (as warranted) during Year 4 or other timing as most appropriate based on needs.

- 2.1.8 Establish the 2030 LDN targets for achieving neutrality: Collaboration will be promoted with the Group on Earth Observations (GEO) Initiative⁶⁸ on LDN, as well as the IUCN/GEF Target Setting Program on LDN⁶⁹ for technical assistance with setting LDN baselines, targets, monitoring and reporting land degradation. This will ensure that methods are compatible/equivalent with the work undertaken by UNCCD and the Global Mechanism through the LDN Target Setting Program, and that the format and software will be compatible for the next reporting cycle using PRAIS and eventually Earth.Trend.
- 2.1.<u>9 Support provided to states to identify the SLM measures required to meet LDN targets:</u> Efforts led by DECEM (national mapping office) starting in Year 3

Output 2.2 Resilience assessments of landscapes, habitats and land uses to land degradation and climate-induced risks to support planning and zoning.

- 78. This output will build on previously conducted large-scale assessments of resilience and vulnerability to land degradation such as those presented in the Forest Action Plan 2020-2030 and FSM State of Environment Report 2018, and the planned assessments on climate change vulnerability to be undertaken by the recently approved GCF/MCT Food Security project. The project will build from and complement these initiatives, using the results of the baseline assessments of the three LDN sub-indicators and the 'resilience assessment' approach of the UNCCD Scientific Conceptual Framework for LDN and tools such as the Resilience, Adaptation Pathways and Transformation Assessment (RAPTA) framework and the Self-evaluation and Holistic Assessment of climate Resilience of farmers and Pastoralists (SHARP). The work will be conducted in close cooperation with the GCF project.
- 79. Output 2.2 will support the following activities:
 - 2.2.1 <u>State resilience assessments</u>: International consultant will be contracted to facilitate state resilience assessments in each state, including determination of degradation drivers and impacts to ecosystem services. This activity will be overseen by SEWGs and completed in Year 3. The States level landscape resilience assessments conducted inclusive of habitats and land uses with focus on land degradation and climate-induced risks concerns/potential drivers. Assessments will include detailed spatial mapping and field data collection. Detailed evidence-based assessment of landscapes, habitats and land uses that are particularly exposed to land degradation, identifying land degradation hotspots by comparing the LDN baseline assessment with the spatial changes over a period of 10-15 years to assess rates and intensity of change. Priorities will differ between the States but will include watershed assessments/mapping of forest loss, soil erosion and landslide vulnerability (Chuuk, Kosrae, Pohnpei); Coastal vulnerability inundation assessment to sea level intrusion (Kosrae, Yap); Mangrove vulnerability assessment (all states except Pohnpei); Dredging, land reclamation and landfill survey (Kosrae, Pohnpei); Water quality vulnerability assessment (Pohnpei).
 - 2.2.2 <u>Assessments input into national spatial sharing platform:</u> Efforts to be completed in Year 4 by states offices which have received appropriately training (output activity 4.2).
 - 2.2.3 <u>Determine drivers of land degradation</u>: Using completed assessments, determine drivers of land degradation in hotspots and their impacts on ecosystem services. Efforts overseen by the SEWGs and documented by the consultants and included in the assessment reports by the end of Year 3. Based on the detailed assessments determine the causal chains/drivers of land degradation in the degraded areas (hotspots) and their impacts on ecosystem services. These can then be targeted in land management plans and SLM SAPs can be updated

⁶⁸ <u>https://earthobservations.org/index.php</u>

⁶⁹ Options for collaboration and support will be explored during the PPG, despite the FSM not being a formal partner

accordingly. Examples might include: a) targeting areas for movement of piggeries away from watercourses and promoting the use of dry litter piggeries; or b) reducing the reliance on coral for construction by using landmined aggregate instead (identifying sources of land rocks that can be quarried will require EIAs to be completed for each proposed quarry and associated activities), or by increasing the cost of coral materials to make it cost prohibitive.

Output 2.3 Protocols for monitoring land degradation and practical guidelines for promoting/mainstreaming SLM/BD in the agriculture and infrastructure sectors.

- 80. This Output will address the lack or limited protocols for monitoring land degradation and availability of practical guidelines to be used by States and local communities to promote SLM and biodiversity integration in key sectors, in particular agriculture and infrastructure, which are the two likely sectors to have the greatest impact on land degradation. This Output will support the following indicative activities:
 - 2.3.1 Infrastructure and agriculture sector reviews at State level: This will be undertaken by the PMU with advice from the SEWGs. National consultants will be contracted to support this review in Year 3. The review of infrastructure and agriculture sectors in regard to existing practices and how they pertain to SLM and BD and to provide prioritized recommendations for strengthening each sectors' capacity to support SLM and BD. Agriculture and infrastructure are the biggest sectors in regards to land use. Assessing other sectors would also be beneficial but these appear to be the two biggest users and therefore potential impactors of land and therefore should be minimally engaged, reviewed, supported and better regulated in a holistic manner towards minimizing further land impacts and as feasible reversing/restoring existing degradation. The States reviews will identify key gaps and weaknesses in each states' infrastructure and agriculture sectors in regard to SLM and BD and develop prioritized recommendations to address these barriers. These might include, but not be limited to the following: (i) Protocols: Protocols for monitoring the three LDN global indicators for assessing and monitoring LDN based on global best practices including identifying data sources, frequency of monitoring etc.; water testing protocols; protocol for earth moving, including checklist, permit conditions and land use application form; protocols for reducing the impact of coral/sand dredging (e.g. requiring use of silt curtains); protocol for climate-proofed roads and banks which ensure critical hydrological flows in the freshwater/saltwater interface. (ii) Guidelines: Coastal/beach strand rehabilitation guideline; riparian habitats management/rehabilitation guideline; mangrove/wetland rehabilitation guideline, forest rehabilitation guideline; Composting guideline; strengthened EIA guidelines including robust monitoring and evaluation. (iii) Guidebooks: Guidebook for farmers on SLM traditional agroforestry and climate-smart practices (in collaboration with GCF project); Guidebook on smallholder farm business development (diversification, food processing and value-addition); Guidebook on SLM best practices in the infrastructure sector.
 - 2.3.2 <u>Identify best practice materials</u> (internal and external) to assist the states in addressing land degradation. This will be an attachment to each State's infrastructure and agriculture sectors review report and provided by the contracted consultant to complete the review. To be completed by end of Year 3 as part of the review report. Efforts overseen by the SEWGs.
 - 2.3.3 <u>Develop protocols for monitoring land degradation in agriculture and infrastructure sectors:</u> This will be an attachment to each State's infrastructure and agriculture sectors review report and provided by the contracted consultant to complete the review.
 - 2.3.4 <u>Develop guidelines for strengthening SLM/BD in agriculture and infrastructure sectors:</u> This will be an attachment to each State's infrastructure and agriculture sectors review report and provided by the contracted consultant to complete the review. To be completed by end of Year 3 as part of the review report

Output 2.4: Capacity building for government officers, extension staff, community groups, NGOs, etc., plus technology transfer and equipment for LDN monitoring and mainstreaming of SLM/BD ensuring that training and extension programs are gender-focused and gender-responsive

81. The intent of this Output is to build long term capacity within the country to support local communities with developing and implementing SLM activities to support achieving LDN goals. Priority areas should be determined as

part of the assessments but it is clear that for at least some if not all landscapes building skills to address and reverse land degradation should be a high priority. This can and likely should include such things as identifying native plants and trees for rearing, selecting, acquiring seeds/seedlings, caring for and nurturing plantings, planting out stock, maintaining planted out stocks, maintaining planted areas through activities such as biosecurity and managing existing invasive pests, and building off of successes will all be part of this process. Similarly, developing community buy-in so that it is not only a few individuals doing all the work but that the communities are truly engaged through a clear understanding of how these efforts benefit each member of the community. Also another key area will be strengthening riverine areas, developing protected buffer zones for waterways where activities such as raising livestock is not permissible but where planting of trees to retain soils and shade water is undertaken by all within each community. The following are indicative activities to be supported under this Output:

- 2.4.1 <u>Contractual arrangements for carrying out training</u>: Contractual services through firms of institution such as the COM (or international consultant, if deemed necessary) will be enlisted to provide training to stakeholders for monitoring and strengthening of SLM and BD conservation as well as providing extension-based train the trainer style training. These efforts will be overseen by the respective SEWGs. The contracted firms/institutions will undertake consultation to undertake a capacity and core functional assessment of the state and national government departments and extension services concerned with SLM to identify training needs and any required improvements to operational roles for achieving LDN. This assessment will be used to formulate a detailed capacity building plan for mainstreaming SLM/BD and achieving LDN for implementation during the project.
- 2.4.2. <u>Development of Training Plan</u>: Based on the assessment undertaken in Activity 2.4., the contracted firm/institution develop a training plan to build capacity of key state and national level stakeholders on the principles and stepwise approaches for planning and achieving LDN to ensure that adequate human-resource skills are in place in priority sectors. This will include training for monitoring the standard LDN indicators and progress towards LDN (e.g., at 5-year intervals) and for reporting on the LDN status at the global level by 2030. The training will focus on government officers, extension staff, community groups, including women and youth, NGOs etc., to enable technology transfer and equipment use for LDN monitoring and mainstreaming of SLM and BD. Training and extension programs will be gender-focused and gender-responsive.
- 2.4.3 <u>Training of trainers</u>: Provide training the trainer training for extension offices at states and national level For SLM and BD strengthening. The contracted firm/institution will provide training during the third year of the project. Extension service providers (government and COM) and active NGOs will be trained in participatory methods to build local capacity for SLM. This will focus on training, will be defined through the capacity needs assessment, but could likely include aspects of traditional agroforestry and related improvements, plus increasing the technical, management, and marketing skills of farmers, state farmer associations and small agribusiness enterprises for innovation and added-value product development (see Output 3.3). Support will be given to improve the coordination and partnership between extension providers to enhance the efficiency of extension provisioning.
- 2.4.4 Provide training on key stakeholders: Training to be provided by the contracted firm/institution. Targeted technical training courses led by relevant experts to build the capacity of communities, government and the private sector stakeholders in both the agriculture and infrastructure sectors to implement SLM. This may include some training such as enhancing capacity for conducting EIAs and preparing environmental impact statements (e.g., for dredging, quarries, roads, dams, water drainage schemes, etc.), understanding and following laws and regulations, law enforcement, and building capacity for nature-based versus engineered solutions for land degradation, etc. Specific technical training will be provided on the demonstration activities to be conducted under Component 3 for reducing and reversing land degradation. Priorities requested by the States for Output 3.1 and 3.2 include: such things as identifying native plants and trees for rearing, selecting, acquiring seeds/seedlings, caring for and nurturing plantings, planting out stock, maintaining planted out stocks, maintaining planted areas through activities such as biosecurity and managing existing invasive pests, soil and water conservation activities, and building off of successes will all be part of this process. Similarly, developing community buy-in so that it is not only a few individuals doing all the work but that the communities are truly engaged through a clear understanding of how these efforts benefit each member of

the community. Also another key area will be strengthening riverine areas, developing protected buffer zones for waterways where activities such as raising livestock is not permissible but where planting of trees to retain soils and shade water is undertaken by all within each community. Priorities training applicable to Output 3.3 for sustainable climate resilient agriculture include: soil fertility training (composting / green waste recycling including use of equipment (e.g., wood chippers), soil pH training for farmers, climate resilient crops, integrated pest management (plus pesticide training of trainers with certification); water quality monitoring and provision of equipment).

- 2.4.5 <u>Provisioning of equipment:</u> Detailed assessments once completed should include prioritized actions towards addressing gaps and weaknesses and within this context should also be included very in specific detail on materials/equipment. Efforts would be overseen by the SEWGs starting in Year 3. States have identified the potential need for land survey equipment inclusive of Geographic Positioning System (GPS) units and Unmanned Aerial Vehicles (UAVs) (commonly referred to as drones). These and other potential equipment needs (ex. Wood chippers, pesticide applicators, storage cabinets, personal protective equipment (PPE), etc.) will be identified, assessed and prioritized as part of the assessment reviews (output activity 2.4). Priority equipment needs will be addressed as funding permits.
- 2.4.6 <u>Training for use of equipment</u>: Provide training for equipment and technology use to key offices/groups as well as broadly to end users, strengthen linkages and technology utilization. The contracted firm/institution will provide training in Year 3. One training focus will be on the collection of relevant landscape data, including the use of GIS units and transferring collected data to GIS layers for mapping purposes at both state and national level with detailed training to enable full functional efficiency to support planning and monitoring of land degradation and sharing of information through the national level information portal (Output 4.2). Other specific training may include items such as certification in the use of UAVs. Priority gaps in hardware or software including access to on-line apps such as Collect Earth and Trends Earth, geo-database development, etc. will be identified to assist analysis of land degradation and trends. In addition, actions which support strengthening BD and LDN may also support other ongoing efforts and projects such as the FSM GEF-6 IAS project and training to collect information on identification of pests and documentation of their presences across landscapes should also be engaged.
- 2.4.7 Evaluation of the training programs: The effectiveness of the training program will be evaluated at mid-term and end-of-project to ascertain relevance and effectiveness of the training to help adjust and retool the training to achieve targeted impacts. Evaluations should be completed through the oversight of the PMU with evaluations occurring at project mid-term and the conclusion of the project. Mid-term evaluations will be utilized to review activities and as needed make adjustments to strengthening on-going efforts. The final assessments will help provide a record of how the project has strengthened efforts towards LDN and BD conservation from baselines at start of the project.

Component 3: Embedding climate-smart sustainable land management in critical landscapes and coastal zones (demonstration activities)

(Total Cost: USD 20,079,264; GEF project grant requested: USD 2,679,264; Co-financing: USD 17,400,000)

Outcome 3: Community participation in measures to reduce land degradation, sustain ecosystem services and biodiversity and improve livelihoods and wellbeing

82. Outcome 3 will demonstrate how sustainable nature-based economic development pathways can be engaged by communities (including women and youth), improving livelihoods of men, women and youth and strengthening biological conservation and reducing threats and impacts from land degradation. Community based land management working groups to oversee implementation of activities within the demonstration sites. It is essential that these are set up early on in project implementation and that the PMU is regularly coordinating with these groups and the communities in general. The project will focus on integrated planning and delivery across 4,114 ha in five

landscapes representative of the terrestrial and coastal ecosystems, mangrove forests and coastal wetlands, watersheds and agro-ecosystems of FSM. The proposed demonstration landscapes are:

- Gagil-Tomil Island Northern Road Improvement Project in Yap state (1,187 ha)
- Wichen River, Weno Island in Chuuk state (237 ha)
- Pehleng and Awak Demonstration Landscapes in Pohnpei state (1,615 ha)
- Tofol-Innem Watershed in Kosrae state (1,075 ha)
- 83. The three outputs of this component will bring together best practices from traditional knowledge, previous projects in the FSM and from international experiences to address the threats from land degradation in an integrated way across these four demonstration landscapes.
- 84. At the PPG phase an initial assessment of the feasibility of implementing community-based integrated ecosystem management and threat reduction at land/coastal level was undertaken. More extensive field visits will be undertaken by the Project State Technical Coordinators (supported by the PMU and CTA) during the initial stages of project implementation by the contracted consultants along with representatives from these sites to ensure that they are were properly engaged/consulted prior to the finalization of boundaries of the demonstration sites. The intent is also to further engage and raise awareness with relevant community groups to ensure informed access to project information and activities, their rights and for implementation of a FPIC process. As the implementation of the project (and its relevant activities) progress, additional screening will be required to assess potentially emerging risks or to re-categorize the significance of currently identified risks; which could trigger the need for new assessments and management options. Through on-going engagement, consultation and monitoring of consultative processes of Component 3-related activities, potential risk/adverse impact areas such as access restrictions, economic displacement, livelihoods, access and benefit sharing, cultural heritage for communities can be identified early-on. The implementation of a robust, mutually agreed and Social and Environment Screening (SES) and Environment and Social Management Framework (ESMF). The three outputs of this component will bring together best practices from traditional knowledge, previous projects in the FSM and from international experiences to address the threats from land degradation in an integrated way across these four landscapes.

Output 3.1 Community-led participatory integrated landscape management and rehabilitation plans co-designed, agreed and implemented to avoid, reduce and reverse land degradation to protect ecosystem services and biodiversity

85. Output 3.1 concerns the elaboration of an integrated landscape management plans for the demonstration landscapes with strengthened community governance developed and implemented for biodiversity conservation and sustainable land management at the four demonstration sites, integrating traditional and new knowledge to reduce threats and impacts from land degradation and unsustainable natural resource use. Open and active dialogue across multiple stakeholder groups (including specifically with local groups, women and youth) will be adopted to build a common understanding of priorities, providing co-benefits and resolving conflicting aspirations for each site, including landscape-level target setting for biodiversity and LDN. Design of the plans (or updating of existing plans) will involve full engagement and agreement of local communities, vulnerable groups, women and youth and consideration of local needs and rights including the identification of diversified blue/green livelihood options that can deliver meaningful economic benefits and facilitate a shift away from unsustainable and/or illegal use of natural resources. The management plans will be designed based on detailed and spatially-explicit landscape-level baseline assessments (e.g. using the Biological Rapid Assessment (BIORAPS)⁷⁰ methodology, while also including priority livelihood and land degradation assessments and finalized during the first year of the project. Each management plan (linked to the SLM NAP and SAP) will be supported by an appropriate Community Land Management Working Group (CLMWG) for each of the demonstration landscapes. The CLMWGs will be supported by TORs, and represent the key stakeholders (e.g. community groups, smallholder farmers, local government, private sector), including men, women and youth who will oversee implementation, monitoring and adaptive management and risk/impact mitigation within each landscape. Planning will focus on integrating LDN principles and measures into plans where

⁷⁰ <u>https://pipap.sprep.org/content/bioraps-biological-rapid-assessment</u>

they already exist or establishing new plans. The goal is to achieve a mosaic of zoned land uses across the four landscapes that ensure that the land resource base is used for the purposes to which it is best-suited, so that it can continue to supply ecosystem services and biodiversity such as provision of food and regulation of water and climate, while enhancing the resilience of the communities that depend on it. This will include measures to avoid further land degradation, and to reduce and reverse existing land degradation through the measures outlined for Outputs 3.2 and 3.3 – thereby meeting the goal of LDN. The mapping and strategic planning implemented through this output will provide information for long-term zonation of the landscape for different economic uses and development activities, facilitate permitting processes that meet biodiversity-friendly norms, supported by government led environmental impact assessments, and help develop appropriate governance and enforcement systems to ensure that development is sustainable and environmentally appropriate.

- 86. The proposed activities for Output 3.1 include the following:
 - 3.1.1 <u>Finalize the demonstration landscape:</u> The demonstration sites would need to be finalized within each state, with appropriate coverage for land restoration and improved practices in production systems. The PIF project development phase identified potential demonstration landscapes within each state and the PPG phase supported and expanded on these efforts. It is anticipated that the States will utilize the selected landscapes but if adjustments are required they should be discussed and as appropriate undertaken within the first months of the project implementation, led by State offices in close coordination with local communities, the PMU and DECEM as well as other key stakeholders.
 - 3.1.2 <u>Community Working Groups</u>: Establish (or utilize existing) Community Land Management Working Groups (CLMWGs) with appropriate TORs and membership for each demonstration site. CLMWGs should include representation of the key stakeholders (e.g. community groups, smallholder farmers, state/municipal government, private sector) who will coordinate SLM/LDN and BD conservation implementation, monitoring progress and ensuring review and engaging adaptive management, reinforcing responsible governance, accountability and transparency according to local and traditional norms as well as protecting human rights, including tenure rights. The CLMWGs should be established and active by the end of the project month-12 including have established Terms of Reference (TORs), meeting regularly and being supported by both state government and local stakeholders.
 - 3.1.3 <u>Resource Availability</u>: Ensure that CLMWGs are appropriate resources and linked with state and national partners. The SEWGs will facilitate this progress in collaboration with the PMU.
 - 3.1.4 <u>Development of Demonstration Site Land Management Plans</u>: Consultants will be recruited for each State to facilitate the development of the Demonstration Land Management Plans (DSLMPs) For each of the demonstration landscapes. Oversight will be provided by the SEWGs and the CLMWGs with contracts in place for each demonstration landscape in Year 1.
 - 3.1.5 <u>Assessment of Demonstration Sites</u>: Detailed assessments of each demonstration landscape will be undertaken by the contracted consultants in consultation with local officials and communities. If there are existing plans that cover all land/near shore sea aspects of SLM and addressing land degradation for the demonstration sites that are comprehensive then they should not be duplicated but rather use existing plans. But expectation is that while there are many sectoral plans and even some multi-sectoral plans that their focus is likely not as broad as will be required to develop full SLM/LDN planning documents for the full sized demonstration landscapes which in 3 of the 5 demonstration landscapes are not specifically aligned with individual watersheds. The assessments will (i) characterize the landscape through a participatory process with key stakeholders (especially land users); (ii) describe the key biophysical and socio-economic features of the landscape including its boundary delineation, ecosystem services and ecological functions; (iii) identify what forms of land degradation are affecting productivity and natural ecosystems (e.g. soil erosion including loss of topsoil, gullying, pollution, loss of soil fertility, coastal inundation, sedimentation); and (iv) identify the drivers of land degradation (e.g. drought, migration, market forces), and the pressures and unsustainable land use practices

(e.g. forest conversion to agriculture, poorly planned development, infrastructure (e.g. roads), extraction of natural resources). Assessments are to be undertaken by mid-year 2 with the final assessment report for each landscape being attached to the DSLMP for that landscape.

3.1.6 <u>Develop DSLMPs</u>: Based on the assessment undertaken in Activity 3.1.5, DSLMPs will be developed for each demonstration site ensuring that the development process includes input from local, state and national partners. Based on each of the demonstration landscape assessments support a detailed community-driven consultative process to identify priority areas in each landscape to avoid (i.e., no-go areas), reduce and reverse (i.e. areas to be rehabilitated land degradation. The DSLMPs, like the state and national level NAP efforts should not be sector specific, but should harmonize existing and new efforts across each landscape in a prioritize manner towards achieving the LDN targets set at the national level on the local community scale. So, where forestry plans focus on forest or components that directly relate to forests, the landscape management plans should include forestry but also infrastructure, planning, biodiversity, other aspects of agriculture, general community planning, etc. The key element to ensure happens at each level for SLM is that development, planning and implementation should not be restricted to one or a few sectors but truly engage all land and near shore stakeholders and be a comprehensive device from which specific sectors can be supported but not focused on exclusively to the detriment of other sectors within each landscape.

The priority areas will be accurately mapped, zoned and prioritized. Finally, a simple and costed plan will be prepared and approved for implementing actions towards achieving LDN identifying delivery mechanisms and partners. Mapping will help identify, prioritize and inform on-the-ground actions at landscape levels to support biodiversity conservation and SLM/CSA within the five main sectors (forestry, agriculture, fisheries, infrastructure and aquaculture). It will facilitate identification of (i) areas for conservation of biodiversity, in particular for endangered and endemic species and their habitats and their dispersal corridors, such important ecological areas (including water sources and along rivers); (ii) areas for sustainable community natural resources management and use, including sustainable harvesting and extraction, community based conservation and forest management, watershed conservation and climate risk management; (iii) degraded areas for community forest restoration and fire management; (iv) degraded agricultural areas for restoration using SLM/CSA for sustainable agricultural development; (v) area of mangroves; and (vii) areas and activities that can promote blue/green livelihood improvement. The CLMWGs will oversee the development of the DSLMPs by the contracted consultants for each demonstration landscape during Year 2 with plans finalized by the end of Year 2

3.1.7 Implement DSLMPs: Implementation of the DSLMPs will be facilitated through acquisition of Contractual Services (Firms or NGOs) starting from Year 3 onwards and are reflected in Outputs 3.2 and 3.3. The CLMWGs will oversee implementation of the DSLMPs with significant involvement of local communities and sector agencies (forestry, fisheries and agriculture). Capacity training to support implementation will be provisioned under project Output 2. Capacity building within the demonstration landscapes will empower local communities, inclusive of women and youth, to support implementation of the DSLMPs.

Output 3.2: Targeted ecosystem rehabilitation measures (nature-based solutions) piloted in innovative partnerships with communities and the private sector in degraded watersheds and coastal zones to reduce and reverse land degradation and enhance biodiversity

87. This output will focus on implementation of well-designed, climate-smart nature-based solutions identified under Output 3.1 to reduce and reverse land degradation across natural habitats in the demonstration landscapes including: (i) rehabilitation of degraded native forests in critical watersheds through implementation of community reforestation/tree planting projects including fire breaks where necessary; (ii) rehabilitation of riparian corridors including vegetated buffer strips and setbacks for piggeries and waste disposal to improve water quality; (iii) rehabilitation of strand forest/green belts to stabilize and reduce coastal erosion; (iv) rehabilitation and conservation of mangrove forests mitigating climate change and coastal degradation following the principles of ecological mangrove restoration⁷¹ where possible encouraging natural restoration resulting in heightened survival rates, faster growth, and a more diverse, resilient forest structure; (v) rehabilitation/conservation of freshwater wetlands and traditional taro patch systems inclusive of the prevent of saltwater intrusion; (vi) community-led rehabilitation of formerly productive land degraded by infrastructure development (e.g. small-scale land levelling and replanting with native vegetation etc., where appropriate with support of private sector partners⁷²). To implement these innovative rehabilitation projects, technical support will be provided by Contractual Services contracts with Firms or NGOs, as appropriate in each State to community/landowner groups. This will include providing support for community tree nurseries that can provide planting materials both for the rehabilitation of natural habitats, but also for sustainable agroforestry. Efforts at improving the productivity of agricultural lands will be supported by the project and actively engaging land owners and farmers. Efforts will be undertaken to engage and train women and unemployed youth to implement rehabilitation projects, to raise their environmental awareness and future employment prospects and provide certificates for skills learned. These nature-based solutions are expected to simultaneously deliver benefits for SLM, climate change, biodiversity and livelihoods.

88. Initial calculations were developed as part of the PIF and agreed to at that stage. Sizes were adjusted during the PPG, but not extensively. i.e. these numbers are in large part based on what was accepted from the PIF and are based on the best numbers derived from available GIS and satellite imagery as the PPG team was not able to ground truth via site visits. SLM activities should be very ambitious. But if these extensive efforts are not realistic then considerations regarding how to adjust to what would be more realistic may be necessary: Targeted projected restoration will include a total of 925 hectares as defined in Table 6 below.

GEF Endorsement Calculations for Core Indicators 3.1, 3.2, 3.3 and 3.4					
Area of degraded agricultural land	ha		ha		
restored (includes agroforestry and taro patch)					
(3.1)		Area of natural grass and shrublands restored (3.3)			
Chuuk landscape	50	Chuuk landscape	20		
Kosrae landscape	55	Kosrae landscape	0		
Pohnpei landscape	165	Pohnpei landscape	5		
Yap landscape	50	Yap landscape	90		
Total	320	Total	115		
Area of forest and forest land restored (3.2)	ha	Area of wetlands restored (3.4)	ha		
Chuuk landscape	100	Chuuk landscape	2		
Kosrae landscape	150	Kosrae landscape	31		
Pohnpei landscape	80	Pohnpei landscape	37		
Yap landscape	50	Yap landscape	40		
Total	380	Total	110		

Table 6: Calculations for core indicator 3: Area of Land Restored

⁷¹ https://mangroveactionproject.org/mangrove-restoration/

⁷² Options for private sector partner involvement were consulted during PPG stage

89. Actions to be implemented under Output 3.2 include the following:

3.2.1 <u>Prioritization of areas for restoration</u>: Calculations at PPG stage were based on best available information which were in most cases outdated GIS layers and satellite imagery. Ground truthing must take place early in project implementation stage and adjustments made once the actual ground situation can be viewed and developed into current GIS layers which can be inclusive of high valve targets across the landscape. I.e. identification of what are the key degradations, what is the extent of these areas and where can activities best be directed to 1. prevent further degradation and 2. begin to address and rehabilitate existing degradation. It is likely that shorelines and stream/river buffer area developments will be some of the priority areas as may also be ridge lines and boundaries of existing natural forest stands. The consultancy groups contracted to develop the DSLMPs (Output 3.1) will complete this activity as part of the DSLMPs assessment and plan development with oversight by the CLMWGs in Year 2 and 3. Results will be detailed in the DSLMPs.

3.2.<u>2 Partnerships for restoration of degraded habitats</u>: Establishing partnerships between communities and the public sector will be promoted for the restoration of degraded habitats such as mangroves, greenbelts, wetlands and traditional taro patches. This will occur under the implementation of the DSLMPs and overseen by the CLMWGs and SEWGs. MOUs will be established with clear lines of roles and responsibilities of all partners.

3.2.3 <u>Implementation of land restoration activities</u>: Local communities, inclusive of vulnerable groups, women and youth and the private sector will implement land rehabilitation activities for mangrove, taro patch, greenbelts and near shore areas as well as other key priority areas. Efforts will be overseen by the CLMWGs. The project will support implementation of best management practices for restoration BMPs for degraded lands within the demonstration landscapes that takes into consideration the specific needs of vulnerable groups, women and youth.

Output 3.3 Smallholder farmers on traditionally owned lands supported to implement traditional and innovative climatesmart agricultural practices for SLM and climate change adaptation that contribute to LDN, protect ecosystem services, biodiversity and food security, and enhance incomes.

- 90. Assessment of the landcovers/landscapes is one element. Assessment of existing activities across the landscape and within specific landcovers is another. Both should occur on the ground within each demonstration landscape in order to develop a baseline of what the situation is with both aspects at point zero (project initiation). These assessments should be critical towards informing how the project can best support the communities and address LDN across each landscape. This output will focus on implementation of well-designed, climate-smart nature-based solutions to reduce and reverse land degradation across the demonstration landscapes. Under this output, smallholder farmers (including men, women, youth and vulnerable groups) will be supported to implement innovative agricultural practices to reverse on-going land degradation and rehabilitate degraded areas, increasing resilience to climate change through SLM/CSA towards achieving LDN, protecting ecosystem services and improving incomes through increasing crop and livestock yields. The project will provide technical support through firms/NGOs to work with local land owners and farmers, including women and vulnerable group to assess suitable farming systems and locations for interventions in each landscape that will be established under Output 3.1.
- 91. None of the proposed demonstration landscapes include large-scale commercial farms. The proposed demonstration landscapes contain a variety of small-scale farms where a mixture of subsistence and cash crops are grown. Innovative approaches to SLM/CSA implemented under this project will support development of more reliable, crops, more profitable crops, and/or crops with increased yields thus improving food security in all landscapes also raising farmer incomes in the semi-subsistence systems, within a framework of integrated community planning, governance and management at landscape scale, the project aims to avoid and reduce smallholder encroachment into adjacent forested areas. Project interventions will involve piloting integrated planning, implementation and monitoring of the three key variables required towards achieving LDN in the demonstration landscapes (LCC, NPP and SOC) including land use plans and targets. In order to build capacity and sustainability, technical training on SLM technologies will be conducted through the extension services, also lead farmers in each community, with a particular focus on engaging women and youth. Support will be provided to

train land users to adopt SLM/CSA to replace current damaging practices (e.g. slash and burn and encroachment into forested areas, lack of restoration of SOC, repetitive tillage, inappropriate chemical use, etc.) which will lead to an increase in crop yields/reduction in yield variability – thus increasing incomes. Traditional knowledge of sustainable land management systems will be integrated and promoted⁷³; targeted interventions will include composting, mulching, cover crops, reduced tillage, crop rotations, restoration of fallow periods, use of appropriate beneficial agroforestry systems and terracing to reduce soil erosion, all contributing to increasing soil organic matter content, fertility, water and nutrient management and improved livestock (poultry, piggery) systems, along with measures to reduce the threats to land degradation, including support for addressing risks posed by IAS. Project support for addressing threats and impacts to land and other natural resources degradation will vary according to the contexts and priorities of the land users in the different landscapes. Towards the conclusion of the project, lessons will be shared and scaling-up and laterally of successful interventions through community exchanges and visits (Component 4) and through incorporating lessons into guidelines and agricultural training and extension programs. Smallholders and farmer cooperatives will be assisted to improve post-harvest storage, processing and development of value chains, with improved access to finance.

- 92. There are many opportunities for development of new island products and existing or new local markets for traditional, healthy local foods. FSM has a long list of island farm produce (breadfruits, bananas, taros, yams, black pepper, citrus, sakau, betel nuts, coconuts etc.) with business potential, but lacks capacity to turn them into business commodities. Livestock production could also be improved through various mechanisms such as provisioning of new and better suited genetic stock.
- 93. Activities contribute to Output 3.3 include:
 - 3.3.1 <u>Compilation of information regarding traditional and innovative climate-smart agricultural practices:</u> The project will recruit through a contractual service agreement a suitable firm to engage with local landowners and farmers to compile information regarding traditional and innovative climate-smart agricultural practices and develop a training strategy for each demonstration landscape
 - 3.3.2 <u>Development of gender sensitive training and extension strategy</u>: The contractual service agreement (as mentioned in Output 3.3) would also cover the development of a gender sensitive training and extension strategy for each demonstration landscape. This will be initiated in Year 3 of the project. The strategy will build on successful experiences such as Yap's Climate Adaptive Agriculture and Resilience project, supported by USAID's Pacific-American Climate Fund. The above-approach will attempt to catalyze efforts to attain LDN, including recognition of land degradation issues, also SLM and CSA approaches to halt and reverse land degradation.
 - 3.3.3 Implementation of training to extension offices and similar stakeholders: The project will support the training of extension and similar stakeholders to support local communities with implementing both traditional and innovative climate smart agricultural practices. While SEWGs will oversee this activity, efforts will be looked into the engagement of the College of Micronesia (COM) in close collaboration with the recently approved GCF/MCT project on food security to conduct the training. This will be undertaken in Year 3 of the project.
 - 3.3.4 <u>Long-term efforts to institutionalization of training</u>: Introduction of land degradation and SLM/CSA components into the curricula of COM and relevant Rural Training Centers will be supported so that the training becomes part of the curriculum of these institutions.
 - 3.3.5 <u>Training of local communities on SLM/CSA</u>: Training will be provided to local communities for the implementation of traditional and innovative agricultural practices. Training and extension services will start

⁷³ For example the Bushmen Farming Network is focusing on six key aspects that have been the foundation to farmer-farmer exchanges for thousands of years: Ideas, Planting Materials, Advice, Individuality, Culture. See https://www.bushmenfarming.com/summary.html

in Year 3 with focus on promoting "farming as a business" with the aim of increasing profitability and creating jobs (particularly for women and youth) focusing on value-added marketable products from sustainable agriculture and agroforestry. Trainees will include lead farmers, landowners, women and youth in demonstration landscapes, extension officers (linked to Output 2.4) and focus on implementing innovative agricultural practices to reverse ongoing land degradation and rehabilitate degraded areas, increasing resilience to Climate Change through SLM/CSA towards achieving LDN, protecting ecosystem services and improving incomes through increasing crop/livestock yields. Training will be sensitive to the needs and barriers of participation of vulnerable groups, women and youth. Training will highlight the benefits of participation to encourage increased engagement in project-related activities. Training will be contracted out to an institution, such as the College of Micronesia

- 3.3.6 Improving opportunities for promotion of small-scale local business development: Engagement of consultancy services contract to identify opportunities to improve farmer/land owner access to small grants, credit (micro-finance) and savings facilities for farm business and product development. This contract will also through collaboration with NGOs such as the Island Food Community of Pohnpei (IFCP) and their "Go Local" campaign for promoting local food for its "CHEEF" benefits (Culture, Health, Environment, Economy and Food security) identify at least one product from each State to be promoted to sustain profitable and sustainable local added value businesses. Activities will cover the full spectrum of business incubation support: selection of a resource person or NGO to lead product identification, training (with COM and private sector organizations), market assessment, product preparation, quality control, packaging, labelling, pricing and monitoring (all with NGO, private sector and existing marketer support to share appropriate expertise/knowledge). Farmers will focus on quality production for value addition and potentially for direct marketing. Because of high transport costs, the primary focus will be on local markets; however, opportunities will also be made to identify and develop potential high-value agricultural commodities and products for the export market. Following the identification of suitable products, the contracted firm will provide technical support, advise and identify private sector linkages to farmers and landowners for product development, quality control and marketing, If there are existing projects that have this focus and they support SLM then it might be of value for this project to work within these existing efforts.
- 94. Through the strengthened SLM through management planning for the demonstration sites, capacity building and training and availability of best practices and extension services, this could lead to the enhance of improved practices within demonstration landscapes and seascapes that conserve biodiversity. Actions may include reduced chemical inputs, regulations and BMPs to protect riparian zones, training and extension services for BMPs and implementing sustainable traditional knowledge and traditional/native crops. Based on these actions, it is projected that 2,181 hectares of terrestrial landscape areas and 585 hectares of marine seascape within the demonstration areas would be under improved practices to benefit biodiversity (Core Indicators 4,1 and 5 respectively), while 6,195 hectares of production landscape will be under sustainable management plans, mainstreaming BMPs and strengthened policy and regulations supporting achieving LDN goals and protection of BD, training and extension services, would lead to the enhance of improved practices in the high island areas outside the demonstration sites. The targets for achieving Core Indicator 4 is reflected in Table 7. The area of marine seascape under improved practices within the demonstration sites to benefit biodiversity is 585 hectares and is reflected in Table 8.

	GEF Endorsement Calculations							
4.1 Area of landscapes under improved management to benefit biodiversity				nent to	4.3 Area of landscapes under sustainable land management in production systems			
Demo Site	Forests	River/ Riparian/upland wetland	Savannah	Total (ha)	Demo Site	Agroforestry	Taro and cultivated land	Total (ha)
Chuuk	6	0	2	8	Chuuk	16	0	16

Table 7: Calculations for	core indicator 4 and su	ub-indicators 4.1 and 4.3
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Kosrae	520	16	0	536	Kosrae	225	1	226
Pohnpei	585	34	12	631	Pohnpei	360	32	392
Үар	192	11	303	506	Үар	54	7	61
	sub-to	otal		1,681	sub-total		695	
Additional assumed for BD mainstreaming outside of 500 demonstration landscapes		Add ma den	itional assumed instreaming out nonstration land	for BD side of scapes	5,500			
Total (ha)		2,18	81		Total (ha)		6,195	

Table 8: Calculations for core indicator 5

	GEF Endorsement Calculations				
5. Area of mar	ine habitat unde	r improved prac	tices to benefit b	biodiversity	
Demo			Seagrass Beds		Total
Site	Mangroves	Lagoons		Reefs	(ha)
Chuuk	0	35	0	0	35
Kosrae	42	69	0	23	134
Pohnpei	99	153	0	33	285
Үар	45	0	0	86	131
Sub-Total	186	257	0	142	
Total (ha)				585	

Component 4: Effective knowledge management, gender mainstreaming, and M&E

(Total Cost: USD 5,423,766; GEF project grant requested: USD723,766; Co-financing: USD 4,700,000)

Outcome 4. Increased project impact, replication and upscaling through enhanced awareness and knowledge management

95. Outcome 4 will focus on supporting the development and implementation of a communications strategy inclusive of both gender mainstreaming plan and an awareness and engagement plan. The gender mainstreaming plan will assist with ensuring that women, vulnerable groups (including persons with disabilities) and youth are empowered to become active agents, participants and beneficiaries of the project interventions. The communication strategy overall will support collecting, packaging and sharing information and knowledge about the practices promoted by the project, the processes involved in these, and the short and medium-term results from implementation of the project activities. This knowledge and information will be shared with State and community level authorities to further guide future programming around similar issues and widely disseminated to the rest of the State. By the end of the project, it is expected that local land users, farmers and other key decision-making stakeholders within in the target landscapes, will be better skilled and more knowledgeable on practical solutions to monitor and address impacts of unsustainable land use practices on biodiversity and food and water security challenges they are faced with, and how to tackle them at farm and landscape levels. Emphasis on the importance of local community

knowledge in terms of land and wetland habitat management, but with consideration of both genders and marginalized groups:

- Understanding of the importance of biodiversity mainstreaming and land and coastal wetland management from a gender equity perspective; e.g. with explicit recognition of information gaps that are felt by women and vulnerable peoples;
- Understanding the interdependence of livelihoods and the landscape, inclusive of their connectivity with coastal and marine habitats;
- Strengthening of information collection and sharing mechanisms that meet the needs of target audiences, recognizing that target audiences include women and marginalized people;
- Improved awareness of the tools and methods available (and where to go) for individuals to establish sustainable businesses and other livelihood options;
- Understanding of concepts related to sustainable land and coastal resource management,; and
- Understanding of the role and importance of women, men, marginalized people, and different sectors in landscape planning and management.
- 96. The project will increase public understanding, particularly in four landscapes on how ecosystems are linked and how actions on land and coast impact people and place and their engagement as active participants in these areass. This knowledge, combined with integrated landscape approach will promote reductions in negative impacts on biodiversity and the landscape in general, while increasing the number of local, community driven sustainable natural resource management (agriculture, fisheries, livelihood, etc.) activities in FSM.

Output 4.1: Awareness-raising program on SLM and the benefits of tackling land degradation delivered through targeted communications, education, campaigns and community participation.

97. Considerable effort is required to raise awareness of the links between land degradation, the loss of ecosystem services/biodiversity and impacts on health, well-being and resilience - for the public, decision-makers and the private sector. Influencing stakeholders across sectors to engage in supporting LDN, biological conservation and reducing/preventing climate impacts in a hands-on way in many cases will require changing opinions and attitudes through understanding the essential importance of resource protection and conservation to each and every community's and individual's well-being and providing examples of activities that both individuals and communities can implement towards effectively addressing such concerns. Addressing these concerns in part through community and individual ownership is a high priority for all four states and for local municipalities, particularly concerning watersheds and critical coastal habitats (particularly mangroves). This output will facilitate the development of a communications strategy and action plan, based on an analysis of lessons learned from other GEF projects in the Pacific to raise public awareness of the importance of biodiversity and ecosystem services, the risks and impacts from land degradation and the broad benefits of ecosystem-based management and importantly engagement in strengthening the protection of resources across the landscape. An overall communications strategy will be developed during project months 7-18 and will be inclusive of both a gender mainstreaming plan and an awareness and engagement plan. Training for implementation of the strategy will be provided and then the various components of the strategy will be implemented during project month-26, Implementation will be in coordination with State governments, relevant sectors and NGOs/Community Based Organizations (CBO) partners on the ground, as well as news media and social media. Effectiveness of the strategy and plans will be evaluated internally at project mid-term, and adaptive measures/lessons incorporated. Specific approaches, tools and materials will be needed to address the local languages, potentially lower levels of literacy in some rural areas and challenges with absence or reduced presence of electricity, internet, mobile services, etc., which may occur in some remote areas (e.g. by working through local shortwave radio, extension services and face to face-meetings supported by local teachers, church leaders or nurses, women and youth in the target demonstration landscapes- for eventual upscaling). Communication products and approaches included in the strategy might include State-level posters or videos of importance of ecosystems, benefits of SLM/CSA technologies which contribute to halting and reversing land degradation, as well as targeted campaigns for iconic species conservation or to address specific threats. Community and church leaders will be engaged as important advocates in the demonstration communities. Sustainability mechanisms will be explored to ensure that DECEM can maintain a communications function beyond the end of the project. To the extent feasible, the project will work with NGOs, women's organizations, farmer associations, and

youth clubs to promote awareness on SLM activities so that they become a voice for SLM and watchdogs for land degradation. Activities contributing to Output 4.1 include:

- 4.1.1 <u>Development/finalization and implementation of the framework for measuring knowledge, attitudes, and practices (KAP)</u>: The PMU should complete the KAP survey on SLM/LDN and BD mainstreaming that would serve as a baseline to assess progress in improvement of community knowledge and awareness on BD and SLM issues. The PMU will undertake the KAP survey in the first half of Year 1. The PMU would also report on KAPs implementation at both the project mid-term and conclusion of the project
- 4.1.2 <u>Development of Communication and Knowledge Management Strategy</u>: A national consultant will be recruited to develop the communications and knowledge management strategy. The PMU will oversee this effort, but NLMWG and DECEM will review and finalize the strategy by the end of Year 1. Development and Implementation of the gender sensitive Communication and Knowledge Management Strategy, is intended that (i) the Project is well understood, accepted, and implemented effectively and equitably; (ii) knowledge management products are shared and used, (iii) understanding of landscape planning is increased; (iv) understanding and implementation of best practices is improved; and (v) the public has an increased understanding of impacts of LD and benefits of SLM/CSA practices to support engagement with both management actions. Ultimately the public and visitors should champion the unique biodiversity and ecosystem of FSM at both national and State levels and be strongly engaged with preventing LD through personal and community actions
- 4.1.3 <u>Gender mainstreaming plan developed and implemented:</u> Development of the gender mainstreaming plan will be part of the contracted effort as a component plan of the overall communications strategy (Activity 4.1.2). The gender mainstreaming plan will support (i) a gender and socially inclusive perspective applied to project activities; (ii) research on gender and social roles in the landscape informs resulting plans and ensures equitable distribution of benefits; and (iii) information is collected and shared across gender and social lines and is to be implemented by all project partners throughout the life of the project starting in project month-19 when the plan is made available.
- 4.1.4 <u>National communication and knowledge management plan implemented</u>: The development of this plan that is part of the contracted effort from output activity 4.1.2 and will be a component plan of the overall communications strategy will be implemented to engage policy makers, public and private sector entities, visitors and local communities in regards to SLM/LDN and BD.
- 4.1.5 <u>Training for communication and knowledge management plan:</u> An institution will be contracted in each state to train key persons and entities within the FSM to conduct awareness and engagement campaigns, as well as gender mainstreaming activities. End results should be a cadre of SLM, LDN and BD providers/trainers within each state that can in turn work with national and state stakeholders as well as local communities to strengthen engagement for SLM activities inclusive of gender mainstreaming.
- 4.1.6 <u>Training and Awareness raising among local communities</u>: The trained persons and entities in each state (see Activity 4.1.5), landscape level workshops/meetings will be organized to facilitate dissemination of field lessons and help inform actions relevant to land and coastal conservation practice. Specific topics of learning and success that might evolve from the demonstration sites. The initial documentation of these lessons will be included as part of the participatory monitoring process, that would be complemented by additional national technical support to distil and document lessons and experiences. The project will support regular workshops at the State and landscape level to share lessons and experiences and a national workshop at the end of Year 6 to facilitate the sharing of lessons more widely and enable replication throughout the FSM.
- 4.1.7 <u>Citizen science and volunteer program</u>: A national consultant will be hired to design a citizen science program. The focus of the programs will be on environmental and land degradation issues, including monitoring, land and coastal conservation, and SLM good practices. Programs will be inclusive of gender mainstreaming and youth

4.1.8 <u>Promote SLM/LDN AND BD awareness within schools:</u> A national consultant will develop strategy for promoting SLM/LDN and BD within schools in the demonstration areas. Efforts will begin in Year 3 and supported by trained individuals to engage schools and children with SLM/LDN and BD activities through existing and new mechanisms such as Conservation Society of Pohnpei's Green Road Show, developing environment clubs, booklets, comics, coloring books, and competitions.

Output 4.2 Knowledge management platform and program to share information and project lessons between states, landscapes and communities including through an on-line portal, learning exchanges and demonstration farms/farmer associations

- 98. Output 4.2 will support knowledge sharing, tools, events and networks for safeguarding biodiversity, managing the threats and impacts from land degradation, and demonstrating the benefits of SLM, LDN and BD conservation to aid effectiveness and up-scaling. The project will use mobile communication via videos and other technology to document activities and best practices, as well as supporting exchange visits between landscapes⁷⁴. Low-cost, community-run SLM, LDN and BD and sustainability information/learning programs will be established for coordination and knowledge sharing in each landscape. Participation in regional and international events by local community representatives will be supported where clear benefits are identified, including via virtual means as appropriate. This output will also support all other outputs to promote vertical and horizontal learning, knowledge-sharing and upscaling of project results. It will support the development of a national level SLM on-line portal (as part of DECEM's existing portals) for use by each state and nationally, to ensure availability and use of key documents, GIS and remote sensing imagery and information for use in research, evidence-based approaches, monitoring, and outreach activities, including the LDN indicators.
- 99. Activities under Output 4.2 include the following:
- 4.2.1 <u>SLM/LDN platform and portal development</u>: Contact national consultant to assess current situation and determine where the SLM/LDN platform and portal should be located and how it should be managed. Atlas platform already exists and should be utilized. This effort will be guided by DECEM to determine if existing resources at DECEM (or other partner) can be leveraged to support these efforts. Determination of where the platform will be housed and basic concepts regarding functionality of the platform and portal will be developed and in place by end of Year 2. Based on this assessment, the consultant will develop the SLM/LDN platform and portal in conjunction with stakeholders and the designated office.
- 4.2.2 <u>Training to facilitate use of the platform and portal</u>: Based on the assessment conducted under Activity 4.2.1, the consultant contracted for the assessment will provide training to key stakeholders at national and states levels with utilizing the platform and portal including inputting information.
- 4.2.3 Input knowledge management and other SLM products into the SLM platform: Efforts overseen by the platform management, and conducted by partners trained to implement. Documentation and dissemination of knowledge management products to increase awareness and capacity related to control and management of land degradation in the country, integration of land and coastal management into activities in key natural resources sectors (agriculture, livestock, fisheries, infrastructure, etc.). In particular, this Activity will support knowledge management products such as: (i) development of guiding documents, tools and manuals of best practices related to SLM/CSA, taking into account low levels of literacy and language constraints; (ii) a menu of SLM and CSA compatible farming practices to manage LD and IAS; (iii) tools and procedures for enhancing livelihoods and sustainable income opportunities; (iv) lessons from trialing of land, forest and wetland restoration processes; and (v) documentation of traditional knowledge and skills on SLM and related livelihoods, etc.
- 4.2.4 <u>Learning exchanges</u>: Conduct learning exchanges amongst states and local communities on a regular basis with oversite by national, state and local planning groups as appropriate. These efforts are to be overseen by SEWGs and partnering states' offices and should commence in Year 2 for the life of the project and beyond. Localized

⁷⁴ This will also provide an adaptive management mechanism for the project if COVID-19 travel restrictions are prolonged.

workshops and meetings to facilitate partnership building and dissemination of information including success stories and Best Management Plans (BMPs) for SLM, LDN and BD. Provisioning of technical reports, publications, and other knowledge management products (including in local languages and accessible to local communities. Activities undertaken are to be documented and shared with the SLMWGs and NLMWG for inclusion in annual project reports (Output activity 4.4.3).

- 4.2.5 <u>Develop policy notes on project tested approaches:</u> With support from the PMU, the NLMWG should lead these efforts with input from partners. Policy notes development should begin in Year 2 and occur annually as warranted with results incorporated into annual project reports (Output activity 4.4.3). Policy notes are to facilitate future replication and upscaling of SLM, LDN and BD activities which are locally profitable and support sustainable livelihoods.
- 4.2.6 <u>End of Year national seminar:</u> End of project seminar is to be supported by the PMU under the oversight of the NLMWG and should occur before the end of the project. The intent of the seminar is to present an overview of the project's outcomes and lessons learned and include follow-up recommendations for future implementation and continuation of SLM, LDN and BD strengthening and up and lateral scaling of activities throughout the FSM.
- 4.2.7 <u>Demonstration Farms</u>: Establish demonstration farms with support from public sector and state planning group. Efforts to be led by the CLMWGs for each state and initiated in Year 3 with support from partners and specifically the SLMWGs and associated states offices and agencies. The demonstration farms are utilized to further engage local and statewide communities as part of the awareness and engagement campaigns with increase d engagement of the public sector statewide and examples implemented elsewhere within each state

Output 4.3 Best practices and lessons learned for addressing land degradation exchanged through South-South cooperation with other SIDS across the Pacific and elsewhere to support LDN/SLM.

- 100. To bring the voice of the people of FSM to global and regional fora, the project will explore opportunities for meaningful participation in specific events where UNDP could support engagement with the global development discourse on SLM, LDN and BD issues. The project will furthermore provide opportunities for regional cooperation with countries and other regional partners that are implementing SLM and/or BD initiatives. In particular, this would include close collaboration, knowledge sharing and exchange visits with Pacific Small Island Developing States (PSIDS) that are implementing similar projects. The GEF-7 project will seek opportunities for collaboration with the (i) UNCCD Knowledge Hub⁷⁵ and LDN knowledge e-platform; (ii) the Partnership Initiative on Sustainable Land Management (Caribbean)⁷⁶; (iii) the Pacific Islands Managed and Protected Areas Community (PIMPAC) network; (iv) the Micronesians in Island Conservation (MIC) peer-learning network for conservation leaders; (v) other programs of SPREP and the Pacific Community (SPC) including the latter's Centre of Excellence for Atoll Agricultural Research and Development which is developing ways to increase crop production, improve marketing opportunities and raise local incomes based on community-driven land-use planning.
 - 4.3.1 <u>Best practices and lessons learned</u>: The PMU with support from DECEM and the NLMWG will lead this efforts and obtain the services of a national consultant to produce an annual project overview (with inputs from the States and demonstration landscapes), inclusive of key stories and lessons learned and ensuring dissemination throughout the FSM as well as regionally through appropriate means which will likely include both a web platform and printed materials
 - 4.3.2 <u>Participation in regional events</u>: A limited number of participants will be supported to participation in regional conferences or similar learning events to provide overview of project activities and benchmarks and to share effective lesson learned with regional partners

⁷⁵ https://knowledge.unccd.int/

⁷⁶ https://pislmsids.org/

4.3.3 <u>Promote knowledge sharing:</u> The project will support knowledge through formal and informal networks and forums that support vulnerable groups, including women and youth. Networking activities may include on-line webinars, workshops and forums, social media networks, sharing of best practice materials; where significant benefits can be identified (e.g., for youth champions) international exchanges within the Pacific may be supported, etc. Knowledge sharing activities undertaken by stakeholders should be documented and reported to the PMU and coordinated through the appropriate level NLMWG, SLMWG and/or CLMWG for inclusion in the project annual reports, 'Bright spots' should be recorded and used to highlight project success for vulnerable groups, including women and youth (Output activity 4.4.3).

Output 4.4 Project M&E, safeguards and gender mainstreaming to support effective project management and maximize project impact.

- 101. Output 4.4 will deliver a M&E system that supports project impact including gender and youth mainstreaming and adherence to social and environmental safeguards, building on baseline best practices and lessons from other projects within the Pacific region. As part of this effort, Output 4.4 will support: (i) the development and implementation of monitoring framework, based on the Results Framework Agreement to validate baselines and monitor progress in achieving project outcomes and impacts will be undertaken; (ii) a review and regular update of M&E plan, including results framework baselines, tracking tools, Theory of Change to subsequently adopt these findings to implement all aspects of the project; and (iii) a mid-term and terminal evaluation will be conducted in line with UNDP/GEF requirements and incorporate and adapt recommendations of MTR to revised project plans and monitor their implementation.
 - 4.4.1 <u>Development and implementation of monitoring framework:</u> Monitoring framework developed based on the Results Framework Agreement to validate baselines and monitor progress in achieving project outcomes and impacts. The PMU will develop and implement the monitoring framework with support from DECEM and the NLMWG with inputs provided by project partners and stakeholders on at least an annual basis or perhaps quarterly as feasible. The PMU will work with the Department of Health and Social Affairs (DHSA) to ensure gender equality is mainstreamed throughout the project on a national level
 - 4.4.2 <u>Annual Work Plans</u>: Development and implementation of Annual Project Work Plans will be undertaken by the PMU with support from DECEM and the NLMWG with input from other stakeholders as warranted. DHSA will be consulted to ensure the needs and barriers for women and youth participation is addressed in each State. Annual project work plans will be shared with project partners and implemented annually.
 - 4.4.3 <u>Prepare annual project reports:</u> The PMU will prepare an annual project report with support from DECEM and the NLMWG as well as other stakeholders as warranted. The annual project report will be the basis for the annual project package prepared in Output activity 4.3.1 for dissemination of project advancements and lessons learned.
 - 4.4.4 <u>Review and regular update project component plans, etc.</u> M&E plan, including results framework baselines, tracking tools, Theory of Change to subsequently adopt these findings to implement all aspects of the project. Reviews and updating (as needed) would occur annually and be led by the PMU with support from DECEM and the NLMWG. Documentation of reviews and updates will be provided in annual review reports. Updated component plans, etc. will be made available as completed
 - 4.4.5 <u>Conduct mid-term and final evaluation</u>: Evaluation will follow UNDP/GEF requirements and incorporate and adapt recommendations of MTR to revised project plans and monitor their implementation. Mid-term and final project reviews will be conducted through consultants contracted by UNDP in coordination with the PMU with support from DECEM and the NLMWG.

Partnerships:

102. The success of a project of this nature hinges on dynamic, strategic and multi-sector partnerships across a number of government ministries, agencies, NGOs and local communities. Hence, at the core of the project's strategy is to

identify and engage all relevant actors who will play key roles of providing technical support and extension, undertake management planning and interventions and ensure that adequate measures are in place to reduce the risk of the wetland degradation and unsustainable exploitation of wetland resources. The project will employ an approach of constant engagement and information sharing among the various partners, in particular local communities through their community organizations. Government agencies at the national local levels are critical to the development and implementation of the practices for protection and management of the land and wetlands, including in particular land and wetland degradation, sustainable agricultural and grazing practices, ecologically-friendly livelihoods, catchment protection and erosion control and management. At the local level, and communities and agriculture staff are important to facilitate the infusion of best conservation and management considerations at the ground level. The work of academia is essential for research, technical advice and innovation. Private sector is critical as possible partners for enhancing livelihood opportunities for local community members and thus can play salient roles in the success of the project. With its global knowledge networks and expertise, the technical guidance and advice from the wider UNDP (including UNDP Regional Center) will be essential. Regional and national institutions and experts will also be called upon when necessary to provide capacity strengthening and technical advice.

103. In addition, the project will ensure close linkages with existing and past national and regional projects to build on experiences, learning and best practices and seek efforts for sharing of knowledge management products and expertise. These are reflected in the Table 9 below:

Projects	Complementarities with the proposed project
Climate resilient food security for farming households across the Federated States of Micronesia project proposal to the Green Climate Fund (2021-2026) USD 9.4 million	The GEF 7 project will benefit from the lessons and best practices that focus on increasing the resilience of FSM's most vulnerable communities to climate change-induced food insecurity, including sustainable agricultural practices and developing climate-resilient agriculture value chains. Exchange visits, knowledge sharing and training programs can be shared between the two projects
FSM prioritized road investment management and enhancement project US\$40M (2021-28) World Bank	The World Bank project provides access to important social services like schools and health centers, as well as enabling vital economic activity through the movement of goods and services. This will enable benefit from ability for GEF 7 landscape communities to be able to services like health, and education
GEF-6 project Safeguarding biodiversity from invasive alien species in the Federated States of Micronesia ⁷⁷ (2020-25) - US\$13M	The project will start implementation shortly will provide lessons and best practices, technical support and training to help farmers and land users to address the prevention and management IAS, including identification of eradication and management measures that would be particular beneficial to address IAS related impacts on agriculture, wetlands and forestry in the GEF 7 pilot sites
GEF-FAO Proposed Blue Pacific Finance Hub: Investing in Resilient Pacific SIDS Ecosystems and Economics (USD 8.99 million)	The project is aimed at identifying finance investments (from public and private sources) that increase the resilience of Pacific coastal communities and ecosystems in LDCs. The knowledge generated from the ADB project would be useful to the GEF 7 project in FSM in helping identifying and mobilizing potential private sector finance in the Pacific region; defining investment options that ensure sustainable blue economic development, help with technology transfer and help build partnerships with notable private sector stakeholders in the Pacific Region. The FSM GEF project will ensure links with ADB's KM networks, lessons sharing platforms etc.

Table 9: Partnering projects and synergies with GEF 7 project

⁷⁷ https://www.thegef.org/project/safeguarding-biodiversity-invasive-alien-species-federated-states-micronesia

GEF-FAO proposed Enhancing food security and climate resilience in volcanic islands of the Pacific (USD 6 million)	The proposed ADB project aims to enhance water and food security and climate resilience, sustain ecosystem services and relieve pressure from over-exploited coastal aquifers. The ADB project learning will help identify lessons in relation to ground water management, monitoring as well as land use measures to enhance and demonstrate water resources and environmental benefits to address water and food security that will be useful for the GEF 7 FSM project. Efforts will be made to ensure that FSM benefits from south=south cooperation networks
GEF UNDP Building Resilience of Health Systems in Pacific Island LDCs to Climate Change (USD 17.85 million) 2020-2024	The proposed project is aimed at enhancing the capacity of national and local health system institutions, personnel and local communities to manage health risks induced by climate change variability and change. In particular, Component 4 of the project intends to enhance south-south cooperation fostering knowledge exchange, the provision of technical assistance and scientific advisory, and the integration of national health policy frames and related adaptation plans with ongoing NAP-related process. This is a particular aspect that needs to be also taken into consideration during the NAP process planned in FSM that could draw on lessons and procedures for ensuring that the critical factor of community health is integrated into the NAP process
PacWastePlus: Improving Organic Waste Management in Chuuk and Yap	This program is particularly important for application in the GEF 7 UNDP's four pilot sites as it would provide lessons and best practices to introducing composting programs for communities (with potential income generation opportunities) currently without garbage collection facilities that could result in pollution of wetlands. The project facilitates consultation with relevant stakeholders and local communities to identify and implement suitable organic processing programs.
NGOs/CSOs such as USDA NRCS, SPC, SPREP, TNC, FAO, MCT, CSP, CCS, ISTOP, YIST, KIST, CWC, WWF and CI	Collaboration with staff and personal of these NGOs/CSOs that operate in the field to make use of their technical skills to complement the limited skills available in the country

Table 10: Co-financing Table

Co-financing source	Co-financing type	Co-financing amount	Included in project results?	If yes, list the relevant outputs
Department of Environment, Climate Change	Public Investment	5,250,000	Ν	
and Emergency Management	In-Kind	3,500,000	N	
FSM Department of Resources and	Public Investment	10,000,000	N	
Development	In-Kind	4,000,000	Ν	
Pohnpei State Government	In-Kind	1,750,000	N	
Chuuk State Government	In-Kind	300,000	Ν	
Yap State Government	In-Kind	1,092,144	N	
Kosrea State Government	In-Kind	2,000,000	Ν	
Conservation Society of Pohnpei	In-Kind	1,600,000	Ν	
Micronesia Conservation Trust	In-Kind	4,000,000	Ν	
Total Co-Financing		33,492,144		

<u>Department of Environment, Climate Change and Emergency Management</u> (USD 5,250,000) Investment Mobilized for the following activities: (i) climate change adaptation support to local authorities; (ii) emergency coordination operations for disaster resilience; (iii) grant program to enhance local community resilience through adaptation projects, etc. Implemented with support from SPC.

<u>FSM Department of Resources and Development</u> (USD 10,000,000) Investment mobilized that includes support for enhancing food security of vulnerable households by introducing climate-smart agriculture practices that focuses on food security through traditional crops coupled with nutrient-rich vegetables, promotion of rainwater-harvesting systems and water conservation, and promoting resilient household livelihood opportunities, demonstrated success in bringing together crucial elements needed to reduce vulnerabilities and cope with disaster and climate extremes while embracing the traditional culture. It also will support investments in forest and fisheries management, agriculture, improved biosecurity measures (external and internal) and promotion of protected area management activities.

<u>Risks</u>:

104. Project risks, their overall rating and the mitigation actions required during project implementation are identified in Table 11. The assumptions on which these project risks depend are listed in the project's Theory of Change (Figure 2, with assumptions applied to the project indicators also described in the project Results Framework (Section VI). Risks are only shown if their rating is considered to be Moderate or High, with the exception of risks identified in the Social and Environmental Screening Procedure (SESP, Annex 5), all of which are included in Table 10. As per standard UNDP requirements, the Project Manager will monitor risks quarterly and report on the status of risks to the UNDP Country Office. The UNDP Country Office will record progress in the UNDP ATLAS risk log. Risks will be reported as critical when the impact and probability are high. Management responses to critical risks will also be reported to the GEF in the annual PIR.

Table 11 Description of project risks, impact and probability and mitigation measures

[1]: Only risks rated moderate or high are listed. All risks from the SESP are included.

[2]: Significance, rated low, moderate or high, is a measure of the impact and probability of risk on scales of 1-5.

Risk Description Risk Category [1]	Significance of Risk [2]	Mitigation Measures
		General Risks
Implementation Risk 1: Competing mandates and poor coordination between national government/state agencies/Departments, exacerbated by the federated arrangements of the FSM may disrupt project activities	Moderate	Proper coordination between national government departments and agencies and with and between the states enhances and sustains project progress that is aligned with agreed priorities. All relevant agencies have been engaged in project development and initial discussions on implementation arrangements commenced. DECEM will ensure proper coordination and management of stakeholders.
Implementation Risk 2: Reduced funding for the environment sector, limited human resources in government and competing priorities may impact project activities	Moderate	Human resources will be hired under this project to build government's capacity and the project will have a dedicated PMU housed within the Implementing Partner, DECEM. Staff recruited to build government's capacity may be absorbed by government once project ends. The project strategy will be aligned as far as possible to support the government's longer-term strategy for development, through a focus on SLM.
Implementation Risk 3: Local communities do not fully commit to project	Moderate	Local communities and individuals engage when they fully understand their roles and the associated benefits they will get from the initiative or project. Consultations and stakeholder engagement plan ensures that local communities and other stakeholders were involved in designing, co-creating and promoting the proposed project interventions/solutions, with any outstanding issues resolved during the design, planning

		and inception phases of the project. A grievance mechanism will be put in place to fully address any complaints.
Implementation Risk 4: Limited capacities of local stakeholders, including fishers, farmers, and other natural resource dependents ensure sustainable and appropriate use and management of natural resources that results in reduction of threat to endemic species and ecosystems	Moderate	The project will benefit from best practices of tested innovative approaches for community management of terrestrial, coastal and marine areas under local community governance mechanisms. These approaches will be innovative and build on existing tested practices as well as best practices available from other parts of the country or regionally. The support for improved livelihood measures will build adequate incentives to enhance local community participation in ensuring conservation outcomes.
Implementation Risk 5: Due to its complex and technical nature, the project could be difficult to implement and may be unable to lever significant transformational change	Moderate	An assessment was made of the levels of the project and number/size of demonstration landscapes in relation to the funding available as well as external factors and it was deemed that the design and scope was appropriate given the institutional constraints that operate in the country. Project partnerships and coordination with other initiatives and donors will be used to ensure efficient and cost-effective technical project design and implementation, including shared use of technical specialists and tools as far as possible.
Implementation Risk 6: The overall feasibility and likelihood of the long-term sustainability of the project might be constrained by the varied activities leading to the fragmentation of resources and impacts	Moderate	The design of project activities was made following an extensive review (and consultation) of institutional capacity, resources and skills to determine realistic targets and activities for project investment. On the basis of this, project design entailed (i) selection and focus of demonstration activities to ensure impacts and benefits to communities; (ii) planning at site level will be made in consultation with local communities and other stakeholders to ensure that these are meaningful and manageable within the community capacity; (iii) planning and implementation of on-the-ground activities to be made through existing community organizations than create new institutions; (iv) planning and implementation and extension provided to enable uptake, with the support of local agricultural, tourism, and forestry staff; (v) enhanced coordination along key line agencies to ensure that activities in the 4 demonstration sites are planned and implemented taking into consideration the human, time and financial resources at the disposal of each site); (vi) ensure that activities and expectations were realistic given the capacity and institutional structures within the country; (vii) ensure that efforts are directed at investments that are cost-effective, likely to succeed and provide direct economic benefits to local communities, avoid overlap and enhance collaboration with sector activities and build on what has already been done; (viii) regular monitoring investments on the ground to enable adaptive management, as and when necessary; etc. The project design includes significant level of technical oversight, extensive training and extension services to build capacity within the country.
		Social and Environmental Risks
SES Risk 1: Impacts to traditional rights or access to some land and resources.	Moderate	At the national level, the four states of the FSM include communities with a diversity of customs, customary laws, norms, cultural practices, languages and traditions meeting the broad UNDP definition of Indigenous Peoples. However, at the state level, the communities within each state are considered to be homogenous in language, culture and practices. This means that project benefits or impacts will not adversely affect indigenous people under the UNDP definition at the individual landscape level. For this reason project Aps are considered as a level community encompassing marginalised and

		vulnerable groups and individuals. Best practice will be used and FPIC will be integrated throughout project design and stakeholder engagement. An individual IPP is not required as FPIC is embedded in the project design and implementation.
		Strengthening or introducing SLM measures could restrict access to and use of resources by local communities, affecting livelihoods. This could include restriction of accessed/ used by disadvantaged/vulnerable groups. There is that chance that such new management plans and/or measures could restrict/amend current use of resources by communities, including potentially disadvantaged/vulnerable people. Additional assessment is required during the implementation phase as proposed sites are identified and management measures are further defined, in order to identify any proposed restrictions/alterations to access and use of wetland resources which may adversely affected some individuals, groups or communities. Such assessment will identify, through stakeholder consultation, which users/user groups might be affected, the magnitude and severity of any associated impacts, and measures to avoid, minimize, mitigate or manage such impacts will be developed and implemented. Changes to land use and management practices identified as having potential to entail such restrictions to access to resources will not be commenced until suitable, agreed (through FPIC) management measures are in place.
		Given that much of the land is in customary ownership and the majority of project activities will be undertaken on these lands, the free, prior and informed consent (FPIC) of customary landowners will be required for almost all activities. Integrating an inclusive and participatory planning process into activity design, encompassing FPIC, will ensure that sites selected for project activities have the broad support of all affected community members. As part of this, the activity design detailed in the ProDoc recognises that activities and associated management measures will be community driven and only implemented with broad community support. This community support will be established using FPIC principles and a GEDSI approach. Obtaining FPIC will be given highest priority during the implementation stages and should be aligned to raising peoples' understanding of their rights to the project interventions. There is no standard for obtaining FPIC in the FSM nor is there any national association of indigenous people, therefore, the design team during project implementation will implement global best practices to meet the three principles of FPIC: the right to be consulted; the right to participate; and the right to their lands, territories and resources. It will work with community leaders and with existing community groups formed for natural resource management to design and agree the process in each landscape for obtaining FPIC. This process is integrated into project design such that written FPIC is obtained prior to confirmation of the activity type and site.
SES Risk 2: Marginalization and discrimination of women and other marginalized or vulnerable groups		Women and other marginalized groups could face discrimination or lack voice within decisions, benefits and resources surrounding project design and implementation, leading to grievances or reprisals against those voicing them.
	Moderate	A gender specialist was hired to conduct a detailed assessment of specific local challenges and inequalities for women and other marginalized groups. This determined the roles of women, identify inequalities or vulnerabilities, cultural, social, religious, and other constraints on women's potential participation and any rights issues.
		Additional assessment is required during the implementation phase as proposed sites are identified and management measures are further defined, in order to determine the roles

		of women, identify inequalities or vulnerabilities, cultural, social, religious, and other constraints on women's potential participation and any rights issues.
		The key recommendations from the gender analysis have been captured in a Gender Action Plan and mainstreamed within the project framework, including the incorporation of age and sex-disaggregated data and gender statistics and specific measurable indicators related to gender equality and women's empowerment. Following on from PIF stage, gender and youth considerations have been integrated into project outcome targets. Implementation should aim to reduce gender inequalities and support rights for women in the demonstration landscapes through capacity development and female participation, with the support of community leaders and local governments.
		Both women and men will be provided with equal access to advice and opportunities, including in project governance mechanisms. Mechanisms will be established to encourage and enable people from all marginalized groups to take part in project design and implementation. Knowledge sharing platforms will be developed in order to ensure environmental advice and project planning is distributed to all members of the community.
		The goal for gender-rights development within the project will be Gen 2, following the UN Markers meaning that the project will promote gender equality significantly.
SES Risk 3: Duty barer lacking capacity to implement project activities		Duty bearers may not have the capacity to uphold their duties within the project. This risk has been rated Moderate as the capacity of duty bearers will need to be improved and sustained on an ongoing basis to ensure project success.
	Moderate	A capacity assessment of national and provincial stakeholders has been undertaken under PPG to understand current challenges relating to capacity to uphold duties, rights and safeguards, including consequences of the COVID-19 pandemic.
		Based on the findings of the capacity assessment, training and capacity building have been integrated into project design in order to support duty bearers (particularly members of the Project Steering Committee, project staff and consultants and government officials) so they understand their responsibilities for human rights. Budget to address gender/ safeguards issues have been allocated as necessary such that technical support and training on gender and safeguards is provided to the PMU/Project Steering Committee at start of project. A monitoring and evaluation process will monitor the development of capacity within the project team and stakeholder groups.
SES Risk 4: Impacts to physical and cultural heritage	Low	The proposed project may result in interventions in the demonstration landscapes that would potentially adversely impact sites, structures, or objects with historical, cultural, artistic, traditional or religious values or intangible forms of culture (e.g., knowledge, innovations, practices). The FSM boasts a wealth of historical and traditional sites, many of which are of great significance to the people. Few sites have formal preservation or management in place, and many sites are not documented. Traditional agricultural practices and products (including yam, sakau, breadfruit, taro and pigs) are important for

		ceremonial purposes and gifting which helps cement social bonds. The proposed integrated management plans and SLM interventions to tackle land degradation proposed under Component 3 may impact cultural sites or intangible forms of culture. This risk is rated as Low as it can be easily avoided, managed or mitigated.
		During the identification of intervention sites, this risk will be assessed in detail, identifying risk areas and vulnerable cultural heritage in each demonstration landscape. If found to be necessary, guidelines for safeguarding cultural heritage will be developed at the start of the project and staff, consultants and government officers will be trained around risks to cultural heritage. This is reflected in the ESMF and in the project's design as feasible and appropriate.
SES Risk 5: The introduction of incentives and support for sustainable land management or improved livelihoods could cause conflict if not implemented carefully and managed equitably or may support employment that fails to comply with national		During the implementation phase, a livelihoods assessment will be conducted to assess the current socio-economic relations within the demonstration landscapes, use of natural resources and any incentive mechanisms, based on thorough consultations with local communities. These must consider the needs and preferences of the community and ensure that they fully understand the costs and benefits of potential project interventions. This should take into account any ongoing reported consequences of the Covid-19 pandemic, e.g., on cash flow and food security.
and international labour standards, leading to grievances or reprisals against those voicing them	Low	Financial incentive mechanisms and support for enhanced / more diverse livelihoods will be planned so as not to negatively affect existing economic systems, but as additional benefits to the community as a whole, with emphasis on empowering and including marginalized groups. Mechanisms will be developed to be transparent and community owned. They will address both the negative impacts of the Covid-19 pandemic on the viability of livelihood options, and also any opportunities that may arise from the pandemic to support more sustainable and resilient livelihoods. All measures will be incorporated into a Livelihoods Action Plan to be prepared in Year 1.
SES Risk 6: The effects of climate change such as flooding, droughts and storms could impact project areas and activities and vulnerable communities.	Low	Planned project activities will contribute towards the mitigation of and adaptation to climate change impacts on the vulnerability of communities through improved natural resources management and avoid the potential for maladaptive practices. All PPG proposed activities consider climate vulnerability by adopting local and expert advice over areas most at risk as well as communities or livelihoods that could be affected.
		Project design will take into account the results of climate assessments and fully integrate climate change mitigation and adaptation measures through sustainable land management, livelihoods, capacity building and awareness. Demonstrations on the ground will show how avoiding, reducing and reversing land degradation can be a key tool in addressing climate change impacts.
SES Risk 7: The project could have unintended impacts on valuable natural habitats, globally threatened or endemic species, or production systems if	Low	While this risk and likely impacts can be understood at PPG phase, the specific interventions and sites have not yet been identified therefore it is not possible to assess its the full extent of this risk in the PPG phase. However, the risk is considered low through implementation of the ESMF during activity design. Assessments triggered by the ESMF will consider impacts particularly relating to the demonstration sites and to proposed SLM and livelihoods enhancement measures, including policy and legislative changes.

activities are improperly		
executed		The project design will ensure that new and existing threats to biodiversity from land degradation are avoided, reduced and reversed. Mainstreaming of SLM into particularly the agriculture and infrastructure sectors under Component 1 will follow the Strategic Environmental and Social Assessment (SESA) approach. The SESA should be applied to all new policies and legislation/regulations prior to approval by Government and this will be built into detailed project design and budgeting as needed. Under demonstration activities in Component 3, the project document specifically states that no non-native species will be used for SLM, re-forestation or for livelihoods development. Control methods for IAS (if proposed) will require prior approval by Government and will take place under clear SOPs and management plans, with consideration of potential environmental and social impacts. Measures such as management or rehabilitation plans will ensure compliance with regulations and follow international best practices to avoid negative impacts on natural habitats, globally threatened or endemic species, or production systems. This is reflected in the PPG ESMF, and in the project's design to the extent appropriate and feasible.
		This risk is rated as Low as impacts can be easily avoided, managed or mitigated.
SES Risk 8: Measures to address unsustainable agriculture and infrastructure may create hazardous waste or cause environmental pollution. Due diligence also needs to be completed to		During the implementation phase SLM experts to cover both the agriculture and infrastructure sectors will be hired to assess this risk in detail. The analysis will consider existing and proposed environmental regulations, standards and guidelines and their application as well as knowledge of standard operating procedures and capacity to follow them.
ensure there are no enhanced safeguards risks from working with any private sector organizations with whom the project may cooperate to support LDN/SLM activities.	Low	Potential private sector partners and related activities (including co-financing) will be confirmed during the implementation phase. Each will be subject to completion of due diligence, including use of UNDP Private Sector Risk Assessment Tool.
		If found to be necessary, the assessment will recommend the development of a targeted plan for reducing the impacts of measures to address unsustainable agriculture and infrastructure, including standard operating procedures to reduce environmental and social risks (to be prepared in Year 1 of the project).
		Partnership agreements will be detailed and established with each private sector partner prior to the start of any partnership working. Such agreements will be fully compliant with UNDPs private sector partnerships policy including any conditions according to the findings of UNDP Private Sector Risk Assessment Tool.

- 105. Project development, the project was reviewed using UNDP's social and environmental screening procedure (SESP). The analysis identified a range of potential social and environmental impacts associated with the project activities. The SESP report (Annex 5) details the specific environmental and social risks that apply.
- 106. The UNDP's Social and Environmental Screening Procedure (SESP) has resulted in an overall "moderate" risk rating for the project. According to the 2022 SESP Guidance Note, a project is considered to have "moderate" social and environmental risk when it "includes activities with potential adverse social and environmental risks and impacts that are few in number, limited in scale and largely reversible and can be identified with a reasonable degree of
certainty and readily addressed through application of recognised good international practice, mitigation measures and stakeholder engagement during project implementation. Moderate risk projects range fromto those where the full extent of the limited impacts in unclear and further assessment and management planning is required.

107. The Project's design has integrated the requirements triggered by the UNDP Social and Environmental Standards (SES) in order to ensure that any potentially adverse effects can be avoided or mitigated during implementation, and that the anticipated positive social and environmental outcomes are achieved. Nevertheless, there are some specific project activities and locations that will not be fully defined until the Project is initiated. Therefore, the project's ESMF (Annex 9) establishes a framework that guides the screening and categorization, level of impact assessment, required institutional arrangements, and processes to be followed for components or activities of the project that will be further specified during project implementation. A summary of the risk significance under each SES principle and standard, and the project-level safeguard standards triggered by the relevant project interventions/activities, are shown in Table 12 below.

Table 12: Summary of safeguard standards triggered based on screening conducted during project preparation

Overarching Principle / Project-level Standard	Triggered	Risk Level
Principle 1: Human rights	√*	Substantial
Principle 2: Gender Equality and Women's Empowerment	√*	Moderate
Principle 4: Accountability	√*	Moderate
Standard 1: Biodiversity Conservation and Sustainable Natural Resource Management	✓	Moderate
Standard 2: Climate Change and Disaster Risks		
Standard 3: Community Health, Safety and Security		
Standard 4: Cultural Heritage	✓	Moderate
Standard 5: Displacement and Resettlement	✓	Moderate
Standard 6: Indigenous Peoples	1	Substantial
Standard 7: Labour and Working Conditions		
Standard 8: Pollution Prevention and Resource Efficiency	✓	Moderate
Number of risks in each risk rating category		
High	-	
Substantial	1	
Moderate	9	
Low	-	
Total number of project risks	10	
Overall Project Risk Categorization	Substantial	

Overarching Principle / Project-level Standard	Triggered	Risk Level
Number of safeguard standards triggered	8**	

* - SES Principles are triggered for all projects

- ** Includes the SES Principles
- 108.As a consequence of the initial project SES categorisation, an ESMF was developed (Annex 9) as part of project preparation. The ESMF identifies the steps required for detailed assessment of the project's potential social and environmental risks, and for preparing and approving the required management plans for avoiding, and where avoidance is not possible, reducing, mitigating and managing identified adverse impacts. It also sets out the additional safeguards measures that apply to the project during the inception phase, including but not limited to:
 - i. Using a **Gender Equity, Disability and Social Inclusion (GEDSI)** approach to involving planning support, policy advice and reform, and/or capacity building;
 - ii. **Screening** of project activities and specific interventions/outputs not yet fully specified, using the SESP checklist, to ensure that associated impacts are adequately managed;
 - iii. Developing **Environmental and Social Management Plans (ESMP)** for proposed activities within demonstration landscapes;
 - iv. Ensuring adequate consultation through **Free Prior and Informed Consent (FPIC)** to achieve consensus with affected stakeholder.
- 109. The relevance of the currently identified risks may vary across demonstration landscape proposed activity sites, and the significance or likelihood of the risks or impacts identified by the current SESP will not necessarily be uniform across all locations. Further screening is required to identify site-specific risk significance, and to effectively target any required further impact assessment or management.

Climate risk screening

110. The following climate risk screening has been updated at PPG stage to ensure that the fully designed project will be resilient to shocks, and to ensure transformation and durability of GEBs in the face of ongoing climate change. (Refer Annex 19 for Climate Risk Assessment)

Key aspects of the climate change projections/scenarios in the FSM

- 111. In the absence of comprehensive information and scenarios at national level, a regional summary of climate changes, projections/scenarios and likely impacts has informed this risk assessment⁷⁸. Region-wide, climate trends to date include:
 - Average annual temperatures have increased at an average rate of 0.18°C per decade since 1961, with the number of hot days and hot nights increasing
 - Sea level rise is around 2-4 times the global average, likely due primarily to natural cyclic phenomena, such as ENSO. Average sea levels have risen 10-15 cm regionwide
 - Sea-surface temperatures have increased at a rate of between 0.07 and 0.23°C per decade since the 1970s, with variability across the region
 - While the overall frequency of tropical storms has remained level, occurrence of major tropical storms (Category 4 and 5) has generally increased.

⁷⁸ USAID. Climate risk profile of the Pacific Islands. 2018.

- Projections are that:
- Broadly across the region, an increase in average annual temperature of around 0.6°C-1.4°C by the 2050s is likely with increase in the number of hot days and hot nights.
- Average annual rainfall is expected to increase slightly across most of the region, likely with more extreme wet seasons, extreme rainfall events, and floods. Rainfall patterns are expected to become less predictable, and with more frequent and intense extreme events, including storms and droughts.
- Sea levels are likely to rise between 17 and 38 cm by 2050, though not uniformly across the region. They are expected to rise by at least the global average projection of over 1 meter by 2100
- Sea surface temperatures are expected to increase by 0.9°C-1.4°C by the 2050s. Tropical cyclones are expected to decrease in frequency, but increase in intensity
- Key impacts are predicted as follows:
 - <u>Coastal Zones</u>: Saltwater intrusion into habitats, loss of ocean biodiversity, damage to coastal infrastructure
 - <u>Agriculture</u>: Decreased crop yield and food security, increased drought frequency/duration, groundwater salinization
 - <u>Health</u>: Decreased water quality and availability, decreased nutrition and food security, shifts in infectious disease patterns
 - <u>Livelihoods and Tourism</u>: Decreased economic output, reduced interest in ecotourism, damage to coastal ecosystems
 - <u>Water resources</u>: Salinization of drinking water sources, decreased water availability for crops, reduced hygiene and sanitation
 - <u>Energy and infrastructure</u>: Increased energy costs, damage to key infrastructure, decreased economic output

How the climate scenarios are likely to affect the project, during 2021-2050

112. Climate change is therefore a significant threat to ecosystems and to the livelihoods, wellbeing, culture and survival of islanders throughout the FSM, compounding the effects of land degradation. As climate changes and sea levels rise and severe weather events become more frequent, the country will become more vulnerable to risks and disasters unless effective adaptation and mitigation measures are taken. The national and state governments have recognized these and other challenges and initiated a series of policy reforms to ensure that development is more inclusive, resilient and sustainable, leading to some recent, progressive environment-related policies and strategies. The over-arching FSM Strategic Development Plan, 2004-23 and the related FSM 2023 Action Plan outline the challenges and ambitions for achieving sustainable development, mainstreaming environmental considerations including climate change into national policy and planning. The nation-wide Integrated Disaster Risk Management and Climate Change Policy (2013) and Joint State Action Plans (JSAPs) demonstrate the great importance attached to increasing FSM's adaptive capacity to adjust to climate change. The Agriculture Policy 2012-2016, the Infrastructure Development Plan (IDP) 2016-25, and the National Biodiversity Strategy and Action Plan (2018-23) all recognize the need to increase resilience to climate change through adaptation and mitigation measures and this project will work in support of this overall national climate agenda.

Risk	Rating	Mitigation Strategy
Project outcomes are at risk because of climate change	Moderate	Project activities have been developed in line with national land management and climate plans/frameworks/ actions/agendas, ensuring they are cognizant of and resilient against climate threats, thereby supporting FSM's efforts in enhancing the abilities to adapt to such risks. Activities have been designed with a climate lens applied and will be conducted with readiness to adapt management should unforeseen impacts arise that affect project implementation. Project activities will be planned and executed efficiently to ensure that issues are mitigated, and experienced options remain for adaptive strategies.

Table 13: Climate Risk Assessment and mitigation measures

Risk	Rating	Mitigation Strategy
Climate sensitivity has not been adequately addressed	Low	Climate sensitivity is applied to all activities to varying degrees. This document has been developed in collaboration and consultation with key stakeholders who hold significant knowledge/experience relating to climate/disaster action and mitigation. Hence, climate sensitivity is believed to have been applied comprehensively. Furthermore, project activities aim to enhance the country's ability to respond to climate risks and mitigate its vulnerability and sensitivity to climate threats.
Resilience practices and measures do not address projected climate risks and impacts adequately	Moderate	Strong consultation and collaboration between various stakeholders, including Government agencies, CSOs and the general public will ensure that project activities adequately address national goals and interests, including mitigation against climate risks and impacts. This collaborative and inclusive approach is already underway with inclusion of the key stakeholders contributing to the development of the project. This support will continue throughout project implementation.
There is inadequate technical and institutional capacity and information to address climate change	Moderate	Capacity building forms a core part of project activities, and it will include a climate lens throughout to ensure these considerations are sufficiently included. Strong collaboration with national and regional partners will also ensure the collective intellectual and technical capacities of FSM and the Pacific region are harnessed and maximized in response to climate threats and impacts.

Stakeholder engagement and south-south cooperation:

- 113. During the PPG phase, the Project objectives, and potential activities/interventions were introduced to all the identified stakeholders, including local communities at demonstration sites, municipal, State and national agencies, and private sector representatives. Extensive field consultations were undertaken to the four demonstration sites. The project team consulted with potentially affected persons/stakeholders. A full list of stakeholders engaged during his process has been recorded via attendance lists.⁷⁹
- 114. The Project also has an overall Stakeholder Engagement Plan (Annex 8), whose ultimate purpose is to ensure that all stakeholders participate in the Project implementation, including their contributions to assess potential social and environmental impacts and the development of adequate management measures. If necessary, the Stakeholder Engagement Plan will be updated during Project implementation, with special considerations of incorporating any relevant element(s) related to improving engagement of vulnerable groups, women and youth.
- 115. The project will develop a Communication and Knowledge Management Plan in the early part of project implementation. The objective of this plan will be: (a) to reach out to the project's main stakeholders, including in particular local communities to inform them about the project and the expectation of their basic roles and responsibilities; (b) to take advantage of their experience and skills; and (c) to secure and safeguard their active participation in different project activities to reduce obstacles in its implementation and in its sustainability post-completion. The approach is based on the principles of fairness and transparency in selection of relevant stakeholders and, through consultation, engagement and empowerment, ensure: (i) better coordination between them from planning to monitoring and assessment of project interventions; (ii) access to relevant information and results; accountability; (iii) application of grievance redress mechanism if necessary; and (iv) sustainability of project interventions after its completion.

Identification, Roles and Responsibilities of Stakeholders:

⁷⁹ See Annex 8 of the ProDoc, (Stakeholder Engagement Plan)

116.Stakeholders are identified in Annex 8 of the UNDP Project Document, along with their potential roles and responsibilities. The Communication and Knowledge Management Plan will identify goals and guiding principles, target audiences, community needs, and tools and key messages. The following initiatives below will be taken to ensure participation of stakeholders in project activities.

Project inception workshop:

117. Project stakeholders will participate in the multi-stakeholder inception workshop within three months of the start of the project. The purpose of this workshop will be to create awareness amongst stakeholders of the objectives of the project and to define their individual roles and responsibilities in project planning, implementation and monitoring. The workshop will be the first step in the process to build partnership with the range of project stakeholders and ensure that they have ownership of the project. It will also establish a basis for further consultation as project implementation commences. The inception workshop will address a number of key issues including: assisting all partners to fully understand and take ownership of the project; detail the roles, support services and complementary responsibilities of project partners in terms of implementation of R2R planning and management; and discussion of the roles, functions, and responsibilities within the project structure, including reporting and communication lines, monitoring and conflict resolution mechanisms.

Awareness and Engagement Strategy and Action Plan:

- 118. This Plan will facilitate improved awareness and engagement of stakeholders (in particular local communities) of the project and its contents; and it includes details on best practices to use with particular stakeholder groups. The project will regularly review and update the Plan to ensure that all stakeholders are informed on an ongoing basis about the project's objectives, activities, progress, and opportunities for involvement. The project will develop and maintain public pages and other locally adaptable communication means (Output 4.1) for sharing and disseminating information on sustainable land, marine, biodiversity and ecosystem conservation, good agricultural and fisheries practices, marine and coastal resource use and waste management practices, IAS prevention and management. Activities in the Communication and Knowledge Management Strategy to engage stakeholders and stakeholder groups include:
 - Quarterly meetings with key stakeholders. On a quarterly basis, DECEM will hold meetings that involve key
 stakeholders to discuss achievements, challenges faced, corrective steps taken, and future corrective actions
 needed for the implementation of planned activities. Results-based management and reporting will be
 informed by stakeholder inputs during such meetings.
 - Sharing progress reports and work-plans. Copies of annual and quarterly progress reports and work plans will be circulated to stakeholders to inform them about project planning, implementation and outcomes, as well as through public forums, including web based.
 - Participatory approach for involving local communities. Such an approach will be adopted to facilitate the participation of local communities, either as a group or through their local community organizations, including men's, women's, and youth groups in the planning and implementation of the project activities. Facilitation training for state planning teams will be supported. To ensure participation of local communities, the project will develop Memorandum of Understanding (MOU) with community groups or their institutions before implementing key project activities.
 - Stakeholder consultation and participation in project implementation. The national awareness and engagement plan will be developed and implemented immediately and reviewed at quarterly meetings with stakeholders to assess its effectiveness.

Table 14: Stakeholder Engagement Plan

Stakeholder	Roles and Responsibilities / Mandate	Engagement During Implementation		
Government Entities				
Department of Environment, Climate Change & Emergency Management (DECEM)	Mandate includes environment protection, climate change and disaster management, waste. Houses the GEF Operational Focal Point and focal point for UNCCD Secretariat of the President's Council on Climate Change and Sustainable Development	Project Executing Agency. Coordination of activities with other national partners and though its state focal agencies. Attending/chairing meetings, hosting the PIU and providing the secretariat and Chair for the Project Steering Committee. Arranges meetings for the President's Council on CC&SD that is chaired by the Vice President. All Components and Outputs.		
Department of Resources & Development (FSM R&D)	Mandates include: Forestry Fisheries, Agriculture, Biosecurity services, Coastal fishery, Protected Areas Network and Tourism	Key partner for all aspects of SLM and coordination of activities with its state counterparts, attending / organizing meetings.		
President's Council on Climate Change and Sustainable Development	Advise the President on climate change and sustainable development issues, with oversight of global environmental responsibilities and obligations including UNCBD, UNCCD and UNFCCC.	Can influence and garner political support for the project. This Council is part of the proposed project management structure.		
Department of Health and Social Affairs	Lead on gender issues, and engages CSO partners focusing on youth, women and environment in each state.	Ensure gender equality is mainstreamed throughout project Outputs: 4.4		
Department of Education	Policy and coordination for schools and educational programs. Provision of training on environmental studies.	Support curriculum development on environmental studies and educational awareness activities. Output: 4.1		
Department of Transportation, Communications and Infrastructure	Manages all interstate and international sea and air transportation, regulates the radio communication spectrum, and implements, coordinates, and manages all capital projects funded by the FSM Congress	Outputs: 1.1, 2.4, 3.1, 3.2, 4.1, 4.2, 4.3		
Office of Overseas Development Assistance and Compact Management	Oversight and States-national coordination functions of overseas development assistance funds.	Coordination between existing and pipeline projects to maximize project potential. All Components and Outputs.		
College of Micronesia (COM-FSM)	COM-FSM operates through its Cooperative Research & Extension Services on campuses within each state, with funding from National and State governments, and US Department of Agriculture. Key program areas are aquaculture, small island agricultural systems and food, nutrition and health.	Key partner for capacity development and awareness raising in the farming sector. Outputs: 2.4, 3.2, 3.3, 4.2, 4.3		
FSM Telecommunication Corporation and Pohnpei	Government-owned broadcasting on TV, radio and internet.	Implementation support through awareness		

Public Broadcasting Corporation					
State Governments (Analogous offices in each State)					
States Attorney General's Office	Legal review and enforcement of policies and regulations on natural resource management.	Reviews/enforcement of existing laws. Draft new legislations			
State Governments and Governor's Association	States are responsible for natural resource management within state boundaries.	Involve the Governor and personnel in multiple aspects of the project. Outputs: 1.3, 3.1			
States Council of Traditional Leaders	Community leadership.	Endorsement of activities (usually at community, island wide level).			
Local governments/ municipalities	FSM States are subdivided into 76 municipalities, with responsibilities for environmental management. Municipalities are increasingly partnering with State, NGO, and community actors to enforce NRM regulations.	Key stakeholder for implementation Outputs: 3.1, 3.2, 3.3			
	Chuuk State				
Chuuk State Environment Protection Agency	Responsible for environmental protection, including law enforcement, awareness, monitoring, solid waste control, control of water and wastewater. Focal point for environment and climate change activities.	Focal point of DECEM for project execution at state level. Coordination with other state-level partners All Components and Outputs			
Chuuk State Department of Agriculture and Forestry	Focal point for SLM activities in Agriculture, livestock and forestry	Key partner for SLM implementation at state level.			
Chuuk State Department of Marine Resources	Lagoon and reef protection and monitoring	Outputs 1.1, 1.2, 1.3, 1.4, 3.1, 3.2, 4.2			
Chuuk Department of Administrative Services	Administers Chuuk State budget.	Coordination of state agencies to prevent budget duplication and ensure compliance.			
Chuuk Department of Transport and Public Works	Responsible for public works, seaports, airports and landfill management	Output 4.4 Outputs 1.1, 1.2, 1.4, 2.4, 3.1, 3.2			
	Kosrae State				
Kosrae Island Resource Management Authority (KIRMA)	Semi-autonomous agency; focal point for biodiversity and climate change. Its scope covers environmental protection, marine conservation and surveillance, forestry and GIS-related programs.	Focal point of DECEM for project execution at state level. Coordination with other state-level partners All Components and Outputs			
Kosrae Department of Resources and Economic Affairs	Oversees marine and land resource management. Divisions responsible for agriculture and land, (model farming, export promotion programs, sustainable livelihoods) and fisheries development in support of sustainable livelihoods and marine surveillance unit.	Key partner for SLM implementation at state level. All Components and Outputs.			
Kosrae Infrastructure Policy Implementation Committee (KIPIC)	Lead the planning and implementation of infrastructure policies in Kosrae	Outputs 1.1, 1.2, 1.4, 2.4, 3.1, 3.2			

Kosrae Department of Public Works	Responsible for waste and landfill management	Outputs 1.1, 1.2, 1.3, 1.4, 2.4, 3.1, 3.2, 4.2
Kosrae Department of Fisheries	Lagoon and reef protection and monitoring	Outputs 1.1, 1.2, 1.3, 1.4, 3.1, 3.2, 4.2
Kosrae Conservation and Safety Organization	Protection of natural resources, comprising representatives of government and non-governmental organizations, police and Municipal conservation officers. Collaboration to enforce existing legislation and regulation for natural resource management in general	1.2, 3.1, 3.2, 4.1, 4.2
	Pohnpei State	
Pohnpei State Environment Protection Agency (EPA)	Semi-autonomous agency and focal point for climate change and environmental protection. Oversees waste recycling and waste management.	Focal point of DECEM for project execution at state level. Coordination with other state-level partners All Components and Outputs
Department of Resources & Development	Responsible for Economic Affairs, Agriculture, Forestry and Marine Conservation	Key partner for SLM implementation at state level.
Department of Land and Natural Resources	Planning, organization, budgeting, staffing, monitoring, and evaluation of statutory and regulatory mandates on State land system	Outputs 1.1, 1.2, 1.3, 3.1
Department of Public Safety	Responsible for safeguarding and protecting the lives and property, keeping the peace, and assuring compliance with all applicable laws	Regulation and enforcement for terrestrial and marine areas Outputs 1.2, 1.4, 3.1, 41., 4.2
Soil and Water Conservation Board	Promotes soil and water conservation by preventing erosion and improving the use	Outputs 3.1, 3.2, 3.3, 4.1, 4.2
Pohnpei Office of Fisheries and Aquaculture	Responsible for health of the inshore marine ecosystem, fisheries management and aquaculture	Outputs 1.1, 1.2, 1.3, 1.4, 3.1, 3.2, 4.2
Pohnpei Utilities Corporation	Engineering and planning, power, water and wastewater	Outputs 1.1, 1.2, 1.4, 2.4, 3.1, 3.2
Department of Transportation and Infrastructure	Responsible for landfill management	Outputs 1.1, 1.2, 1.3, 1.4, 2.4, 3.1, 3.2, 4.2
	Yap State	
Yap State Environment Protection Agency	Semi-autonomous environment protection agency with responsibilities for awareness and law enforcement	Focal point of DECEM for project execution at state level. Coordination with other state-level partners
Yap State Department of Resources & Development	Division of Agriculture & Forestry (DAF) covers agriculture, livestock, forests. Also has Division of Land Resources (responsible for land registration and GIS) and Division of Marine Resources Management	All Components and Outputs Key partner for SLM implementation at state level. All Components and Outputs.
Budget	Responsible for aligning departmental/divisional activities with State plans and priorities. Coordinates state-wide planning for coastal and terrestrial management.	Key partner for landscape level planning Outputs: 1.1, 1.3, 3.1, 4.4

Yap State government Department of Transport and Public works	Responsible for public works, infrastructure, sea ports and airports, oversees landfill management	Outputs 1.1, 1.2, 1.4, 2.4, 3.1, 3.2, 4.2
NG	Os, regional/international organisations, bi-lateral partners	s and private sector
Nationwide NGOs	Island Conservation, Micronesia Catholic Relief Services, Micronesia Productions. FSM Women's Council	Key stakeholders for ensuring grassroots involvement in needs assessment, planning implementation All components and Outputs
State-level NGOs	Island Food Community of Pohnpei, Conservation Society of Pohnpei, Chuuk Conservation Society, Chuuk Youth Council, Chuuk Women's Council, Ship-Hoops (Chuuk), Yonkgu Association (Chuuk), Kosrae Women's Association, Kosrae Women in Farming, Kosrae Farmers Association, Kosrae Youth Development Association, Yela Environmental Landowners Authority (Kosrae), Pohnpei Women's Council, Yap Community Action Program (YAPCAP), Yap Fusion, Yap Locally Managed Area Network, Yap Institute of Natural Science, Yap Women's Association.	Key stakeholders for ensuring grassroots involvement in needs assessment, planning implementation, raising awareness Outputs: 3.1, 3.2, 3.3, 4.1, 4.2
Regional/International	Micronesia Conservation Trust (MCT), Secretariat of the Pacific Regional Environmental Program (SPREP), The Nature Conservancy – Micronesia, Pacific Resources for Education and Learning (PREL), Local Managed Area Network, Pacific Community (SPC), Pacific Invasives Learning Network (PILN), Pacific Regional Invasive Species Management Support Service (PRISMSS), Pacific Islands Managed and Protected Area Community (PIMPAC), Regional Invasive Species Council (RISC), Micronesia Challenge Regional Office.	Key partners for technical assistance and knowledge sharing Outputs: 4.2, 4.3
UNDP including: Joint Presence Office (Pohnpei), Regional Office (Fiji) and UNDP/GEF RTA	Key development partner of government.	GEF Agency All Components and Outputs and project oversight
US Department of Agriculture (Natural Resources Conservation Service and Forest Service)	Through USDA Cooperative Agreement, these two US Federal Agencies provide technical assistance through grants, conservation planning and field support on forestry and soil conservation.	Technical support Outputs: 1.1, 3.1, 3.2, 3.3, 4.2, 4.3
Business/Private Sector	Farmers (small and large), traders and local food vendors, processors, exporters/importers. Farmers Associations and cooperatives, State Chambers of Commerce, Small Business Development Centers (in each State), Media e.g. Kaselehlie Press, C4Life Initiative, Vital's Coconut for Life project. National/state infrastructure organizations (utilities (e.g., Vital - national energy supplier), FSM Telecom), construction companies.	Improving environmental performance to reduce land degradation; enhancing livelihoods; and potentials to support implementation Outputs: 1.2, 2.3, 2.4, 3.1, 3.2, 3.3

South-South Cooperation

119. While this project is specific to FSM, it has implications for the rest of the Pacific that is extremely vulnerable to the

continued progression of unsustainable land, marine and resources uses. The project will collaborate with a variety of existing Pacific partnerships and initiatives and with other donor-funded projects (as summarized in Section IV Part ii. Partnerships), including GEF-financed UNDP-supported projects in the Pacific Islands, Samoa, Solomon Islands, Fiji, Federated States of Micronesia (FSM) and others. This project will seek to collaborate with the other projects to ensure knowledge exchange and sharing of best practices and lessons learned, as detailed under Output 4.3, and other key technical outputs where there are good opportunities for technical exchange and sharing of experiences and expertise. Opportunities for site exchange visits and knowledge exchange on key technical issues will also be explored, using both virtual and face-to-face formats as opportunities arise. The project will also support South-South cooperation through strengthening FSM's participation in Pacific regional initiatives. Specific activities relating to this have been included under Output 4.3.

Gender equality and Women's Empowerment:

- 120. FSM's National Gender Policy (NGP) 2018 2023, was endorsed by the FSM Government in May 2018 and is intended to "promote gender equity, equality, social justice and sustainable development in the country". The NGP is aligned with: the goals and objectives of the National Strategic Development Plan 2004-2023; the Pacific Leaders Genders Equality Declaration (PLEGD); the Convention on the Elimination of all forms of Discrimination against Women (CEDAW), the Convention on the Rights of People with Disabilities, and the mandate of the Department of Health and Social Affairs and State Offices responsible for Social Services. The NGP commits the FSM Government to take action in the following six areas:
 - Women's advancement
 - Gender mainstreaming
 - Strengthening women's programing
 - Strengthening youth organizations programming and leadership
 - Establishing social inclusion and social services for the elderly, and
 - Addressing the economic, political, social and legal needs of people with disabilities and those with special needs.
- 121. In FSM, among those who participate in the subsistence economy, gender is a major organizing principle in the division of labor. Women are the primary child-care providers and gardeners. They are responsible for many domestic chores including meal preparation and laundry. Women also harvest subsistence produce, weave mats, tend livestock, glean shellfish, and fish inshore. Men are the primary builders and carpenters. They do much of the heavy labor associated with subsistence horticulture and conduct the more dangerous fishing activities beyond the reef. High status positions in religious and traditional political hierarchies are primarily held by men, although women's church organizations provide a separate system of ranking among the women in some societies. Participation in the market economy has blurred the strict demarcation of gender roles associated with subsistence production. Across the FSM, 52 percent of females 15 years of age and older participate in the cash economy compared to 66 percent of males. Men still hold the higher status jobs in government, but the increasing frequency of female employment in the labor force often requires men to perform domestic tasks traditionally performed by women.
- 122. With the exception of Yap and a few coral atoll societies in Pohnpei, Micronesian societies emphasize matrilineal descent. Women, therefore, are the channels through which identity, titles, land rights, and property are acquired. This provides women with a level of status that is not found in more patriarchal societies, allowing women to exercise considerable influence over the conduct of domestic affairs, and even the allocation of use rights to land. Men typically control the political and economic affairs in the public sphere and have ultimate authority over domestic decisions, but the complementarity of tasks provides males and females with valued roles in society. The shift towards a market-oriented economy, however, has unsettled traditional gender relations. In many societies, the patrilineal emphasis of Western cultures is eroding matrilineal inheritance practices, while greater female participation in the cash economy is challenging male roles and diminishing the complementarity of tasks performed by males and females

- 123. In terms of gender mainstreaming across various government agencies, slow progress has been made. The slow uptake of gender mainstreaming has been attributed to the traditional roles of women as carers and nurturers and not visible in the formal economy or decision-making arena. This, however, is changing with time, with a growing commitment to include women. There are different levels of understanding of gender equality, with a passive ignorance within communities and, according to national officials within the Department of Social Affairs, 'no conscious intent to exclude or aggressive attempt to include' women. While there is political will at the national level, there is, in general, not enough action. Gender sensitization has been done in FSM with assistance provided by the NGO sector, but there is room to do more, combined with adequate allocation of resources. Technical capacity is limited, and there is a need for more people with appropriate skills and abilities to conduct gender mainstreaming within sectors.
- 124. In terms of women's role in specific sectors, analysis seems to largely exist in the fisheries sector⁸⁰. On Kosrae, women have traditionally been regular providers of seafood for the family, through netting, handlining and reef gleaning activities. Men's contribution was mainly in catching those species that required fishing beyond the reef in boats or in diving or spearfishing. In Yap, fishing is not considered as such an important activity for women, but women are involved in many aspects of fisheries from gleaning, processing and marketing. This is similar to Chuuk and Pohnpei, where women tend to be more involved in the collection of shellfish and other invertebrates as an important subsistence activity, rather than fishing beyond the reef. In Chuuk, women also undertake a significant amount of inshore fishing. In Yap, 20% of fishers were women and in Chuuk 32% were women. Eighteen years later, women in FSM are still active players in the fisheries sector, with some notable shifts of women going out with their husbands when they go night fishing in Kosrae and Yap. This has been attributed to better boats and also mobile phones, so there are fewer risks involved in going out fishing at night and it is safer for women. In Chuuk, there are significant differences in fishing practices by women who live in the lagoon area and those who live on the outer islands. Also in Chuuk, the fisheries officials noted an increase in the number of women now managing the marketing and selling of fish, which was attributed to women being better managers of financial resources. In Kosrae, many women have no choice but to accompany their husbands or to fish for their livelihood, as the youth or the men now work in Guam and Honolulu.
- 125. Overcoming gender disparities, in particular for women requires a number of actions, including improving the production and analysis of disaggregated data relevant to gender equality, strengthening the capacity to monitor on the impacts of policies, plans and services on rural population, strengthening gender mainstreaming capacity in key natural resources agencies, providing training on gender equality, strengthening monitoring and evaluation of policy implementation, supporting studies to identify economic opportunities for women in the context of blue and green economies, strengthening women's resilience to climate change impacts and their ability to sustain their natural resource based livelihoods, increasing access to extension and development support and enhance the quality of delivery of rural services. In relation to the above, gender and social inclusion considerations have been integrated into the project design following the development of the Gender Analysis and Mainstreaming Action Plan (Annex 10 of UNDP Project Document). As the project entails a multi-stakeholder approach in dealing with natural resource use and management in the four pilot sites, integration of gender concerns is critical to ensure equity and participation of both men and women. Rather than focus only on gender alone, the project adopts an approach that does not simply focus on women, but rather on overall inclusivity and multiple vulnerable populations. The approach may have significant long-term impacts on both gender and social groups, and thus the Gender Analysis and Mainstreaming Action Plan includes specific actions for applying a gender and socially inclusive lens to every decision, expanding representation, filling in gender and social-based research gaps, and investing in approaches to gather and share information among more groups. It is the intent of this project for it to become a model for improving gender and social mainstreaming into government and planning processes. Gender mainstreaming in the project will be addressed (refer Annex 10 of UNDP Project Document) through the following actions:
 - Potential opportunities include equitable women's involvement in project governance and staffing, intersectoral committees established through the project (e.g. for example in the Project Steering

⁸⁰ Gender analysis of the Fisheries Sector in Federal States of Micronesia. Pacific Community 2019

Committee, on the intersectoral SLM committee (Output 1.4) and in state or landscape coordination committees; targeted capacity building and support from extension services (Output 2.4),

- Reducing the burden of work on women and improving their livelihood opportunities through improved access to resources and services.
- Ensuring gender equality in opportunities for education, skill building, training and capacity building.
- Promoting the voice, participation and empowerment of women, and reducing opportunities for elite misuse of benefits and leaders' sole decision making
- Ensuring that project materials, including meeting agendas, reporting templates, communications materials, and all written policies include gender and social mainstreaming;
- Creating and requiring minimum standards for community planning teams, including representation from multiple gender and social groups and/or tasking of planning team members to speak for vulnerable people;
- Capacity building and training for project staff and planning team facilitators to include the input of multiple groups into resulting plans (Output 2.4);
- Investing in staff to enable adequate connections with multiple groups. Instead of general community meetings, meetings with (i) women's groups; (ii) men's groups; (iii) youth groups; and (iv) individuals with access to or influence over vulnerable people (e.g., landowners or village leaders);
- Applying a gender and socially inclusive lens to every meeting, report, plan, and activity;
- Diversifying sustainable livelihood opportunities, specifically for women and youth involvement in SLM and support for marketing of agricultural produce (Output 3.3);
- Implementing the Communications and awareness plan, including holding multiple, targeted meetings by disaggregated groups;
- Knowledge sharing on gender mainstreaming successes and lessons learned (Output 4.2).
- Making better use of oral/audio content, with less emphasis on writing to better communicate with women and youth; and
- Incorporating gender and socially sensitive indicators and collecting gender-disaggregated data for monitoring and evaluating project results.

Innovativeness, Sustainability and Potential for Scaling Up:

126. Innovation: The proposed project will for the first time in the FSM support a holistic approach to addressing the critical threat of land degradation, simultaneously integrating in one concerted approach the formulation of a National Action Program, LDN target setting, mainstreaming into sub-national plans and regulations, capacity and tools development, demonstration of SLM on the ground, awareness raising and knowledge sharing. This brings significant additionality from the GEF investment compared to any single investment in one of these activities. The project will also build on, and try to replicate the lessons from proven 'best practices' from the LDN target setting process in PSIDS and provide a way forward for policy makers and stakeholders on future action to address land degradation. This will take into account cross-cutting issues and linkages between emerging and existing challenges and priorities, notably climate change, biodiversity recovery and building-back from the impacts of COVID-19. While, the proposed integrated approach will benefit greatly from existing high levels of ownership by local communities, it will further try to integrate the existing community managed areas into a broader and holistic integrated planning and management approach through innovative coordination mechanisms and platforms that involve a wider range of government, non-governmental and community partnerships. This move from a local village planning approach to a more holistic and integrated site-specific planning approach is an innovative and modern approach to mainstreaming biodiversity and sustainable land (and wetland) management that is innovative in that it facilitates effective ecological linkages between production areas (community lands) and high conservation forests and wetlands and the implementation of conservation practices at a land/wetland scale, thereby guaranteeing the longterm conservation of biodiversity and ecosystem services and sustainable land management for the country. Other opportunities for innovation include the establishment of a cadre of community-based farmer trainee practitioners trained in a variety of semi-technical topics to build capacity within communities. Specifically, the project will support an intersectoral committee with a mandate for mainstreaming biodiversity across sectors, overseeing implementation of SLM and achieving LDN, at the national and state-levels and elaborating a strategy for a

community livelihood and economic development (Outputs 3.3 and 3.4); provide a coordination platform and initiate the foundations for achieving land degradation neutrality (LDN) (Output 1.1); along with demonstrating integrated approaches to biodiversity conservation and SLM across four target landscapes (Component 3). Communities will be at the heart of the project, leading the improved management of biodiversity and sustainable resource management with support of government, and with citizen science as a new way of gathering data, information and traditional knowledge for assessments and monitoring to support adaptive management. The project will actively seek to identify how citizen science data collection methods and techniques can be used to leverage additional data on species distribution and land condition (including traditional knowledge and information on species and resource condition), while also raising awareness and engagement of communities.

127. Overall, the project focuses on demonstration of nature-based solutions to rehabilitate degraded watersheds, rivers and coastal zones and will use innovative partnerships between government, community and the private sector to deliver multiple benefits including livelihoods, biodiversity and food security (e.g. mangrove, reef and lagoon restoration to protect from storms and improve fisheries, riparian buffers and rehabilitated/created wetlands for water purification, strategic forest rehabilitation to reduce erosion and flood risk). Innovative climate-smart agricultural practices will also be demonstrated on smallholder farmers on traditionally owned lands for sustainable land management and climate change adaptation that contribute to LDN, protect ecosystem services and food security and enhance profitability (reduced use of chemicals and water, better soil conservation, agroforestry and tree nurseries, mixed cropping, marketing of local produce etc.). The project will also bring a new focus on the infrastructure sector as a major source of land degradation, supporting innovative best practices to avoid new and solve existing problems.

Sustainability:

- 128. Institutional Sustainability: The long-term commitment of the Government of the FSM to protecting its natural endowments provides very positive signs for sustainability of project impact. The project will further build on this commitment, by helping support and build the capacity of entities such as government departments, decentralized state bodies, community-based mechanisms, traditional governance, existing local CSOs, so that further progress after completion of the project does not depend on external funding for follow-up activities. This will optimize the future investments for conservation of globally threatened and endemic species and increase sustainability of project SLM outcomes. Specifically: under Component 1, the project will support development of National Action Program for combating land degradation and identification of priority actions for achieving LDN, with clear indicators and targets that would then be implemented through state-level plans, building on the establishment of a multistakeholder coordination mechanisms at national and state levels to provide oversight and guide the achievement of LDN. Under Component 2, the project will support spatial planning and strengthen baseline information and build tools, guidelines and protocols and support capacity building of existing extension services and use/strengthen existing portals for sharing information; under Component 3, demonstration landscapes/coastal wetlands were selected to build on existing community initiatives and the project will prioritize working through existing extension services, NGOs, farmer cooperatives etc.; under Component 4, knowledge sharing will make great use of existing regional platforms including those developed and managed by SPREP and supported by other GEF investments. In the FSM, ownership and resource rights to land, reefs, and fisheries are enshrined in constitutionally recognized customary ownership. Any successful conservation initiative needs the support of local communities to be sustainable. Thus, the project will employ a community-driven, participatory approach to support community natural resource management governance systems. To facilitate long-term sustainability of existing land management efforts in FSM, the project will ensure the following: (i) support tailored training and capacity building to strengthen functionality and capability of extension workers; (ii) strengthened collaborations for comprehensive SLM management, including strengthening of the agencies that are responsible for land management; (iii) outreach and awareness programs delivered at national, state and village levels in parallel to build local community and stakeholder support for SLM, forest and coastal resource conservation.
- 129. Financial sustainability will be achieved through: a) alignment of existing government funded programs with LDN objectives; b) promotion of public-private-community partnerships; c) development and promotion of new business models for agroforestry based on improved profitability and opportunities for added-value products and improved

ecosystem services (soil fertility, water quality, climate change adaptation etc.); d) facilitating market linkages (including with the tourism sector), encouraging the private sector to invest in sustainable and profitable SME businesses; e) ensuring sustainable infrastructure development that avoids costs from damage to ecosystem services. Through these measures, the project will demonstrate livelihood benefits for smallholder farmer households in the demonstration landscapes (greater resilience and 10% improvement in profitability) through reduction in input costs, enhanced income from added-value products and improved marketing and diversification, with the potential for wide replication.

- 130.<u>Social sustainability</u> will be achieved through strengthening stakeholder participation mechanisms between local government, communities and the private sector (including infrastructure) in the demonstration landscapes. Project communications will facilitate awareness and enhance stakeholder participation. PPG consultations have ensured that collective decision-making mechanisms is built into project design and the stakeholder engagement plan will ensure that key decisions on landscape management priorities have strong buy-in from all stakeholders.
- 131. Potential for scaling-up: Under Component 1, support for delivering the foundations for LDN, supported by improved coordination, regulations and tools, and capacity building at national and provincial levels, will give high potential for up-scaling. Similarly, Under Component 2, protocols and guidelines for monitoring land degradation and capacity building will play a big role in ensuring continuation of project learning and best practices, as well as development of land management plans for the high islands. Demonstrations of integrated approaches to biodiversity conservation, and SLM in Component 3 will have high potential for replication, with additional communities in the concerned states. Component 4 has a particular focus on mechanisms to support upscaling and replication nationally through the communication strategy and plan, and through knowledge sharing mechanisms. The project is also designed to provide demonstration models for up-scaling in the country. In particular, the capacity building and the development of best practices to control and manage land degradation will strongly support up-scaling. Ensuring that activities, impacts and lessons learnt from the demonstration sites are disseminated widely helps generate a bottom-up demand for similar activities throughout the country. The project's investment component will seek to develop synergies among rural development actors and programs with an objective of raising additional emphasis on SLM and will expand current models of sustainable resource use and alternative livelihood activities within and outside of the targeted landscapes and coastal seascapes.
- 132. Overall, by demonstrating a strategic approach, the project will place the FSM in a much stronger position to access substantial investment programs for scaling-up LDN, such as traditional multilateral and bilateral funding and new innovative financing options and incentive packages. Upscaling at local level will be achieved through agricultural training and extension programs and sharing of successful interventions through exchanges and visits between communities, landscapes and states.

V. PROJECT RESULTS FRAMEWORK

This project will contribute to the following Sustainable Development Goal (s): SDG 2 (End hunger, achieve food security and improved nutrition, and promote sustainable agriculture); SDG 14 (Conserve and sustainably use the oceans, seas, and marine resources for sustainable development) and SDG 15 (Protect, restore, and promote sustainable use of terrestrial ecosystems, sustainably manage forests, combat desertification, and halt and reverse land degradation and halt biodiversity loss)

This project will contribute to the following country outcome (UNDAF/CPD, RPD, GPD): Climate Change, Disaster Resilience, and Environmental Protection (Outcome 1): By 2022 People and ecosystems in the Pacific are more resilient to the impacts of climate change, climate variability, disasters and environment protection is strengthened

	Objective and Outcome Indicators	Baseline ⁸¹	Mid-term Target ⁸²	End of Project Target
	(no more than a total of 20 indicators)			
Project Objective:	To secure critical ecosystem services through climate-resilient sustainable land and coastal management contributing to Land Degradation Neutrality in the Federated States of Micronesia			
	Indicator 1: Mandatory GEF Core Indicator 11 # direct project beneficiaries disaggregated by gender (individual people) ⁸³	Current number of direct beneficiaries not available, however, some sustainable resource use and extension services available, but no wide spread and comprehensive actions being implemented	At least 500 people (including 250 men and 250 women) directly benefiting from project activities (improved agriculture, fisheries, livestock agroforestry, livelihoods, value addition and improved landscape conditions	At least 4,516 people benefiting from project activities, including 2,258 men and 2,258 women
	Indicator 2: Mandatory GEF Core Indicator 3: Area of land restored	Limited efforts and resources for restoration of terrestrial and wetland habitats	At least 200 hectares under restoration and sites locations and restoration measures defined for the balance 685 hectares	At least 925 hectares restored, including agricultural lands, forest lands, savannahs and wetlands
	Indicator 3: Mandatory <u>GEF Core Indicator 4:</u> Area of landscape under improved management (excluding protected areas CI 4.1 Area of landscape under improved management to benefit biodiversity – 579 hectares, which includes	Insufficient efforts currently exist for demonstration landscapes with limited ability to integrate holistic natural resources management	Management plans developed for target sites and around 2,181 hectares under land use plans for the high islands	At least 2,181 hectares of landscapes under improved management to benefit biodiversity and advance LDN as measured by: (i) commitment of local communities to implement improved conservation

⁸¹ Baseline, mid-term and end of project target levels must be expressed in the same neutral unit of analysis as the corresponding indicator. Baseline is the current/original status or condition and needs to be quantified. The baseline can be zero when appropriate given the project has not started. The baseline must be established before the project document is submitted to the GEF for final approval. The baseline values will be used to measure the success of the project through implementation monitoring and evaluation.

⁸² Target is the change in the baseline value that will be achieved by the mid-term review and then again by the terminal evaluation.

⁸³ Provide total number of all direct project beneficiaries expected to benefit from all project activities until project closure. Separate the total number by female and male. This indicator captures the number of individual people who receive targeted support from a given GEF project and/or who use the specific resources that the project maintains or enhances. Support is defined as direct assistance from the project. Direct beneficiaries are all individuals receiving targeted support from a given project. Targeted support is the intentional and direct assistance of a project to individuals or groups of individuals who are aware that they are receiving that support and/or who use the specific resources.

the remaining biodiversity rich habitats of the demonstration landscapes not already covered by the other indicators (rivers/riparian and wetlands) which will benefit from improved management by inclusion in the integrated landscape management plans (=79ha), plus an estimate of 500ha of the area of landscapes across the remaining land area of the high islands ⁸⁴ that will benefit from mainstreaming biodiversity and LDN into land use or management plans). CI 4.3 Area of landscapes under SLM in production systems – 7,030 hectares which includes: a) 1,530 ha within the demonstration landscapes of mainly agroforestry/forestry), plus; b) a conservative estimate (5,500ha) of the area of landscapes across the remaining land area of high islands	and local community engagement in effective SLM practices		and land use practices; (ii) technical support and training being delivered to communities; (iii) management plans approved for target sites and high islands; (iv) biodiversity and LDN mainstreamed into land use or other related plans for high islands; and (iv) monitoring system in place to monitor improved outcomes At least 6,195 hectares under SLM in production landscapes as measured by: (i) implementation of SAPs; (ii) state high island and demonstration site land management plans, (iii) mainstreaming BMPs (iv) strengthened policy and regulations supporting LDN goals and protection of BD and (v) reduced chemicals, protection of riparian zones, training and extension services of BMPs and implementation of traditional practices
Indicator 4: Mandatory <u>GEF Core Indicator 5:</u> Area of marine habitats under improved practices to benefit biodiversity Includes area of mangroves, lagoons, seagrass beds and reefs included in the project landscapes (less the area of mangroves to be restored under Core Indicator 3.4 to avoid double-counting), which will benefit from improved management practices as well as reduced sedimentation and pollution because of their inclusion in the integrated landscape management and rehabilitation plans (Output 3.1) and SLM measures in Outputs 3.2 and 3.3.	Limited efforts and resources for applied to marine habitat management, including seagrass beds and, mangroves	At least 100 hectares of marine habitat (mangroves, lagoons, seagrass beds and coral reefs) in four target landscapes under improved management practices to benefit biodiversity and strengthen efforts towards achieving LDN.	At least 585 hectares of marine habitat (mangroves, lagoons, seagrass beds and coral reefs) in four target landscapes under improved management practices to benefit biodiversity and achievement of LDN. This would be measured by: (i) agreements reached with communities to implement improved conservation, sustainable resource use practices and habitat restoration efforts (i.e. mangroves planting); (ii) reduced pollution and waste inflows; (iii) management prescriptions approved for target sites; and (iv) monitoring system in place to monitor improved outcomes
Greenhouse Gas Emissions Mitigated (metric tons of CO2e)	efforts to assess carbon values	methodology established for monitoring and staff trained	year period

⁸⁴ The GEF-5 R2R team calculated the area of the high islands to be around 62,000ha. Removing the terrestrial parts of the demonstration landscapes to avoid double-counting, we have taken a round figure of 60,000ha. We assume 10% of this area will benefit from SLM and BD mainstreaming (=6,000 ha), split 500ha for BD (Core indicator 4.1) and 5,500ha for SLM (Core Indicator 4.3) based on the relative focus of the project.

	Benefits generated through promotion and adoption of sustainable land management practices in agroforestry, which will result in avoided forest degradation and rehabilitation of degreed lands, resulting in expansion of vegetative cover across the landscapes			
Project component	Strengthening the strategic (institutional, policy, regulat	ory) framework for addressing	g land degradation	
Project Outcome ⁸⁵ 1 Strengthened inter-sectoral governance and strategies to mainstream SLM/LDN and BD	Indicator 6: Number of national and state prioritized actions plans developed and approved for achieving LDN by 2030	Although other plans exist at national and state levels (e.g. FSM Strategic Development Plan, State Development Plans, Integrated Disaster Risk Management and Joint State Action Plans, NBSAP and State BSAPs) there are no National Action Plans (NAP) required under UNCCD, nor State level plans to address land degradation)	National-State inter-sectoral working group established, consultations completed and first draft of national SLM NAP under review. Arrangements for development of State level plans to combat land degradation agreed to.	SLM NAP developed and approved, with indicators, targets and priority actions for achieving LDN by 2030, and four State level plans identifying priority actions for achieving LDN developed and approved at States' level.
	Indicator 7: Number of laws and regulations to prevent land degradation reviewed and updated based on a robust and comprehensive LDN target setting process and resilience assessments	Existing national, state, and municipal regulations currently result in duplications, gaps, and effective enforcement seriously lacking, and institutional differences in addressing land degradation	Review/assessment completed in terms of existing national, state and municipal laws, regulations, ordinances and standards, with gaps and weaknesses identified and prioritized, resulting in improved coordination towards addressing prioritized actions and strengthening of regulations and protocols for combatting land degradation and mainstreaming SLM and biodiversity into the agriculture and infrastructure sectors.	At least three regulatory instruments reviewed and updated to ensure consistency across institutional responsibilities and enforcement to strengthen achievement of LDN
	management plans in terms of strengthened	Land use plans exists for two states, but lack targets for achieving LDN.	Land use plans updated for two states to include targets for achieving LDN and the	I wo existing state-level land use plans updated and two new State land use or relevant management

⁸⁵Outcomes are medium term results that the project makes a contribution towards, and that are designed to help achieve the longer-term objective. Achievement of outcomes will be influenced both by project outputs and additional factors that may be outside the direct control of the project.

	implementation to avoid, reduce and reverse land degradation and conserve biodiversity	In general community plans lacking or do not address LDN.	remaining two state develop SLM State Action Plans (SAPs) Demonstration landscapes SLM action plans or community land management action plans (CLMAPs) with prioritized actions developed	plans developed/updated to include detailed priority actions (with timelines) to contribute to LDN targets. Demonstration landscapes SLM action plans or community land management action plans (CLMAPs) of project plans at both levels are being implemented with demonstratable/measurable results.
	Indicator 9: Functionality of State level inter-sectoral working groups for landscape management in overseeing and mainstreaming NAP	Nascent state level intersectoral working groups for landscape management exists, their capacity is low	State inter-sectoral working groups reconstituted and strengthened, with approved TORs and capacity to oversee development of LUPs, state- level SLM NAPs and their implementation	All four State level SLM working groups for landscape management fully functional and SLM NAP implemented
Outputs to achieve Outcome 1	 1.1 National Action Program (NAP) for combating land d actions for achieving Land Degradation Neutrality (LDN) 1.2 Priority gaps and weaknesses in the regulatory frame achieved through technical support and advocacy leadin 1.3 State level land use plans and local management pla degradation and conserve biodiversity. 1.4 Existing/nascent state level intersectoral working group established an private sector. 	egradation prepared for adop across each State, with suppo ework and enforcement mech og to adoption by state and na ns on the high islands strengt pups for landscape manageme nd supported to oversee form	otion by Government, incorporating ort for mainstreaming into priority hanisms for combatting land degrad itional governments. hened with enhanced implementat ent fostered and operationalized to sulation and mainstreaming of the s	g indicators, targets and priority policies. dation identified, and improvements tion to avoid, reduce and reverse land address land degradation, and SLM , both with engagement of the
Component 2:	Enhancing information, decision/support tools and capa	city for addressing land degra	idation	
Outcome 2 Enhanced tools and government capacity for SLM and LDN	Indicator 10: Number of practical guidelines, protocols and tools for SLM/BD in agriculture and infrastructure sectors	Currently there is limited acceptable norms and standards, protocols and technical guidelines as well as the environmental impact assessment (EIA) process. to guide planning and development activities on land, coastal and marine environments	Priority guidelines to facilitate SLM/BD in agriculture and infrastructure sectors identified and under development	At least 5 practical guidelines, protocols, and tools established for SLM/BD in the agriculture and infrastructure sectors
	Indicator 11: Extent of baseline and sub-targets for LDN established for each State	Limited of no baselines and sub-targets for LDN established in each State	Baseline, targets and priority actions for achieving LDN identified by each State	Baseline and targets for the LDN sub-indicators established for each State, including: (i) trends in land cover; (ii) trends in land productivity or functioning of the land; and (iii) trends in carbon stock above and below ground).

	Indicator 12: increase in capacity for SLM/LDN and PD	Limited capacity at	At least 10% increase in	At least 30% increase in canacity for
	in the agriculture and infrastructure sectors for both	present as reflected in	capacity for SLM/LDN and BD	SI M/I DN and BD in the agriculture
	women and men as measured by LINDP canacity	capacity development	in the agriculture and	and infrastructure sectors for both
	development scorecard	baseline of 12 of a total of	infrastructure sectors for both	women and men as measured by
		42	women and men as measured	UNDP capacity development
			by UNDP capacity	scorecard
			development scorecard	
Outputs to achieve Outcome 2	2 1 National level spatial mapping and strengthened has	l eline information available to	states on existing platforms to ass	ess trends drivers and hotspots of
	land degradation, and targets set for the LDN sub-indica	tors		
	2.2 Resilience assessments of landscapes, habitats and la	and uses to land degradation	and climate-induced risks to suppo	ort planning and zoning
	2.3 Protocols for monitoring land degradation and pract	ical guidelines for promoting/	mainstreaming SLM/BD in the agr	iculture and infrastructure sectors
	2.4 Capacity building for government officers, extension	staff, community groups, NG	Os etc.), plus technology transfer a	nd equipment for LDN monitoring and
	mainstreaming of SLM/BD ensuring that training and ext	tension programs are gender-	focused and gender-responsive	
Project component 3	Embedding climate-smart sustainable land management	in critical landscapes and coa	astal zones (demonstration activitie	es)
Outcome 3	Indicator 12: Number of initiatives successfully	Currently limited	At least E initiatives initiated to	At loast 8 initiatives implemented to
Outcome 5	implemented to enhance ecosystem services and	initiatives for SIM under	enhance ecosystem services	enhance ecosystem services and
	high high high high high high high high	implementation and their	and biodiversity and reverse	biodiversity and reverse land
Community participation in		effectiveness uncertain	land degradation from	degradation from agriculture and
measures to reduce land			agriculture and infrastructure	infrastructure sectors through
degradation, sustain ecosystem			sectors through nature-based	nature-based solutions, engaging
services and biodiversity,			solutions, engaging both youth	both youth and an equal
improve livelihoods and			and an equal participation of	participation of women and men
weilbeing			women and men	
	Indicator 14: Extent of application of practices to	Smallholder farmers have	At least 100 smallholder	Reduced land degradation in lands
	reduce land degradation in smallholder farms	limited opportunities for	household farms initiated SLM	belonging to at least 335
		application of SLM due to	activities through support from	smallholder household farms (50%
		lack of extension services	project funded extension	of households in the landscapes)
		and best practice	services, training and best	adopting SLM techniques
		guidelines and knowledge	practice guidance	
		available to them		
	Indicator 15: Percentage increase in incomes from	Baselines for community	At least average of 2 %	At least average of 10%
	smallholder farms adopting SLM, diversification of	incomes will be	improvement in net household	improvement in net household
	products and small-scale microenterprises	established in Year 1	profitability (including female-	profitability (including female-
			headed households) from	headed households) from
			smallholder farms adopting	smallholder farms adopting SLM and
			SLM and related added value	related added value products /
			products / marketing /	marketing / diversification initiatives
			diversification initiatives	

Outputs to achieve Outcome 3	2.1. Community led participatony integrated landscape management and sebabilitation plans so designed agreed and implemented to avoid reduce and									
Outputs to achieve Outcome 5	3.1 Community-led participatory integrated landscape management and renabilitation plans co-designed, agreed, and implemented to avoid, reduce, and reverse land degradation to protect ecosystem services and biodiversity									
	reverse land degradation to protect ecosystem services and biodiversity 3.2 Targeted ecosystem rehabilitation (nature-based solutions) demonstrated in innovative partnerships with community and the private sector in degraded									
	3.2 Targeted ecosystem rehabilitation (nature-based solutions) demonstrated in innovative partnerships with community and the private sector in degraded watersheds and coastal zones to reduce and reverse land degradation and enhance biodiversity.									
	watersheds and coastal zones to reduce and reverse land degradation and enhance biodiversity.									
	3.3 Smallholder farmers on traditionally owned lands supported to implement traditional and innovative climate-smart agricultural practices for sustainable									
	land management and climate change adaptation that c	ontribute to LDN, protect eco	system services, biodiversity, and f	ood security, and enhance incomes						
Component 4:	Effective knowledge management, gender mainstreaming	ng, and M&E								
Outcome 4	Indicator 16: Percentage increase in awareness and	Baseline of awareness and	At least 10% improvement in	At least 30% improvement in						
Increased project impact.	attitudes towards sustainable land management and	attitudes towards	community awareness and	community awareness and attitudes						
replication and upscaling	protecting ecosystem services in participating	sustainable land	attitudes towards sustainable	towards sustainable land						
through enhanced awareness	communities	management and	land management and	management and protecting						
and		protecting ecosystem	protecting ecosystem services	ecosystem services and biodiversity						
und		services in participating	and biodiversity as measured	as measured by KAP (Knowledge,						
		communities will be	by KAP (Knowledge, Attitudes	Attitudes and Practices) survey						
		established in Year 1	and Practices) survey							
		through KAP surveys	, ,							
	Indicator 17: Number of best practices and lessons of	Limited number of best	At least 3 project best practices	At least 5 project best practices and						
	SLM/LDN being applied	practices on SLM available	and lessons on SLM/LDN	lessons on SLM/LDN (including on						
		to farmers	(including on gender and youth	gender and youth mainstreaming						
			mainstreaming and socio-	and socio-cultural benefits) are						
			cultural benefits) are accessed	accessed and applied throughout						
			and being documented	the FSM						
	Indianter 19: Number of initiatives being implemented	Limited and	Coordinated offerts being	At least C initiatives domonstrating						
	through active participation and knowledge suchange			At least 5 initiatives demonstrating						
	in regional and clobal platformed	uncoordinated knowledge	made to enhance partnership	active participation and knowledge						
		exchange with regional	and global notworks and							
		and global platforms	and global networks and	SLW/LDN Initiatives						
			programs							
Outputs to achieve Outcome 4	4.1 Awareness-raising program on SLM and the benefits	of tackling land degradation	delivered through targeted commu	inications, education, campaigns and						
	community participation									
	4.2 Knowledge management platform and program to share information and project lessons between states, landscapes and communities including through									
	an on-line portal, learning exchanges and demonstration farms/farmer associations									
	4.3 Best practices and lessons learned for addressing lan	nd degradation exchanged thr	ough South-South cooperation wit	h other SIDS across the Pacific and						
	elsewhere to support LDN/SLM.									
	4.4 Project M&E, safeguards, and gender mainstreaming	g to support effective project	management and maximize project	t impact						

VI. MONITORING AND EVALUATION (M&E) PLAN

- 133.Project-level monitoring and evaluation will be undertaken in compliance with UNDP requirements as outlined in the UNDP POPP (including guidance on GEF project revisions) and <u>UNDP Evaluation Policy</u> The UNDP Country Office is responsible for ensuring full compliance with all UNDP project M&E requirements including project monitoring, UNDP quality assurance requirements, quarterly risk management, and evaluation requirements.
- 134.Additional mandatory GEF-specific M&E requirements will be undertaken in accordance with the <u>GEF Monitoring</u> <u>Policy</u> and the <u>GEF Evaluation Policy</u> and other <u>relevant GEF policies</u>⁸⁶. The M&E plan and budget included below will guide the GEF-specific M&E activities to be undertaken by this project.
- 135. In addition to these mandatory UNDP and GEF M&E requirements, other M&E activities deemed necessary to support project-level adaptive management will be agreed including during the Project Inception Workshop and will be detailed in the Inception Report.

Minimum project monitoring and reporting requirements as required by the GEF:

- 136.<u>Inception Workshop and Report</u>: A project inception workshop will be held within 2 months from the First disbursement date, with the aim to:
 - a. Familiarize key stakeholders with the detailed project strategy and discuss any changes that may have taken place in the overall context since the project idea was initially conceptualized that may influence its strategy and implementation.
 - b. Discuss the roles and responsibilities of the project team, including reporting lines, stakeholder engagement strategies and conflict resolution mechanisms.
 - c. Review the results framework and monitoring plan.
 - d. Discuss reporting, monitoring and evaluation roles and responsibilities and finalize the M&E budget; identify national/regional institutes to be involved in project-level M&E; discuss the role of the GEF OFP and other stakeholders in project-level M&E.
 - e. Update and review responsibilities for monitoring project strategies, including the risk log; SESP report, Social and Environmental Management Framework (where relevant) and other safeguard requirements; project grievance mechanisms; gender strategy; knowledge management strategy, and other relevant management strategies.
 - f. Review financial reporting procedures and budget monitoring and other mandatory requirements and agree on the arrangements for the annual audit.
 - g. Plan and schedule Project Steering Committee meetings and finalize the first-year annual work plan. Finalize the TOR of the Project Steering Committee.
 - h. Formally launch the Project.

GEF Project Implementation Report (PIR):

137. The annual GEF PIR covering the reporting period July (previous year) to June (current year) will be completed for each year of project implementation. UNDP will undertake quality assurance of the PIR before submission to the GEF. The PIR submitted to the GEF will be shared with the Project Steering Committee. UNDP will conduct a quality review of the PIR, and this quality review and feedback will be used to inform the preparation of the subsequent annual PIR.

GEF Core Indicators:

138. The GEF Core indicators included as Annex 13 will be used to monitor global environmental benefits and will be updated for reporting to the GEF prior to MTR and TE. Note that the project team is responsible for updating the indicator status. The updated monitoring data should be shared with MTR/TE consultants <u>prior</u> to required

⁸⁶ See <u>https://www.thegef.org/gef/policies_guidelines</u>

evaluation missions, so these can be used for subsequent ground-truthing. The methodologies to be used in data collection have been defined by the GEF and are available on the <u>GEF</u>. If relevant to the project: The required Protected Area Management Effectiveness Tracking Tool (METTs) have been prepared and the scores included in the GEF Core Indicators.

Independent Mid-term Review (MTR):

139.An independent mid-term review (MTR) will be completed by the mid-point of the project. The terms of reference, the MTR process and the final MTR report will follow the standard template and MR guidance for UNDP-supported GEF-financed projects available on the <u>UNDP Evaluation Resource Center</u>. The MTR must be submitted to the GEF by the mid-point of the project but no later than 48 months after CEO Endorsement. To meet the submission deadline, final MTR reports must be completed and submitted to BPPS NCE team no later than 2 months in advance of the submission deadline to allow sufficient time for internal review/clearance that is required prior to submission.

Provisions must be taken to complete and submit the MTR within the submission deadline. Therefore, the MTR process must start no later than 8 months before the expected date of submission of the MTR.

- 140. The MTR will be 'independent, impartial and rigorous'. The evaluator(s) that UNDP will hire to undertake the assignment will be independent from organizations that were involved in designing, executing or advising on the project to be reviewed. Equally, the evaluators should not be in a position where there may be the possibility of future contracts regarding the project under review.
- 141. The GEF Operational Focal Point and other stakeholders will be actively involved and consulted during the MTR process. Additional quality assurance support is available from BPPS/NCE.
- 142. The final MTR report will be publicly available in English and will be posted on the UNDP ERC by the MTR submission date included on cover page of this project document. A management response to MTR recommendations will be posted in the ERC within six weeks of the MTR report's submission to the GEF.

Terminal Evaluation (TE):

143. An independent terminal evaluation (TE) will take place upon completion of all major project outputs and activities. The terms of reference, the evaluation process and the final TE report will follow the standard templates and TE guidance for UNDP-supported GEF-financed projects available on the <u>UNDP Evaluation Resource Center</u>. TE must be submitted to the GEF no later than 6 months after the Completion Date. This is a hard deadline that, if not met, can only be extended through a formal extension request. To meet the submission deadline, final TE reports must be completed and submitted to BPPS NCE team no later than 2 months in advance of the deadline to allow sufficient time for internal review/clearance that is required prior to submission.

Provisions must be taken to complete and submit the TE within the submission deadline. Therefore, TE must start no later than 8 months before the expected date of submission of the TE (or 11 months prior to the estimated operational closure date).

- 144. The evaluation will be 'independent, impartial and rigorous'. The evaluator(s) that UNDP will hire to undertake the assignment will be independent from organizations that were involved in designing, executing or advising on the project to be evaluated. Equally, the evaluators should not be in a position where there may be the possibility of future contracts regarding the project being evaluated.
- 145. The GEF Operational Focal Point and other stakeholders will be actively involved and consulted during the terminal evaluation process. Additional quality assurance support is available from BPPS NCE.

146. The final TE report will be publicly available in English and posted on the UNDP ERC by the TE submission date included on cover page of this project document. A management response to the TE recommendations will be posted to the ERC within six weeks of the TE report submission to the GEF.

Per the GEF Terminal Evaluation requirements, for cancelled full-sized projects, Terminal Evaluations are required if the GEF grant expenditure exceeds more than US\$ 2 million.

Final Report:

147. The project's final GEF PIR along with the terminal evaluation (TE) report and corresponding management response will serve as the final project report package. The final project report package shall be discussed with the Project Board during an end-of-project review meeting to discuss lesson learned and opportunities for scaling up.

In accordance with UNDP's programming policies and procedures, the project will be monitored through the following monitoring and evaluation plans.

Monitoring Plan: The project results, corresponding indicators and mid-term and end-of-project targets in the project results framework will be monitored by the Project Management Unit annually, and will be reported in the GEF PIR every year, and will be evaluated periodically during project implementation. If baseline data for some of the results indicators is not yet available, it will be collected during the first year of project implementation. Project risks, as outlined in the risk register, will be monitored quarterly.

Table 15: Monitoring Plan:

Results Monitoring	Indicators	Targets	Description of indicators and targets	Data source/Collection Methods ⁸⁷	Frequency	Responsible for data collection	Means of verification	Risks/Assumptions
Project objective To secure critical ecosystem services through climate-resilient sustainable land and coastal management contributing to Land Degradation Neutrality in the Federated States of Micronesia	Indicator 1: Mandatory GEF Core Indicator <u>11</u> # direct project beneficiaries disaggregated by gender (individual people) ⁸⁸	<i>MTR:</i> At least 500 people (including 250 men and 250 women) directly benefiting from project activities <i>TE:</i> At least 4,610 people benefiting from project activities, including at least 2,258 men and 2,258 women	Direct benefits to community members from improved agriculture, fisheries, livestock agroforestry, fisheries, livelihoods, value addition and improved landscape conditions	<i>Consultations</i> with community groups, socio-economic surveys, etc	Annually Reported in DO tab of the GEF PIR	PMU, DECEM and consultants	Progress reports, Socio- economic surveys, Consultant livelihood reports	Assumptions: -The local administrations, CBOs, private sector and communities would work in close collaborate for ensuring benefits from agricultural, fisheries, livestock and livelihood benefits <u>Risks:</u> -Lack of capacity in government, private sector and communities to meet obligations related to project. - Lack of involvement from resource users with continued unsustainable practices

⁸⁷ Data collection methods should outline specific tools used to collect data and additional information as necessary to support monitoring. The PIR cannot be used as a source of verification.

⁸⁸ Provide total number of all direct project beneficiaries expected to benefit from all project activities until project closure. Separate the total number by female and male. This indicator captures the number of individual people who receive targeted support from a given GEF project and/or who use the specific resources that the project maintains or enhances. Support is defined as direct assistance from the project. Direct beneficiaries are all individuals receiving targeted support from a given project. Targeted support is the intentional and direct assistance of a project to individuals or groups of individuals who are aware that they are receiving that support and/or who use the specific resources.

Results Monitoring	Indicators	Targets	Description of indicators and targets	Data source/Collection Methods ⁸⁷	Frequency	Responsible for data collection	Means of verification	Risks/Assumptions
	Indicator 2: Mandatory GEF Core Indicator 3: Area of land restored	MTR: At least 200 hectares under restoration and sites locations and restoration measures defined for the balance 685 hectares TE: At least 925 hectares restored, including agricultural lands, forest lands, savannahs and wetlands	Restoration of agricultural lands, forest lands, savannahs and wetlands through selection of appropriate native species, proven restoration methods, maintenance, protection and monitoring of regeneration	Field assessments, survival assessments for planted species	Annually Reported in DO tab of the GEF PIR	PMU, DECEM and consultants	Progress reports, restoration and maintenance surveys	Assumptions -Technical support, knowledge and capacity exists for undertaking restoration - Government and sector agencies consider it priority to support restoration activities -Communities might not see direct benefits from restoration activities <u>Risks</u> : -Community short-term needs over-ride interests in restoration and protection -Inability to restored areas might negatively affect efforts at restoration -inappropriate species selection or planting strategies or unanticipated hazard leads to high levels of mortality
	Indicator 3: Mandatory <u>GEF Core</u> Indicator 4: Area of landscape under improved management (excluding	MTR: Management plans developed for target sites and around 2,181 hectares under land use plans for the high islands TE: At least 2,181 hectares of landscapes under improved management to	Cl 4.1 Area of landscape under improved management to benefit biodiversity – 1,681 hectares, which includes the remaining biodiversity rich habitats of the demonstration landscapes not	Consultations with local communities, DECEM, DRD, State administration	Annually Reported in DO tab of the GEF PIR	PMU and State- level Technical Coordinators	Progress Reports, Community survey reports	<u>Assumptions:</u> - Communities see direct benefit in supporting prevention and control of threats on biodiversity and land and wetland productivity - Willingness of communities to engage in alternate sustainable activities

Results Monitoring	Indicators	Targets	Description of indicators and targets	Data source/Collection Methods ⁸⁷	Frequency	Responsible for data collection	Means of verification	Risks/Assumptions
	protected areas	benefit biodiversity as measured by (i) commitment of local communities to implement improved conservation and land use practices; (ii) technical support and training being delivered to communities; (iii) management plans approved for target sites; (iv) LDN and biodiversity mainstreamed into land use or other related plans for high islands; and (iv) monitoring system in place and engaged	already covered by the other indicators (rivers/riparian and wetlands) which will benefit from improved management by inclusion in the integrated landscape management plans, plus an estimate of 500 ha of the area of landscapes across the remaining land area of the high islands ⁸⁹ that will benefit from mainstreaming biodiversity into land use or management plans). CI 4.3 Area of landscapes under SLM in production systems – 6, 195 hectares which includes: a) 695 ha within the demonstration landscapes of mainly agroforestry/forestry), plus; b) a conservative estimate (5,500ha) of the area of landscapes across the remaining land area of high islands					<u>Risks:</u> -Benefits of land and marine management approaches costly and time consuming might negate efforts -Communities might not see any direct economic benefits to engage in SLM and FSM and wetland management

⁸⁹ The GEF-5 R2R team calculated the area of the high islands to be around 62,000ha. Removing the terrestrial parts of the demonstration landscapes to avoid double-counting, we have taken a round figure of 60,000ha. We assume 10% of this area will benefit from SLM and BD mainstreaming (=6,000 ha), split 500ha for BD (Core indicator 4.1) and 5,500ha for SLM (Core Indicator 4.3) based on the relative focus of the project.

Results Monitoring	Indicators	Targets	Description of indicators and targets	Data source/Collection Methods ⁸⁷	Frequency	Responsible for data collection	Means of verification	Risks/Assumptions
	Indicator 4: Mandatory <u>GEF</u> <u>Core Indicator 5:</u> Area of marine habitats under improved practices to benefit biodiversity	MTR: Action initiated to improve practices in at least 100 hectares of marine habitat (mangroves, lagoons, seagrass beds and coral reefs) in four target landscapes <i>TE:</i> At least 525 hectares of marine habitat (mangroves, lagoons, seagrass beds and coral reefs) in four target landscapes under improved management practices to benefit biodiversity.	This would be measured by: (i) agreements reached with communities to implement improved conservation and sustainable resource use practices; (ii) management plans approved for target sites; and (iii) monitoring system in place to monitor improved outcomes	Consultations with local communities, DECEM, DRD, State administration	Annually Reported in DO tab of the GEF PIR	PMU and State- level Technical Coordinators	Progress Reports, Community survey reports	
	Indicator 5: Mandatory <u>GEF</u> <u>Core Indicator 6:</u> Greenhouse Gas Emissions Mitigated (metric tons of CO2e)	<i>MTR:</i> Monitoring system and methodology established for monitoring and staff trained <i>TE:</i> 31,582 tCO ₂ -e mitigated over 20 year period	Benefits generated through promotion and adoption of sustainable land management practices in agroforestry, which will result in avoided forest degradation	Consultation with local communities, Forest, Agriculture and Livestock staff Field visits and observations	MTR and TE Reported in DO tab of the GEF PIR	PMU and consultants	Progress reports in terms of forest, savannah, land and agriculture restoration survey reports etc. -Status of natural system reports	Assumptions: -Success of forest, agriculture and marine conservation actions, restoration efforts, etc. - local communities take action to conserve their natural resources, including, forests, agricultural lands, mangroves and seagrass beds, etc. <u>Risks:</u> Slack opportunities for livelihood improvements may likely constraint

Results Monitoring	Indicators	Targets	Description of indicators and targets	Data source/Collection Methods ⁸⁷	Frequency	Responsible for data collection	Means of verification	Risks/Assumptions
								community engagement in conservation actions
Project Outcome 1 Strengthened inter-sectoral governance and strategies to mainstream SLM/BD and LDN	Indicator 6: Number of national and state prioritized actions plans developed and approved for achieving LDN by 2030	MTR: National- State inter-sectoral working group established, consultations completed and first draft of national NAP under review. Arrangements for development of State level plans to combat land degradation agreed to. TE: National Action Plan (NAP) to combat LD developed and approved, with indicators, targets and priority actions for achieving LDN by 2030, and four State level plans identifying priority actions for achieving LDN developed and approved at State level.	These include specific tools for LDN and SLM at national and state level, with clear targets, indicators and priority actions IAS and sustainable land management	Consultation with members of coordination committees at national and state levels	Annually Reported in DO tab of the GEF PIR	PMU and DECEM	Plans, Government approval notices for plans, Project progress reports	Assumption: Key agency willingness to support and use LDN and SLM plans and priorities Risks: Priority of national and state governments might shift due to external or internal political or other events
	Indicator 7: Number of laws and regulations to prevent land degradation reviewed and updated based	MTR: Review/assessment completed in terms of existing national, state and municipal laws, regulations, ordinances and	These include specific tools for prevention of land degradation and measures for enhancing LDN targets and priorities to promote	Consultations with legal and policy experts	Reported in DO tab of the GEF PIR	PMU and MECDM	Plans, regulations, strategies and guideline documents	Assumption: Key agency willingness to support and use new tools and protocols Adequate manpower and resources are available to sector

Results Monitoring	Indicators	Targets	Description of indicators and targets	Data source/Collection Methods ⁸⁷	Frequency	Responsible for data collection	Means of verification	Risks/Assumptions
	on a robust and comprehensive LDN target setting process and resilience assessments	standards, gaps identified improved coordination and complementarity for combatting land degradation and mainstreaming SLM and biodiversity into the agriculture and infrastructure sectors. Update of regulations in progress <i>TE:</i> At least three regulatory instruments reviewed and updated to ensure consistency across institutional responsibilities and enforcement to tackle land degradation	sustainable land management				Project progress reports	entities to achieve intended targets
	Indicator 8: Status of state- level land use and local management plans in terms of strengthened implementation to avoid, reduce and reverse land degradation and conserve biodiversity	MTR: Land use plans updated for two states to include targets for achieving land degradation neutrality and two other state plans under development TE: Two existing State-level land use plans updated and two new State land use or relevant management plans			Annually Reported in DO tab of the GEF PIR			

Results Monitoring	Indicators	Targets	Description of indicators and targets	Data source/Collection Methods ⁸⁷	Frequency	Responsible for data collection	Means of verification	Risks/Assumptions
		developed/updated to include detailed priority actions (with timelines) to contribute to LDN targets						
	Indicator 9: Functionality of State level inter- sectoral working groups for landscape management in overseeing and mainstreaming NAP	MTR: State inter- sectoral working groups reconstituted and strengthened, with approved TORs and capacity to oversee development of LUPs, state-level NAPs and their implementation TE: All four State level inter-sectoral working groups for landscape management fully functional with state SLM plans that are endorsed and enacted	TORs will define clear responsibilities and roles of working groups, decision- making procedures and coordination arrangements	Consultation with DECEM, committee members and others,	Annually Reported in DO tab of the GEF PIR	Progress reports of PMU Minutes of meetings	Progress reports Minutes of committee meetings	Assumptions: -The state governments are committed to the strengthening of the inter-sectoral committees with provision of adequate staff and resources for its functioning -Sector agencies are committed to working together through their active engagement <u>Risks:</u> -Sector agencies might not be willing to release their staff for engagement with these committees -Infrequency of meetings might constrain their ability to guide and support project activities
Project Outcome 2 Community participation in measures to reduce land degradation, sustain ecosystem	Indicator 10: Number of practical guidelines, protocols and tools for SLM/LDN and BD in agriculture and	MTR: Priority guidelines to facilitate SLM/BD in agriculture and infrastructure sectors identified and under development	These guidelines, protocols and tools are developed and updated to ensure it is comprehensive and serves as a road map for all sectors throughout the country	Consultation with key agencies, including sector entities at national and state level dealing with land, marine, agriculture and infrastructure activities	Annual Reported in DO tab of the GEF PIR	PMU, DECEM and State coordination committees	Project progress reports Approved guidelines, protocols and tools	Assumptions There is political commitment to LDN, SLM and land and marine resource management -Adequate manpower and resources are available to

Results Monitoring	Indicators	Targets	Description of indicators and targets	Data source/Collection Methods ⁸⁷	Frequency	Responsible for data collection	Means of verification	Risks/Assumptions
services and biodiversity, improve livelihoods and wellbeing	infrastructure sectors	<i>TE</i> : At least 5 practical guidelines, protocols, and tools for SLM/BD in the agriculture and infrastructure sectors						implementation of these instruments <u>Risks:</u> -The lack of effective coordination might constraint effectiveness of implementation
	Indicator 11: Extent of baseline and sub-targets for LDN established for each State	MTR: Baseline and targets and priority actions for achieving LDN targets being established for the States TE: Baseline and targets for the LDN sub-indicators established for each State, including: (a) trends in land cover; b) trends in land productivity or functioning of the land; and c) trends in carbon stock above and below ground).	As part of the LDN planning efforts baseline and targets will be defined	Consultation with key sector entities and other stakeholders	Annually Reported in DO tab of the GEF PIR	Baseline reports	Project progress reports LDN reports	
	Indicator 12: increase in capacity for SLM/LDN and BD in the agriculture and infrastructure sectors for both women and men as measured by	MTR: At least 10% increase in capacity for SLM/LDN and BD in the agriculture and infrastructure sectors for both women and men as measured by UNDP capacity	UNDP Capacity Scorecard baseline values are: SLM baseline value is 12 of a possible 42	Consultations with relevant institutions and staff	MTR and TE Reported in DO tab of the GEF PIR	PMU, DECEM and State Technical Coordinators	UNDP capacity development scorecards	Assumption: -The agencies, including DECEM will develop institutional and technical measures that facilitate integrated SLM planning and management in a timely manner.

Results Monitoring	Indicators	Targets	Description of indicators and targets	Data source/Collection Methods ⁸⁷	Frequency	Responsible for data collection	Means of verification	Risks/Assumptions
	UNDP capacity development scorecard	development scorecard TE: At least 30% increase in capacity for SLM/LDN and BD in the agriculture and infrastructure sectors for both women and men as measured by UNDP capacity development scorecard						<u>Risks:</u> -Priorities of agencies and communities might shift if gestation period for realization of benefits take too long - Plans are developed by not used
Project Outcome 3: Community participation in measures to reduce land degradation, sustain ecosystem services and biodiversity, improve livelihoods and wellbeing	Indicator 13: Number of initiatives successfully implemented to enhance ecosystem services and biodiversity and reverse land degradation	MTR: At least 5 initiatives initiated to enhance ecosystem services and biodiversity and reverse land degradation from agriculture and infrastructure sectors through nature-based solutions, engaging both youth and an equal participation of women and men TE: At least 8 initiatives implemented to enhance ecosystem services and biodiversity and reverse land degradation from agriculture and infrastructure	Initiatives will build on practices available in FSM and those defined through the project that will be documented and disseminated in a format that enables easy replication	Field surveys Consultation with local farmers and extension staff	Annual Reported in DO tab of the GEF PIR	PMU and DECEM and State entities	Progress reports Field survey reports	Assumptions There is community and land owners commitment improving land management practices -Extension staff has capacity and manpower to support and guide community actions -There are adequate information of best land management practices <u>Risks:</u> -Farmers might find solutions too expensive, time consuming and not profitable -Competing community interests might stifle efforts at improving land management practice

Results Monitoring	Indicators	Targets	Description of indicators and targets	Data source/Collection Methods ⁸⁷	Frequency	Responsible for data collection	Means of verification	Risks/Assumptions
		sectors through nature-based solutions, engaging both youth and an equal participation of women and men						
	Indicator 14: Extent of application of practices to reduce land degradation in smallholder farms	MTR: At least 100 smallholder farms initiated SLM activities through support from project funded extension services, training and best practice guidance TE: Reduced land degradation in at least lands belonging to 335 smallholder farms (= 50% of households in the landscapes) adopting SLM techniques	Consultation with local farmers, NGOs and state agency staff	Field surveys Consultation with local farmers and extension staff	Annual Reported in DO tab of the GEF PIR	PMU and DECEM and State entities	Progress reports Field survey reports	Assumptions There is community and land owners commitment to improving land management practices -Extension staff has capacity and staff available to support and guide community actions -There is adequate information on best land management practices <u>Risks:</u> -Farmers might find solutions too expensive, time consuming and not profitable -Competing community interests might stifle efforts at improving land management practice
	Indicator 15: Percentage increase in incomes from smallholder farms adopting SLM, diversification of products and	MTR: At least average of 2 % improvement in net household profitability (including female- headed households)	To be achieved through the following interventions: (including female- headed households) from smallholder farms adopting SLM and related added value products /	Livelihood surveys	MTR and TE Reported in DO tab of the GEF PIR	PMU with support from consultants	Livelihood reports	<u>Assumptions</u> -There is adequate community interest and support in promoting economically important and sustainable activities - Adequate technical support and extension services available to

Results Monitoring	Indicators	Targets	Description of indicators and targets	Data source/Collection Methods ⁸⁷	Frequency	Responsible for data collection	Means of verification	Risks/Assumptions
	small-scale microenterprises	TE: At least average of 10% improvement in net household profitability (including female- headed households)	marketing / diversification initiatives					support diversification of livelihoods <u>Risks</u> -lack of market access might stifle opportunities for income generation
Project Outcome 4: Increased project impact, replication and upscaling through enhanced awareness and	Indicator 16: Percentage increase in awareness and attitudes towards sustainable land management and protecting ecosystem services in participating communities	MTR: At least 10% improvement in community awareness and attitudes towards sustainable land management, protecting ecosystem services and biodiversity as measured by KAP (Knowledge, Attitudes and Practices) survey TE: At least 30% improvement in community awareness and attitudes towards sustainable land management and protecting ecosystem services and biodiversity as measured by KAP (Knowledge, Attitudes and Practices) survey	Baseline KAP survey established to be undertaken in Year 1 and establish level of awareness and subsequent surveys to assess change in awareness	Consultation with communities	MTR and TE Reported in DO tab of the GEF PIR	PMU and State Technical Coordinators	KAP survey reports	<u>Assumption:</u> - Gender and Social Inclusion Mainstreaming Plan followed and benefits distributed equitably. -Stakeholders willing to actively participate in the review process.

Results Monitoring	Indicators	Targets	Description of indicators and targets	Data source/Collection Methods ⁸⁷	Frequency	Responsible for data collection	Means of verification	Risks/Assumptions
	Indicator 17: Number of best practices and lessons of SLM/LDN being applied	At least 3 project best practices and lessons on SLM/LDN (including on gender and youth mainstreaming and socio-cultural benefits) are accessed and being documented <i>TE:</i> At least 5 project best practices and lessons on SLM/LDN (including on gender and youth mainstreaming and socio-cultural benefits) are accessed and applied throughout the FSM	Best practices will cover project success in agriculture, fisheries, forestry and being applied to agriculture, coastal ecosystems, fisheries and marine resource use by both genders and multiple social groups.	Consultations with all stakeholders and field visits	Last 2 years Reported in DO tab of the GEF PIR	PMU, State technical consultants	Project progress reports Best practice reports	Assumptions -Project management will be able to identify, document and disseminate the best practices -Mid Term Review and End of Project Evaluation of the project will also contribute to identifying the best practices <u>-</u> Best practices on sustainable resource management readily available to resource users
	Indicator 18: Number of initiatives being implemented through active participation and knowledge exchange in regional and global platforms	TE: Coordinated efforts being made to enhance partnership arrangements with regional and global networks and programs TE: active participation and knowledge exchange in regional and global SLM/LDN initiatives	Participation in regional events, networks to sharing of information, study tours etc.	Documentation of partnership MOUs, number of lessons shared and events attended	MTR and TE Reported in DO tab of the GEF PIR	PMU	Regional workshop reports Data sharing reports Project progress reports	<u>Assumption</u> Willingness of government to permit participation in cross events, knowledge sharing platforms etc.

Results Monitoring	Indicators	Targets	Description of indicators and targets	Data source/Collection Methods ⁸⁷	Frequency	Responsible for data collection	Means of verification	Risks/Assumptions
Mid-term Review		Completed in timely fashion	To be outlined in MTR inception report	Submitted to GEF same year as 3 rd PIR	Project Manager and UNDP CO	Completed MTR	Mid-term Review report	<u>Assumption:</u> -National and local administration commitments to
Terminal Review		Completed in timely fashion	To be outlined in MTR inception report	Submitted to GEF at end of project	Project Manager and UNDP CO	Completed TE	Terminal Review report	assessment - Information available to enable appropriate level of evaluations - Adequate expertise available for update of indicators and reviews <u>Risks</u> -Willingness of government and communities to take corrective actions following evaluations might not be forthcoming
Environmental and Social risks and management plans, as relevant.		Completed in timely and diligent manner	Updated SESP and management plans	Annually	Project Manager UNDP CO	Updated SESP	Environmental and Social risks and management plans, as relevant.	Assumption: National and local administration recognize and committed to manage social and environmental risks

Table 16: Monitoring end Evaluation Plan
Monitoring and Evaluation Budget for project execution:		
GEF M&E requirements to be undertaken by Project Management Unit (PMU)	Indicative costs (US\$)	Time frame
Inception Workshop and Report	25,000 (Includes travel)	Inception Workshop within 2 months of the First Disbursement
M&E required to report on progress made in reaching GEF core indicators and project results included in the project results framework	82,560 (includes travel)	Annually and at mid-point and closure.
Preparation of the annual GEF Project Implementation Report (PIR)	NA	Annually typically between June- August
Monitoring of [SESP, ESMP GAP, SEP]	63,860 (includes travel)	On-going.
Supervision missions		Bi-Annually
Learning missions	NA	As needed
Independent Mid-term Review (MTR):	32,000 (includes travel)	Includes international and national consultants and travel costs Date:
Independent Terminal Evaluation (TE): costs associated with conducting the independent evaluation to be commissioned by UNDP not the Implementing Partner or the PMU.	42,000 (includes travel)	Includes international and national consultants and travel costs Date:
	245,420	Equivalent to TBWP component (M&E)

VII. GOVERNANCE AND MANAGEMENT ARRANGEMENTS

Section 1: General roles and responsibilities in the projects' governance mechanism

148.<u>Implementing Partner</u>: The Implementing Partner for this project is Department of Environment, Climate Change & Emergency Management (DECEM). The Implementing Partner is the entity to which the UNDP Administrator has entrusted the implementation of UNDP assistance specified in this signed project document along with the assumption of full responsibility and accountability for the effective use of UNDP resources and the delivery of outputs, as set forth in this document.

149. The Implementing Partner is responsible for executing this project. Specific tasks include:

- Project planning, coordination, management, monitoring, evaluation and reporting. This includes providing
 all required information and data necessary for timely, comprehensive and evidence-based project
 reporting, including results and financial data, as necessary. The Implementing Partner will strive to ensure
 project-level M&E is undertaken by national institutes and is aligned with national systems so that the data
 used and generated by the project supports national systems.
- Overseeing the management of project risks as included in this project document and new risks that may emerge during project implementation.
- Procurement of goods and services, including human resources.
- Financial management, including overseeing financial expenditures against project budgets.
- Approving and signing the multiyear workplan.
- Approving and signing the combined delivery report at the end of the year; and,
- Signing the financial report or the funding authorization and certificate of expenditures.
- 150. Responsible Parties: DECEM will be supported by sub-level responsible parties within each of the States as shown in Table 17. Further, other responsible parties/sub-level responsible parties will be established as needed to support project implementation. The College of Micronesia-FSM will be established as a responsible party for delivery of the modular biosecurity training course, selected on comparative advantage. Local NGOs will be appointed to support delivery of activities at project sites – this will be done through a competitive process. Responsible parties for this project will act on behalf and designed by the Implementing Partner on the basis of a written agreement or contract defining specific roles and responsibilities following government rules and regulations.

FSM/State	Federal Implementing Partner and State Sub-level Responsible Parties
	Department of Environment, Climate Change and Emergency Management (DECEM) – Implementing Partner
FSM	Department of Resources and Development
	 Division of Agriculture Division of Marine Resources
Kosrae State	 Kosrae Island Resource Management Authority (sub-level responsible party) Division of Forestry Division of Marine Conservation Department of Resource & Economic Affairs Division of Agriculture
Pohnpei State	 Environmental Protection Agency (sub-level responsible party) Department of Resources and Development Department of Land and Natural Resources Department of Economic Affairs
Chuuk State	Environmental Protection Agency (sub-level responsible party)

Table 17: Implementation Arrangements at each State

	 Department of Agriculture and Forestry (terrestrial sites) Department of Marine Resources (marine sites)
Yap State	 Department of Resources and Development (sub-level responsible party) Division of Agriculture and Forestry Division of Marine Resources Management Environmental Protection Agency

Project stakeholders and target groups:

- 151. The key beneficiaries, namely the local wetland resource dependents in the 4 sites that will be directly involved through their respective community institutions in all aspects of the project, namely in the integrated landscape planning process, in the planning and management of conservation, habitat restoration, sustainable land and coastal resource use, livelihood and small-scale enterprise development activities, as well as overseeing and supporting the monitoring of the condition of the landscape sites through their individual community committees. The project will invest in technical and capacity development support to strengthen existing communities and their organizations, support training and capacity development of these institutions, provide extension support in relation to agriculture, fisheries and coastal resource conservation and sustainable use, income generation, and other livelihood improvement activities. Other beneficiaries will include the population living around the four high lands that will benefit from the improved quality of the terrestrial and wetland systems, the management of pollution and erosion as well as provide safe and pleasant recreation and tourism experiences.
- 152.<u>UNDP</u>: UNDP is accountable to the GEF for the implementation of this project. This includes overseeing project execution undertaken by the Implementing Partner to ensure that the project is being carried out in accordance with UNDP and GEF policies and procedures and the standards and provisions outlined in the Delegation of Authority (DOA) letter for this project. The UNDP GEF Executive Coordinator, in consultation with UNDP Bureaus and the Implementing Partner, retains the right to revoke the project DOA, suspend or cancel this GEF project. UNDP is responsible for the Project Assurance function in the project governance structure and presents to the Project Board and attends Project Board meetings as a non-voting member.

Section 2: Project governance structure

- 153. The governance structure for the project is presented in the organogram below. The PMU will be supported by a National-State Inter-Sectoral Working Group (NLMWG) that will oversee and support the implementation of the project, including the preparation of the NAP, SAPs and other key policy and legislative actions. At the State level, State level SLM Working Groups will oversee the review and updating of selected/priority States' policies, plans, programs and budgets for mainstreaming of SLM/LDN principles and targets. Each State will be supported by a State Technical Coordinator and support staff from the State EPAs to implement the project at State level, including activities in the demonstration sites. Demonstration Landscape Technical Working Groups will facilitate and support technical coordination among the government sector entities, NGOs and local communities to plan, implement and monitor activities at the demonstration sites.
- 154. The Project **Board** will provide high level policy, strategic and regulatory guidance to the Technical and Working Groups and support for cross-sectoral coordination and partnership in stewardship of the target areas. The Project Board is chaired by the Secretary of DECEM. It meets at least once a year and is responsible for calling the meeting, preparing the agenda and a meeting information package that includes: the Annual Evaluation Report; recommendations from the Technical Working Committees; details on any major proposals (projects, initiatives or infrastructure developments); and proposed activities for the following year. The Board discusses progress towards the achievement of Targets and Objectives, based on the monitoring and evaluation information provided by the PMU, and the recommendations from the Technical Committees. They review any major projects put forward for submission to external funding agencies and endorse, or propose amendments to, those initiatives.

- 155. The composition of the Project Board will include the following organizations, subject to confirmation during the project inception period. Observers may be included at PB meetings upon the agreement of the PB members.
 - Department of Environment, Climate Change & Emergency Management (DECEM) Chair, Secretary
 - Department of Resources and Development
 - Department of Foreign Affairs
 - State representatives nominated by their respective Governors (four) representing the beneficiaries
 - UNDP



*Indicates co-financed positions.

First line of defense:

• Person providing oversight of execution support (COS) cannot report to UNDP staff providing project assurance or providing programmatic oversight support to the RR

Second line of Defense:

- Regional Bureau oversees RR and function of UNDP compliance in project assurance
- BPPS RTA overseas functions of technical oversight and GEF compliance in project assurance. BPPS NCE PTA overseas RTA function.
- UNDP GEF Executive Coordinator and Regional Bureau Deputy Director can revoke DOA/cancel/suspend project or provide enhanced oversight.
- 156. The UNDP Resident Representative assumes full responsibility and accountability for oversight and quality assurance of this Project and ensures its timely implementation in compliance with the GEF-specific requirements and UNDP's Programme and Operations Policies and Procedures (POPP), its Financial Regulations and Rules and Internal Control Framework. A representative of the UNDP Country Office will assume the assurance role and will present assurance findings to the Project Board, and therefore attends Project Board meetings as a non-voting member.
- 157. **UNDP project support**: The Implementing Partner and GEF OFP have requested UNDP to provide support services in the amount of *USD\$ 41,000 for* the full duration of the project, and the GEF has agreed for UNDP to provide such execution support services and for the cost of these services to be charged to the project budget. The execution support services whether financed from the project budget or other sources have been set out in detail and agreed between UNDP Country Office and the Implementing Partner in a Letter of Agreement (LOA). This LOA is attached to this Project Document.

To ensure the strict independence required by the GEF and in accordance with the UNDP Internal Control Framework, these execution services will be delivered independent from the GEF-specific oversight and quality assurance services.

Section 3: Segregation of duties and firewalls vis-à-vis UNDP representation on the Project Steering Committee:

158.As noted in the <u>Minimum Fiduciary Standards for GEF Partner Agencies</u>, in cases where a GEF Partner Agency (i.e. UNDP) carries out both implementation oversight and execution of a project, the GEF Partner Agency (i.e. UNDP) must separate its project implementation oversight and execution duties, and describe in the relevant project document a: 1) Satisfactory institutional arrangement for the separation of implementation oversight and executing functions in different departments of the GEF Partner Agency; and 2) Clear lines of responsibility, reporting and accountability within the GEF Partner Agency between the project implementation oversight and execution functions.

In this case, UNDP's implementation oversight role in the project – as represented in the project board and via the project assurance function – is performed by UNDP Resident Representative and may be delegated to Country Manager/Deputy Resident Representative, and Team leader, Resilience and Climate Change or his/her delegation. UNDP's execution role in the project (as requested by the implementing partner and approved by the GEF) is performed by Procurement and Contract Management Analyst and Administration Analyst who will report to Operations Manager.

Section 4: Roles and Responsiblities of the Project Organization Strucutre:

159.a) Project Board: All UNDP projects must be governed by a multi-stakeholder board or committee established to review performance based on monitoring and evaluation, and implementation issues to ensure quality delivery of

results. The Project Board (also called the Project Steering Committee) is the most senior, dedicated oversight body for a project.

160. The two main (mandatory) roles of the Project Boardare as follows:

- 1) High-level oversight of the execution of the project by the Implementing Partner (as explained in the <u>"Provide Oversight"</u> section of the POPP). This is the primary function of the project board and includes annual (and as-needed) assessments of any major risks to the project, and decisions/agreements on any management actions or remedial measures to address them effectively. The Project Board reviews evidence of project performance based on monitoring, evaluation and reporting, including progress reports, evaluations, risk logs and the combined delivery report. The Project Board is responsible for taking corrective action as needed to ensure the project achieves the desired results.
- 2) Approval of strategic project execution decisions of the Implementing Partner with a view to assess and manage risks, monitor and ensure the overall achievement of projected results and impacts and ensure long term sustainability of project execution decisions of the Implementing Partner (as explained in the <u>"Manage Change"</u> section of the POPP).

Requirements to serve on the Project Board:

- ✓ Agree to the Terms of Reference of the Board and the rules on protocols, quorum and minuting.
- ✓ Meet annually; at least once.
- ✓ Disclose any conflict of interest in performing the functions of a Project Board member and take all measures to avoid any real or perceived conflicts of interest. This disclosure must be documented and kept on record by UNDP.
- ✓ Discharge the functions of the Project Board in accordance with UNDP policies and procedures.
- ✓ Ensure highest levels of transparency and ensure Project Board meeting minutes are recorded and shared with project stakeholders.

Responsibilities of the Project Board:

- ✓ Consensus decision making:
 - The Project Board provides overall guidance and direction to the project, ensuring it remains within any specified constraints, and providing overall oversight of the project implementation.
 - Review project performance based on monitoring, evaluation and reporting, including progress reports, risk logs and the combined delivery report;
 - The Project Board is responsible for making management decisions by consensus.
 - In order to ensure UNDP's ultimate accountability, Project Board decisions should be made in accordance with standards that shall ensure management for development results, best value money, fairness, integrity, transparency and effective international competition.
 - In case consensus cannot be reached within the Board, the UNDP representative on the board will mediate to find consensus and, if this cannot be found, will take the final decision to ensure project implementation is not unduly delayed.
- ✓ Oversee project execution:

- Agree on project manager's tolerances as required, within the parameters outlined in the project document, and provide direction and advice for exceptional situations when the project manager's tolerances are exceeded.
- Appraise annual work plans prepared by the Implementing Partner for the Project; review combined delivery reports prior to certification by the implementing partner.
- Address any high-level project issues as raised by the project manager and project assurance;
- Advise on major and minor amendments to the project within the parameters set by UNDP and the donor and refer such proposed major and minor amendments to the UNDP BPPS Nature, Climate and Energy Executive Coordinator (and the GEF, as required by GEF policies);
- Provide high-level direction and recommendations to the project management unit to ensure that the agreed deliverables are produced satisfactorily and according to plans.
- Track and monitor co-financed activities and realisation of co-financing amounts of this project.
- Approve the Inception Report, GEF annual project implementation reports, mid-term review and terminal evaluation reports.
- Ensure commitment of human resources to support project implementation, arbitrating any issues within the project.
- ✓ Risk Management:
 - Provide guidance on evolving or materialized project risks and agree on possible mitigation and management actions to address specific risks.
 - Review and update the project risk register and associated management plans based on the information prepared by the Implementing Partner. This includes risks related that can be directly managed by this project, as well as contextual risks that may affect project delivery or continued UNDP compliance and reputation but are outside of the control of the project. For example, social and environmental risks associated with co-financed activities or activities taking place in the project's area of influence that have implications for the project.
 - Address project-level grievances.
- ✓ Coordination:
 - Ensure coordination between various donor and government-funded projects and programmes.
 - Ensure coordination with various government agencies and their participation in project activities.
- 161. **Composition of the Project Board**: The composition of the Project Board must include individuals assigned to the following three roles:
 - Project Executive: This is an individual who represents ownership of the project and chairs (or co-chairs) the Project Steering Committee. The Executive usually is the senior national counterpart for nationally implemented projects (typically from the same entity as the Implementing Partner). In exceptional cases, two individuals from different entities can co-share this role and/or co-chair the Project Steering Committee. If the project executive co-chairs the Project Steering Committee with representatives of another category, it typically does so with a development partner representative. The Project Executive is: Secretary, Department of Environment, Climate Change & Emergency Management (DECEM) Chair,
 - 2. Beneficiary Representative(s): Individuals or groups representing the interests of those groups of stakeholders who will ultimately benefit from the project. Their primary function within the Project Steering Committee is to ensure the realization of project results from the perspective of project beneficiaries. Often representatives from civil society, industry associations, or other government entities benefiting from the project can fulfil this role. There can be multiple beneficiary representatives in a Project Steering

Committee. The Beneficiary representative (s) is/are: **one each from the four States as designated by the respective Governors.**

3. Development Partner(s): Individuals or groups representing the interests of the parties concerned that provide funding, strategic guidance and/or technical expertise to the project. The Development Partner is UNDP Resident Representative

162. b) Project Assurance: Project assurance is the responsibility of each project board member; however, UNDP has a distinct assurance role for all UNDP projects in carrying out objective and independent project oversight and monitoring functions. UNDP performs quality assurance and supports the Project Board (and Project Management Unit) by carrying out objective and independent project oversight and monitoring functions, including compliance with the risk management and social and environmental standards of UNDP. The Project Board cannot delegate any of its quality assurance responsibilities to the Project Manager. Project assurance is totally independent of project execution. A designated representative of UNDP playing the project assurance role is expected to attend all Project Steering Committee meetings and support Project Steering Committee processes as a non-voting representative. It should be noted that while in certain cases UNDP's project assurance role across the project may encompass activities happening at several levels (e.g. global, regional), at least one UNDP representative playing that function must, as part of their duties, specifically attend Project Steering Committee meeting and provide Project Steering Committee members with the required documentation required to perform their duties. The UNDP representative playing the main project assurance function is/are: CCR (RSD) Team representatives and a Representative of the Management Performance and Oversight Team (Program Oversight Specialist) 163. c) Project Management – Execution of the Project: The Project Director (PD) is the senior most representative of the Project Management Unit (PMU) and is overall responsible for the management of the project. The PD will be a senior member of the DECEM and will be funded through co-financing. The PD will be supported by a national Project Manager (PM) who will be responsible for the overall day-to-day management of the project on behalf of the Implementing Partner, including the mobilization of all project inputs, supervision over project staff, responsible parties, consultants and sub-contractors. The PM typically presents key deliverables and documents to the Project Steering Committee for their review and approval, including progress reports, annual work plans, adjustments to tolerance levels and risk registers. The PMU will also have a National Technical Advisor, a Finance/Adminstrative Assistant and a communication officer. Each of the four States will have a State Technical Coordinator and a State Stakeholder Engagement Officer. Terms of Reference for staff of the PMU are provided in Annex 7.A designated representative of the PMU is expected to attend all board meetings and support board processes as a non-voting representative.

The primary PMU representatives attending board meetings are: National Project Director and Project Manager

VIII. FINANCIAL PLANNING AND MANAGEMENT

- 164. The total cost of the project is USD 38,647,399. This is financed through a GEF grant of USD 5,155,255 administered by UNDP and additional support of USD 33,492,144 (include GEF grant administered by other GEF Agencies as relevant). UNDP, as the GEF Implementing Agency, is responsible for the oversight of the GEF resources and the cash co-financing transferred to UNDP bank account only.
- 165. <u>Co-financing</u>: The actual realization of project co-financing amounts will be monitored by the UNDP Country Office and the PMU on an annual basis in the GEF PIF and will be reported to the GEF during the mid-term review and terminal evaluation process as follows:

Co-financing source	Type of Co- financing	Amount (\$)
Department of Environment, Climate	Public	5,250,000
Change and Emergency Management	Investment	
	In-Kind	3,500,000
FSM Department of Resources and	Public	10,000,000
Development	Investment	
	In-Kind	4,000,000
Pohnpei State Government	In-Kind	1,750,000
Chuuk State Government	In-Kind	300,000
Yap State Government	In-Kind	1,092,144
Kosrea State Government	In-Kind	2,000,000
Conservation Society of Pohnpei	In-Kind	1,600,000
Micronesia Conservation Trust	In-Kind	4,000,000
Total Co-financing		33,492,144

- 166. **Budget Revision and Tolerance**: As per UNDP POPP, the project board may agree with the project manager on a tolerance level for each detailed plan under the overall multi-year workplan. The agreed tolerance should be written in the project document or approved project board meeting minutes. It should normally not exceed 10 percent of the agreed annual budget at the activity level, but within the overall approved multi-year workplan at the activity level. Within the agreed tolerances, the project manager can operate without intervention from the project board. Restrictions apply as follows:
- 167.Should the following deviations occur, the Project Manager/IP through UNDP Country Office will seek the approval of the BPPS/NCE-VF team to ensure accurate reporting to the GEF. It is **strongly encouraged** to maintain the expenditures within the approved budget at the budgetary account and at the component level:
 - a) Budget reallocations must prove that the suggested changes in the budget will not lead to material changes in the results to be achieved by the project. A strong justification is required and will be approved on an exceptional basis. Budget re-allocations among the components (including PMC) of the approved Total Budget and Work Plans (TBWP) that represent a value greater than 10% of the total GEF grant.
 - b) Introduction of new outputs/activities (i.e. budget items) that were not part of the agreed project document and TBWP that represent a value greater than 5% of the total GEF grant. The new budget items must be eligible as per the <u>GEF and UNDP policies</u>.
 - c) Project management cost (PMC): budget under PMC component is capped and cannot be increased.

- 168. UNDP is not in a position to increase the total budget above the amount approved by the donor, therefore any over-expenditure would have to be absorbed from non-GEF resources by the Implementing Partner (GEF Executing Entity)
- 169. **Project extensions:** The UNDP-BPPS-NCE team Executive Coordinator must approve all requests for extension of the Project Completion Date and for other milestone extensions with hard deadlines. All extensions impose additional time and cost burdens at all levels and the GEF project budget cannot be increased beyond its originally approved amount. A single extension may be granted on an exceptional basis and subject to the conditions and maximum durations set out in the UNDP POPP. The project management costs during the extension period must remain within the originally approved amount, and any increase in PMC costs shall be covered by non-GEF resources; the additional UNDP oversight costs during the extension period must be covered by non-GEF resources, in accordance with UNDP's policy as set out in UNDP POPP.

For any extension request, UNDP CO and IP will consult and jointly present a clear plan indicating how and from which specific sources the additional oversight costs that will be incurred by UNDP will be covered during the extended period. The BPPS-NCE Executive Coordinator will consult the Regional Bureaux (RBX) and may reject the extension request if no (external co-financing by the IP or internal UNDP CO resources) can be identified.

All extension requests, along with all supporting documentation, shall be submitted by the IP to the UNDP CO in line with the requirements and within the deadlines set out in the UNDP SOPs and policies in UNDP POPP.

Audit: The project will be audited as per UNDP Financial Regulations and Rules and applicable audit policies. Audit cycle and process must be discussed during the Inception workshop. If the Implementing Partner is an UN Agency, the project will be audited according to that Agencies applicable audit policies.

<u>Transfer or disposal of assets</u>: In consultation with the Implementing Partner and other parties of the project, UNDP is responsible for deciding on the transfer or other disposal of assets. Transfer or disposal of assets is recommended to be reviewed and endorsed by the project board following UNDP rules and regulations. Assets may be transferred to the government for project activities managed by a national institution at any time during the life of a project, however, **must be done before the operational closure date**. In all cases of transfer, a transfer document must be prepared and kept on file⁹⁰. The transfer should be done before Project Management Unit complete their assignments.

- 170. <u>Completion Date:</u> The project completion date is the date of Project Document Signature plus project duration. This date can only be extended through a formal extension request. Prior to completion date, all UNDP-financed inputs must be provided and related activities for the Project completed. No activities, except for the final clearance of the Terminal Evaluation Report and the corresponding management response and the end-of-project review Project Board Meeting should take place after the Completion Date.
- 171. **Project Closure**: Project closure will be conducted as per UNDP requirements outlined in the UNDP POPP. All costs incurred to close the project must be included in the project closure budget and reported as final project commitments presented to the Project Board during the final project review. The only costs a project may incur following the final project review are those included in the project closure budget.

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https://popp.undp.org/_layouts/15/WopiFrame.aspx?sourcedoc=/UNDP_POPP_DOCUMENT_LIBRARY/Public/PPM Project%20Management Closing.docx&action=default.

- <u>Operational Closure</u>: Operational closure must happen within 9 months from project completion date. Prior to operational closure, the Terminal Evaluation must have been submitted and the corresponding TE management response and the end-of-project review Project Board meeting must have been completed. The Implementing Partner through a Project Board decision will notify the UNDP Country Office when operational closure has been completed. Before Operational Closure, the project must have completed the transfer or disposal of any equipment that is still the property of UNDP.
- <u>Financial Closure</u>: Financial closure must happen within 6 months of operational closure or after the date of cancellation. The project will be financially closed when the following conditions have been met: a) the project is operationally completed or has been cancelled; b) the Implementing Partner has reported all financial transactions to UNDP; c) UNDP has closed the accounts for the project; d) UNDP and the Implementing Partner have certified a final Combined Delivery Report (which serves as final budget revision).

Between operational and financial closure, the implementing partner will identify and settle all financial obligations and prepare a final expenditure report. The UNDP Country Office will send the final signed closure documents including confirmation of final cumulative expenditure and unspent balance to BPPS/NCE for confirmation before the project will be financially closed in Quantum by the UNDP Country Office.

- 172. <u>Cancellation and Suspension</u>: All projects considering going through cancellation or suspension must follow UNDP and GEF requirements. Guidance can be found in the UNDP POPP (<u>SOPs for management actions of Vertical Fund</u> projects escalated to the Executive Coordinator and <u>Guidance for GEF project revisions</u>).
- 173. **Refund to GEF:** Should a refund of unspent funds to the GEF be necessary, this will be managed directly by the BPPS/NCE team Directorate in New York. No action is required by the UNDP Country Office on the actual refund from UNDP project to the GEF. Unspent project balance is not permitted to be transferred to any other parties.

IX. TOTAL BUDGET AND WORK PLAN

Total Budget and Work Plan			
Quantum Business Unit	UNDP-FJI		
Quantum Project ID:	01000658	Quantum Project Title:	Securing Climate-Resilient Sustainable Land Management and Progress Towards Land Degradation Neutrality in the Federated States of Micronesia
Quantum Award ID:	<mark>1102017</mark>	Quantum Award Title:	FSM LAND DEGRADATION NEUTRALITY
UNDP-GEF PIMS No.	6567		
Implementing Partner	Department of Environment	, Climate Change & Emerge	ency Management (DECEM)

Quantum Outcome (GEF Component)	Quantum Output (GEF Outcome)	Quantum Activity (GEF Output)	Quantum Responsible Party	Quantum Fund ID	Quantum Donor ID	Quantum Budgetary Account Code	Quantum Budget Account Description	Amount Year 1 (USD)	Amount Year 2 (USD)	Amount Year 3 (USD)	Amount Year 4 (USD)	Amount Year 5 (USD)	Amount Year 6 (USD)	Total (USD)	See Budget Note:
Component 1: Strengthening the	Outcome 1: Strengthened	Output 1.1: A SLM NAP for combating	UNDP	62000	10003	71200	International Consultants	30,000	9,000	9,000	-	-	-	48,000	1
strategic (institutional,	inter-sectoral land degradation governance, prepared for	land degradation prepared for	Total UNDP		30,000	9,000	9,000	-	-	-	48,000				
policy, capacity and regulatory) strategies to framework for mainstream	adoption by government, incorporating	DECEM	62000	10003	71300	Local Consultants	38,000	20,000	-	-	-	-	58,000	2	
addressing land degradation	sustainable land management,	indicators, targets and priority actions for achieving LDN				71800	Contractual Services -Imp Partn	15,000	15,000	15,000	15,000	15,000	15,000	90,000	3
biodiver and LDN	biodiversity and LDN	across each state, with support for mainstreaming into priority policies				72100	Contractual Services - Firm	-	34,000	34,000	-	-	-	68,000	4
						75700	Training, Workshops and Conf	10,000	20,000	22,000	10,000	10,000	-	72,000	5
						71600	Travel	5,000	2,000	2,000	2,000	-	-	11,000	6
			Total DECEM		L			68,000	91,000	73,000	27,000	25,000	15,000	299,000	
		Total Output 1.1						98,000	100,000	82,000	27,000	25,000	15,000	347,000	
		Output 1.2. Priority gaps and weaknesses in the regulatory framework and	DECEM	62000	10003	71800	Contractual Services -Imp Partn	10,000	10,000	10,000	10,000	10,000	10,000	60,000	3
		enforcement mechanisms for combatting land				75700	Training, Workshops and Conf	4,600	10,000	4,000	10,000	7,400	4,000	40,000	5
		identified, and				71600	Travel	3,000	2,000	2,000	2,000	2,000	2,000	13,000	6

		improvements achieved through technical support and advocacy leading to adoption by state and national	Total DECEM					17,600	22,000	16,000	22,000	19,400	16,000	113,000	
	·	governments Total Output 1.2						17,600	22,000	16,000	22,000	19,400	16,000	113,000	
		Output 1.3 State level land use plans and local	DECEM	62000	10003	71800	Contractual Services -Imp Partn	10,000	10,000	10,000	10,000	10,000	10,000	60,000	3
		management plans on the high islands strengthened with enhanced				72100	Contractual Services- Companies	-	11,000	11,000	45,000	20,000	13,000	100,000	4
		implementation to avoid, reduce and reverse land degradation and				75700	Training, Workshops and Conf	-	-	4,200	5,200	2,600	-	12,000	5
		conserve biodiversity				71600	Travel	6,000	5,000	6,000	7,000	4,000	4,000	32,000	6
			Total DECEM					16,000	26,000	31,200	67,200	36,600	27,000	204,000	
		Total Output 1.3						16,000	26,000	31,200	67,200	36,600	27,000	204,000	
		Output 1.4 Existing/nascent state level intersectoral working	DECEM	62000	10003	71800	Contractual Services -Imp Partn	4,653	4,653	4,653	4,653	4,653	4,653	27,918	3
		groups for landscape management fostered and operationalized to				75700	Training, Workshops and Conf	8,400	10,000	4,800	4,800	5,000	5,000	38,000	5
		address land degradation, and				71600	Travel	1,000	1,000	-	-	-	-	2,000	6
		intersectoral working group established and supported to oversee formulation and mainstreaming of the NAP, both with engagement of the private sector	Total DECEM					14,053	15,653	9,453	9,453	9,653	9,653	67,918	
	Table	iotal Output 1.4						14,053	15,653	9,453	9,453	9,653	9,653	67,918	
Total Component 1	i otal Outcome 1							145,653 145,653	163,653 163,653	138,653 138,653	125,653 125,653	90,653	67,653 67,653	731,918	
Component 2: Enhancing	Outcome 2: Enhanced tools	Output 2.1. National level spatial mapping	DECEM	62000	10003	71300	Local Consultants	-	20,000	-	-	-	-	20,000	8

information, decision/support tools and capacity for addressing	and government capacity for SLM and LDN	and strengthened baseline information available to states on existing platforms to				71800	Contractual Services -Imp Partn	12,200	12,750	12,750	12,750	12,750	12,750	75,950	9	
land degradation		assess trends, drivers and hotspots of land degradation and taraets set for LDN				75700	Training, Workshops and Conf	-	4,000	4,000	-	-	-	8,000	10	
		sub-indicators				71600	Travel	4,000	4,000	2,000	2,000	2,000	2,000	16,000	11	
			Total DECEM		L			16,200	40,750	18,750	14,750	14,750	14,750	119,950		
			UNDP	62000	10003	71200	International Consultants	-	-	2,000	2,000	-	-	4,000	7	
						72200	Equipment and furniture	20,000	15,000	15,000	-	-	-	50,000	12	
			Total UNDP					20,000	15,000	17,000	2,000	-	-	54,000		
		Total Output 2.1						36,200	55,750	35,750	16,750	14,750	14,750	173,950		
		Output 2.2 Resilience assessments of	DECEM	62000	10003	71300	Local Consultants	-	20,000	20,000	-	-	-	40,000	8	
		and land uses to land degradation and climate-induced risks				71800	Contractual Services -Imp Partn	12,207	12,750	12,750	12,750	12,750	12,750	75,957	9	
		to support planning and zoning				75700	Training, Workshops and Conf	-	-	4,000	4,000	-	-	8,000	10	
						71600	Travel	3,000	2,000	2,000	2,000	2,000	2,000	13,000	11	
				Total DECEM		L			15,207	34,750	38,750	18,750	14,750	14,750	136,957	
			UNDP	62000	10003	71200	International Consultants	-	-	3,000	3,000	-	-	6,000	7	
			Total UNDP					-	-	3,000	3,000	-	-	6,000		
		Total Output 2.2						15,207	34,750	41,750	21,750	14,750	14,750	142,957		
		Output 2.3 Protocols for monitoring land degradation and	DECEM	62000	10003	71300	Local Consultants	-	-	20,000	20,000	-	-	40,000	8	
		practical guidelines for promoting/mainstre				71800	Contractual Services -Imp Partn	12,200	12,750	12,750	12,750	12,750	12,750	75,950	9	
		aming SLM/BD in the agriculture and infrastructure sectors				75700	Training, Workshops and Conf	-	-	4,000	4,000	-	-	8,000	10	
						71600	Travel	3,000	2,000	2,000	2,000	2,000	2,000	13,000	11	

]	Total DECEM					15,200	14,750	38,750	38,750	14,750	14,750	136,950	
			UNDP	62000	10003	71200	International Consultants	-	-	3,000	3,000	-	-	6,000	7
			Total UNDP		•	•		-	-	3,000	3,000	-	-	6,000	
		Total Output 2.3						15,200	14,750	41,750	41,750	14,750	14,750	142,950	
		Output 2.4: Capacity building for government officers, extension staff	DECEM	62000	10003	71800	Contractual Services -Imp Partn	12,200	12,750	12,750	12,750	12,750	12,750	75,950	9
		community groups, NGOs, etc., plus technology transfer				75700	Training, Workshops and Conf	-	18,000	30,000	11,000	10,000	-	69,000	10
		LDN monitoring and mainstreaming of SLM/BD ensuring				71600	Travel	2,000	22,000	24,000	24,000	19,000	7,000	98,000	11
		extension programs	Total DECEM					14,200	52,750	66,750	47,750	41,750	19,750	242,950	
		are gender-focused and gender- responsive	UNDP	62000	10003	71200	International Consultants	-	-	1,000	1,000	-	-	2,000	7
						72200	Equipment and furniture	20,000	15,000	15,000	-	-	-	50,000	12
						72800	Information Technology Equipm	20,000	-	-	-	-	-	20,000	12-A
			Total UNDP					40,000	15,000	16,000	1,000	0	0	72,000	
		Total Output 2.4						54,200	67,750	82,750	48,750	41,750	19,750	314,950	
	Total Outcome 2							120,807	173,000	202,000	129,000	86,000	64,000	774,807	
Total Component 2								120,807	173,000	202,000	129,000	86,000	64,000	774,807	
Component 3: Embedding climate-smart	Outcome 3: Community participation in	Output 3.1 Community-led participatory	DECEM	62000	10003	71200	International Consultants	8,000	8,000	-	-	-	-	16,000	13
sustainable land management in critical landscapes and	measures to reduce land degradation, sustain	integrated landscape management and rehabilitation plans co-designed, agreed				71800	Contractual Services -Imp Partn	29,214	29,214	29,214	29,214	29,214	29,214	175,284	15
coastal zones (demonstration activities)	ecosystem services and biodiversity and improve	and implemented to avoid, reduce and reverse land dearadation to				72100	Contractual Services- Companies	35,000	25,000	-	-	-	-	60,000	16
	livelihoods and wellbeing	protect ecosystem services and biodiversity				75700	Training, Workshops and Conf	3,000	8,000	7,400	-	-	-	18,400	17
						71600	Travel	2,000	2,000	2,000	2,000	2,000	2,000	12,000	18

	Total DECEM					77,214	72,214	38,614	31,214	31,214	31,214	281,684	
	UNDP	62000	10003	71200	International Consultants	-	-	3,000	3,000	-	-	6,000	13-A
	Total UNDP		•			-	-	3,000	3,000	-	-	6,000	
Total Output 3.1						77,214	72,214	41,614	34,214	31,214	31,214	287,684	
Output 3.2: Targeted ecosystem rehabilitation	DECEM	62000	10003	71200	International Consultants	8,000	8,000	-	-	-	-	16,000	13
measures (nature- based solutions) piloted in innovative partnerships with				71800	Contractual Services -Imp Partn	74,215	74,215	74,215	74,215	74,215	74,215	445,290	15
communities and the private sector in degraded watersheds and				72100	Contractual Services- Companies	-	100,000	240,000	240,000	240,000	180,000	1,000,000	16
coastal zones to				71600	Travel	2,000	4,000	6,000	6,000	4,000	4,000	26,000	18
land degradation and enhance biodiversity				72200	Equipment and furniture	-	10,000	40,000	40,000	10,000	-	100,000	19
				72800	Information Technology Equipm	14,000	-	-	-	-	-	14,000	19-A
	Total DECEM					98,215	196,215	360,215	360,215	328,215	258,215	1,601,290	
	UNDP	62000	10003	71200	International Consultants	-	-	3,000	3,000	-	-	6,000	13-A
	Total UNDP					-	-	3,000	3,000	-	-	6,000	
Total Output 3.2						98,215	196,215	363,215	363,215	328,215	258,215	1,607,290	
Output 3.3 Smallholder farmers	DECEM	62000	10003	71300	Local Consultants	-	30,000	30,000	-	-	-	60,000	14
on traditionally owned lands supported to implement				71800	Contractual Services -Imp Partn	74,215	74,215	74,215	74,215	74,215	74,215	445,290	15
traditional and innovative climate- smart agricultural practices for SLM and				72100	Contractual Services- Companies	-	25,000	40,000	60,000	60,000	20,000	205,000	16
climate change adaptation that contribute to LDN, protect ecosystem				75700	Training, Workshops and Conf	3,000	8,000	8,600	12,000	12,000	4,400	48,000	17
services, biodiversity				71600	Travel	-	4,000	4,000	4,000	4,000	4,000	20,000	18
and enhance incomes	Total DECEM		•		•	77,215	141,215	156,815	150,215	150,215	102,615	778,290	

			UNDP	62000	10003	71200	International Consultants	-	-	3,000	3,000	-	-	6,000	13-A					
			Total UNDP					-	-	3,000	3,000	-	-	6,000						
		Total Output 3.3						77,215	141,215	159,815	153,215	150,215	102,615	784,290						
	Total Outcome 3							252,644	409,644	564,644	550,644	509,644	392,044	2,679,264						
Total Component 3				252,644	409,644	564,644	550,644	509,644	392,044	2,679,264										
Component 4: Effective knowledge	Outcome 4. Increased	Output 4.1: Awareness-raising	DECEM	62000	10003	71200	International Consultants	20,000	10,000	-	-	-	-	30,000	20					
management, gender	replication and upscaling	the benefits of tackling land				71300	Local Consultants	30,000	14,000	-	-	-	-	44,000	21					
mainstreaming, and M&E	mainstreaming, and M&E through enhanced awareness and knowledge management degradation delivered through targeted communications, education, campaigns and community participation				71800	Contractual Services -Imp Partn	1,768	1,768	1,768	1,768	1,768	1,768	10,608	22						
		education, campaigns and community participation					72100	Contractual Services- Companies	-	-	20,000	30,000	12,000	12,000	74,000	23				
						75700	Training, Workshops and Conf	2,000	20,000	5,000	5,000	4,000	-	36,000	24					
						71600	Travel	10,000	4,000	4,000	4,000	4,000	2,000	28,000	25					
							-				72500	Supplies	-	-	20,939	20,000	-	-	40,939	26
			Total DECEM					63,768	49,768	51,707	60,768	21,768	15,768	263,547						
		Total Output 4.1						63,768	49,768	51,707	60,768	21,768	15,768	263,547						
		Output 4.2 Knowledge management	DECEM			71800	Contractual Services -Imp Partn	1,768	1,768	1,768	1,768	1,768	1,768	10,608	22					
	management platform and program to sl information a	platform and program to share information and proiect lessons				75700	Training, Workshops and Conf	-	10,000	25,000	15,000	12,000	23,000	85,000	24					
		between states,				71600	Travel	-	6,000	10,000	12,000	12,000	10,000	50,000	25					
		landscapes and communities including through an on-line portal, learning exchanges and domostration	Total DECEM		1,768	17,768	36,768	28,768	25,768	34,768	145,608									
	ana demonstration farms/farmer associations																			
	associations Total Output 4.2										28,768	25,768	34,768	145,608						

		Output 4.3 Best practices and lessons learned for addressing land degradation	DECEM	62000	10003	71800	Contractual Services -Imp Partn	1,767	1,767	1,767	1,767	1,767	1,767	10,602	22
		exchanged through				71600	Travel	-	10,000	10,000	8,000	8,000	12,000	48,000	25
		cooperation with other SIDS across the Pacific and elsewhere to support LDN/SLM	Total DECEM		l	1	•	1,767	11,767	11,767	9,767	9,767	13,767	58,602	
		Total Output 4.3						1,767	11,767	11,767	9,767	9,767	13,767	58,602	
		Output 4.4 Project M&E, safeguards and gender	DECEM	62000	10003	71800	Contractual Services -Imp Partn	1,767	1,767	1,767	1,767	1,767	1,767	10,602	22
		mainstreaming to support effective project management and maximize project impact	Total DECEM					1,767	1,767	1,767	1,767	1,767	1,767	10,602	
		Total Output 4.4						1,767	1,767	1,767	1,767	1,767	1,767	10,602	
	Total Outcome 4	i						69,070	81,070	102,009	101,070	59,070	66,070	478,359	
Total Component 4	(excluding M&E)							69,070	81,070	102,009	101,070	59,070	66,070	478,359	
Project M&E	M&E	M&E	DECEM	62000	10003	71800	Contractual Services -Imp Partn	7,070	7,070	7,070	7,070	7,070	7,070	42,420	28
						75700	Training, Workshops and Conf	5,000	-	-	-	-	-	5,000	29
						71600	Travel	25,000	5,000	5,000	20,000	5,000	20,000	80,000	30
			Total DECEM					37,070	12,070	12,070	27,070	12,070	27,070	127,420	
			UNDP	62000	10003	71200	International Consultants	-	9,000	40,000	15,000	18,000	36,000	118,000	27
			Total UNDP					-	9,000	40,000	15,000	18,000	36,000	118,000	
	Total M&E							37,070	21,070	52,070	42,070	30,070	63,070	245,420	
Total Component 4	(including M&E)							106,140	102,140	154,079	143,140	89,140	129,140	723,779	
Project Management Cost (PMC)	РМС	РМС	DECEM	62000	10003	71800	Contractual Services -Imp Partn	31,000	31,000	31,000	31,000	31,000	31,000	186,000	31
						72500	Supplies	300	-	100	-	87	-	487	32
			Total DECEM	-		•		31,300	31,000	31,100	31,000	31,087	31,000	186,487	

			UNDP	62000	10003	74100	Professional Services	3,000	3,000	3,000	3,000	3,000	3,000	18,000	33
						74596	Services to Projects – CO staff	15,000	4,000	7,000	4,000	4,000	7,000	41,000	34
			Total UNDP					18,000	7,000	10,000	7,000	7,000	10,000	59,000	
Total Project Management Cost						49,300	38,000	41,100	38,000	38,087	41,000	245,487			
Total Project Grant						674,544	886,437	1,100,4 76	986,437	813,524	693,837	5,155,255			

Budget Notes

Budget Note No.	Project Output (Description)							
Component 1: Strength	Component 1: Strengthening the strategic (institutional, policy, regulatory) framework for addressing land degradation							
	International consultants (\$48,000)							
1	1. Chief Technical Advisor Part Costs (Component 1) - \$18,000							
	2. International Consultant to update priority national plans, policies, etc. to incorporate SLM/LDN (Output 1.1) - \$30,000							
	Local Consultants (\$58,000)							
2	1. National consultant to develop SLM NAP (Output 1.1) - \$18,000							
	 National consultant to develop SLM NAPs for all 4 States (Output 1.1) - \$10,000 x 4 = \$40,000 							
	Contractual Services – Imp Partn (\$237,918)							
	1. Project Manager (part costs) - \$30,081							
3	2. National Technical Coordinator (part costs) - 26,841							
5	3. State Technical Coordinators (4) Part Costs) - \$17,023 x 4 = \$68,092							
	 State Stakeholder Engagement Officers (Part costs) - \$17,023 x 4 = \$68,092 							
	5. Communication Officer (part costs) - \$44,812							
	Contractual Services – Firm (\$168,000)							
4	 Update State Land Use and related Plans for 4 States (Output 1.3) - \$17,000 x 4 = \$68,000 							
	 Technical support to address LDN/SLM for 4 States (Output 1.3) - \$25,000 x 4 = \$100,000 							
	Training, workshops and Conferences (\$162,000)							
	1. Stakeholder workshops for development of SLM NAP (Output 1,.1) - \$4,000							
	 Stakeholder workshops for development of SLM SAPs for 4 States (Output 1.1) - \$2,000 x 4 = \$8,000 							
	3. Workshops for updating of priority national plans, policies, etc. to incorporate SLM/LDN (at least 2 plans updated annually) (Output 1.1) -\$40,000							
	4. Workshops for updating of priority state plans, policies, etc. to incorporate SLM/LDN for 4 States (Output 1.1) - \$5,000 x 4 = \$20,000							
5	5. National consultation workshops to address priority gaps in LDN regulatory and policy framework (Output 1.2) -\$28,000							
	6. State consultation workshops to address priority gaps in LDN regulatory and policy framework for 4 States (Output 1.2) -\$3,000 x 4 = \$12,000							
	7. Consultations to support updating land use or related plan for all 4 States (Output 1.3) - \$3,000 x 4 = \$12,000							
	8. State Workshops to support development of SLMWG TORs and code for 4 States (Output 1.4) - \$600 x 4 = \$2,400							
	9. State SLMWG Quarterly workshops for 4 States (Output 1.4) - \$7,200 x 4 = \$28,800							
	10. National workshop(s) to support development of SLMWG TORs and code (Output 1.4) - \$1,200							

	11. NLMWG workshops (Output 1.4) - \$3,600						
	12. SLM/LDN consultant (Output 1.4) - \$2,000						
	Travel (\$58,000)						
6	1. Travel to support NAP development (Output 1.1) - \$20,000						
	2. Travel to support land use planning for all 4 States (Output 1.3) - \$6,000						
	3. Travel to support development of MOUs (Output 1.4) - \$12,000						
	4. Travel to support steering and technical committee visits to provide guidance (all outputs) - \$20,000						
Component 2: Enhancin	ig information, decision/support tools and capacity for addressing land degradation						
7	International Consultant (\$18,000)						
,	1. Chief Technical Advisor for all 4 states (part costs) - \$18,000						
	Local Consultants (\$100,000)						
	1. National Consultant to support national and state governments with identifying LDN targets and specific activities required to achieve targets (Output 2.1) -						
	\$20,000						
8	2. National Consultants to undertake state resilience assessment focus on land degradation and climate induced risks/impacts in all 4 States (Output 2.2) -						
	\$10,000 x 4 = \$40,000						
	3. National Consultants to undertake agriculture and infrastructure review, BMPs identified, Protocols and guidelines developed for all 4 States (Output 2.3) -						
	$\$10,000 \times 4 = \$40,000$						
	Contractual Services – Imp Partn (\$303,807)						
	1. Land Use and GIS Specialist - \$150,000						
0	2. Project Manager (part costs) - \$30,081						
9	3. National rectificat Coordinator (part Costs) - $520,841$						
	4. State Technical Coordinators (4) Part Costs) - $511,349 \times 4 = 545,396$						
	5. State Stakeholder Engagement Officers (Part costs) - $$11,349 \times 4 = $45,390$						
	6. Communication Officer (part costs) - \$6,095						
	1 Training, workshop, contenence (353,000) 1 Training for states in use of national GIS platform (Output 2.1) - $\$8.000$						
	2. State consultations to support resilience assessment for all 4 States (Output 2.2) $=$ \$2,000 x 4 = \$8,000						
10	3 State consultations to support agriculture and infrastructure review for all 4 States (Output 2.3) - $\frac{52,000}{4}$ = $\frac{52,000}{4}$ = $\frac{52,000}{4}$ = $\frac{52,000}{4}$ = $\frac{52,000}{4}$						
	4 State extension staff training for monitoring and strengthening of SI M and BD (Output 2.3) $\frac{22,000 \times 4}{20,000}$						
	5 Consultations associated with training needs assessment (Output 2.4) - \$4,000						
	Travel (\$140.000)						
	1. Travel related to finalize/update mapping of land coverages and use in each of 4 States (Output 2.1) -\$10,000 x 4 = \$40,000						
	2. Travel to support GIS training (Output 2.1) - \$10.000						
	3. Travel to support development of LDN targets and measures (Output 2.1) - \$10,000						
11	4. Travel to support resilience assessment for 4 States (Output 2.2) - \$2,500 x 4 = \$10,000						
	5. Travel to support agriculture and infrastructure review for all 4 States (Output 2.3) -\$4,000 x 4 = \$16,000						
	6. Travel association with extension staff training (Output 2.4) - \$24,000						
	7. Travel associated with training assessment and training evaluation in Year 4 (Output 2.4) - \$10,000						
	8. Travel to support steering and technical committee visits to provide guidance (all outputs) - \$20,000						
	Equipment and Furniture (\$100,000)						
12	1. Resource and equipment for state GIS office (software, GIS/GPS systems, drones, etc.) for all 4 States (Output 2.1) - \$12,500 x 4 = \$50,000						
12	2. Priority equipment purchasing for SLM and BD such as land survey equipment for all 4 States (Output 2.4) - \$12,500 x 4 = \$50,000						

12-A	IT Equipment 1. IT Equipment in terms of computers, laptops, printers, etc \$20,000						
Component 3: Embedd	ing climate-smart sustainable land management in critical landscapes and coastal zones (demonstration activities)						
13	International consultant to develop gender sensitive training and extension strategy for demonstration landscapes - \$32,000						
13-A	Chief Technical Advisor (part costs) - \$18,000						
14	Local Consultants (\$60,000) 1. National consultants to compile and provide training on traditional and climate smart agricultural practices for 4 States (Output 3.3) - \$15,000 x 4 = \$60,000						
15	 Contractual services - Imp Partn (\$1,065,864) 1. Project manager part costs for technical aspects - \$135,364 2. National Technical Coordinator part costs - \$172,130 3. State technical coordinators (4) part costs - \$85,117.50 x 4 = \$340,470 4. State Stakeholder Engagement Officers part costs: \$85,117.50 x 4 = \$340,470 5. Communication Officer part costs - \$77,430 						
16	 Contractual services – Firm (\$1,265,000) Consultancy services to develop demonstration landscape management plan (DLMP) inclusive of assessment for all 4 State sites (Output 3.1) - \$15,000 x 4 = \$60,000 Consultancy services to implement land management practices with local communities in the 4 State demonstration sites (Output 3.2) - \$250,000 x 4 = \$1,000,000 Consultancy services to support local farms with implementation of traditional and climate smart BMPs in each state demonstration site (Output 3.3) - \$36,250 x 4 = \$145,000 Consultancy support to State CLMWG to promote local products and marketing through NGOS in all 4 States (Output 3.3) - \$15,000 x 4 = \$60,000 						
17	 Training, workshop, conference (\$66,400) 1. Consultation workshops to support CLMWG establishment in all 4 demonstration sites (Output 3.1) - \$3.600 x 4 = \$14,400 2. Consultation workshops to support DLMP development in the 4 demonstration sites (Output 3.1) - \$1,000 x 4 = \$4,000 3. Consultation workshops to provide training of traditional and climate smart practices for all 4 demonstration sites (Output 3.3) - \$1,000 x 4 = \$4,000 4. Workshops to support development of gender sensitive training and extension strategy for all 4 demonstration sites (Output 3.3) - \$1,000 x 4 = \$4,000 5. Workshops to provide of traditional knowledge training to communities for 4 demonstration sites (Output 3.3) - \$10,000 x 4 = \$40,000 						
18	 Travel (\$58,000) 1. Travel to support mapping and finalization of demonstration landscape in all 4 States (Output 3.1) =\$10,000 2. Travel to support implementation of the DLMPs in 4 demonstration sites (Output 3.1) - \$4,000 x 4 = \$16,000 3. Travel to support compilation of traditional and climate smart practices in all 4 demonstration sites (Output 3.3) - \$12,000 4. Travel to support development of gender sensitive training and extension strategy for all 4 demonstration sites (Output 3.3) - \$10,000 5. Travel to support steering and technical committee visits to provide guidance (all outputs) - \$10,000 						
19	Equipment/Furniture to support implementation of land management practices with local communities in the 4 State demonstration sites (Output 3.2) - \$25,000 x 4 = \$100,000						
19-A	IT Equipment (laptops and software) – \$14,000						

Component 4: Effective	e knowledge management, gender mainstreaming, and M&E
20	International Consultants (\$30,000)
20	1. International consultancy for preparation of ESMP and related management plans - \$30,000
	Local Consultants (\$44,000)
21	1. National Consultant to develop communications and knowledge management strategy, including gender mainstreaming plan and awareness plan (Output 4.1)
	- \$44,000
22	Contractual services - Imp Partn (\$42,420)
22	 Project Indiager part costs - \$22,500 National Technical Coordinator part costs - \$19,860
	Contractual services – Firm (\$74,000)
23	1. Develop and advance demonstration farm outcomes for each State (Output 4.1) - \$18,500 x 4 = \$74,000
	Training, workshop, conference (\$121,000)
	1. Consultation workshops to support the development of the communication and knowledge management strategy (Output 4.1) - \$4,000
	2. Consultations training for awareness and engagement campaign development and implementation provided to key stakeholders throughout the country
	(Output 4.1) - \$10,000
	3. Training provided to trainers and awareness and gender mainstreaming providers within the four states (Output 4.1) - \$10,000
24	 Community based land degradation awareness and engagement training for 4 States (Output 4.1) - \$1,000 x 4 = \$4,000
	5. Consultation to support development of citizen science strategy (Output 4.1) - \$4,000
	6. Consultations to support development of the SLM school strategy (Output 4.1) - \$4,000
	7. NLMWG end of project national seminar (Output 4.2) - \$5,000
	8. Learning exchanges for all 4 States (Output 4.2) - $\frac{512}{12}$,000 x 4 = $\frac{548}{12}$,000
	9. Training for demonstration farms engaging with communities for all 4 states (Output 4.2) - \$8,000 x 4 = \$32,000
	1 Travel to support the development of the communication and knowledge management strategy (Output 4.1) \$4,000
	1. Travel to support the development of citizen science strategy (Output 4.1) - $\frac{54,000}{1}$
	2. Travel to support development of citizen science strategy (Output 4.1) - $54,000$ 3. Travel to implement citizen science and/or volunteer activities for all States (Output 4.1) - $54,000$ v $A = 516,000$
25	A Travel to support development of the SLM school strategy (Output 4.1) - \$4,000 x 4 = \$10,000
	5 Travel for participants and resource persons to attend end of project national seminar (Output 4.2) - \$50,000
	6. Travel for national government staff participation in 2 knowledge sharing events (such as conferences) annually (Output 4.3) - \$16,000
	7. Travel for state government staff participating in 2 knowledge sharing events (such as conferences) annually (Output 4.3) - $\$8.000 \times 4 = \32.000
	Supplies (\$40,939)
26	1. Supplies to States related to promoting SLM and BD in schools in all 4 States (Output 4.1) - approximately \$10,234.75/state x 4 = \$40,939
Project M&E	Monitoring and Evaluation
-	International Consultants (\$118,000)
77	1. International consultant for MTR (\$20,000) and TE (\$30,000) evaluation- Total \$50,000
27	2. Chief Technical Officer part costs - \$36,000
	3. Consultant for monitoring safeguard actions - \$32,000
	Contractual services - Imp Partn (\$42,420)
28	1. Project Manager part costs for undertaking M&E of core indicators -\$22,560
	2. National Technical Coordinator for oversight of SESP, ESMP and GAP - \$19,860
29	Training, workshop, conference (\$5,000)
	1. Inception workshop costs - \$5,000
30	Travel (\$80,000)

	1. Travel costs for MTR and TE evaluations – (\$12,000 each) - \$24,000						
	2. Travel costs for monitoring safeguard implementation - \$12,000						
	Travel costs for monitoring core indicators and impacts -\$24,000						
	4. Travel costs for participation in inception workshop - \$20,000						
Project Management							
	Contractual services - Imp Partn (\$186,000)						
31	1. Project Manager part costs - \$60,000 (20% of total costs)						
	 Financial/Administration assistant at \$21,000/year x 6 = \$126,000 (100% of total cost) 						
22	Supplies (\$487)						
52	1. Office supplies - \$487						
22	Professional Services (\$18,000)						
33	1. Annual audits at \$3,000/year - \$18,000						
34	Services to projects -\$41,000						

X. LEGAL CONTEXT

This project document shall be the instrument referred to as such in Article 1 of the Standard Basic Assistance Agreement between the Government of Micronesia and UNDP, signed on 2 December 2008. All references in the SBAA to "Executing Agency" shall be deemed to refer to "Implementing Partner."

This project will be implemented by Department of Environment, Climate Change & Emergency Management (DECEM) ("Implementing Partner") in accordance with its financial regulations, rules, practices and procedures only to the extent that they do not contravene the principles of the Financial Regulations and Rules of UNDP. Where the financial governance of an Implementing Partner does not provide the required guidance to ensure best value for money, fairness, integrity, transparency, and effective international competition, the financial governance of UNDP shall apply.

XI. RISK MANAGEMENT

- 1. Consistent with the Article III of the SBAA [or the Supplemental Provisions to the Project Document], the responsibility for the safety and security of the Implementing Partner and its personnel and property, and of UNDP's property in the Implementing Partner's custody, rests with the Implementing Partner. To this end, the Implementing Partner shall:
 - a) put in place an appropriate security plan and maintain the security plan, taking into account the security situation in the country where the project is being carried;
 - b) assume all risks and liabilities related to the Implementing Partner's security, and the full implementation of the security plan.
- 2. UNDP reserves the right to verify whether such a plan is in place, and to suggest modifications to the plan when necessary. Failure to maintain and implement an appropriate security plan as required hereunder shall be deemed a breach of the Implementing Partner's obligations under this Project Document.
- 3. The Implementing Partner agrees to undertake all reasonable efforts to ensure that no UNDP funds received pursuant to the Project Document are used to provide support to individuals or entities associated with terrorism and that the recipients of any amounts provided by UNDP hereunder do not appear on the United Nations Security Council Consolidated Sanctions List, and that no UNDP funds received pursuant to the Project Document are used for money laundering activities. The United Nations Security Council Consolidated Sanctions List can be accessed via https://www.un.org/securitycouncil/content/un-sc-consolidated-list.
- 4. The Implementing Partner acknowledges and agrees that UNDP will not tolerate sexual harassment and sexual exploitation and abuse of anyone by the Implementing Partner, and each of its responsible parties, their respective sub-recipients and other entities involved in Project implementation, either as contractors or subcontractors and their personnel, and any individuals performing services for them under the Project Document.

a) In the implementation of the activities under this Project Document, the Implementing Partner, and each of its sub-parties referred to above, shall comply with the standards of conduct set forth in the Secretary General's Bulletin ST/SGB/2003/13 of 9 October 2003, concerning "Special measures for protection from sexual exploitation and sexual abuse" ("SEA").

(b) Moreover, and without limitation to the application of other regulations, rules, policies and procedures bearing upon the performance of the activities under this Project Document, in the implementation of activities, the Implementing Partner, and each of its sub-parties referred to above, shall not engage in any form of sexual harassment ("SH"). SH is defined as any unwelcome conduct of a sexual nature that might reasonably be expected or be perceived to cause offense or humiliation, when such conduct interferes with work, is made a condition of employment or creates an intimidating, hostile or offensive work environment.

- 5. a) In the performance of the activities under this Project Document, the Implementing Partner shall (with respect to its own activities), and shall require from its sub-parties referred to in paragraph 4 (with respect to their activities) that they, have minimum standards and procedures in place, or a plan to develop and/or improve such standards and procedures in order to be able to take effective preventive and investigative action. These should include: policies on sexual harassment and sexual exploitation and abuse; policies on whistleblowing/protection against retaliation; and complaints, disciplinary and investigative mechanisms. In line with this, the Implementing Partner will and will require that such sub-parties will take all appropriate measures to:
 - i. Prevent its employees, agents or any other persons engaged to perform any services under this Project Document, from engaging in SH or SEA;
 - ii. Offer employees and associated personnel training on prevention and response to SH and SEA, where the Implementing Partner and its sub-parties referred to in paragraph 4 have not put in place its own training regarding the prevention of SH and SEA, the Implementing Partner and its sub-parties may use the training material available at UNDP;
 - iii. Report and monitor allegations of SH and SEA of which the Implementing Partner and its sub-parties referred to in paragraph 4 have been informed or have otherwise become aware, and status thereof;
 - iv. Refer victims/survivors of SH and SEA to safe and confidential victim assistance; and
 - v. Promptly and confidentially record and investigate any allegations credible enough to warrant an investigation of SH or SEA. The Implementing Partner shall advise UNDP of any such allegations received and investigations being conducted by itself or any of its sub-parties referred to in paragraph 4 with respect to their activities under the Project Document, and shall keep UNDP informed during the investigation by it or any of such sub-parties, to the extent that such notification (i) does not jeopardize the conduct of the investigation, including but not limited to the safety or security of persons, and/or (ii) is not in contravention of any laws applicable to it. Following the investigation, the Implementing Partner shall advise UNDP of any actions taken by it or any of the other entities further to the investigation.
 - b) The Implementing Partner shall establish that it has complied with the foregoing, to the satisfaction of UNDP, when requested by UNDP or any party acting on its behalf to provide such confirmation. Failure of the Implementing Partner, and each of its sub-parties referred to in paragraph 4, to comply of the foregoing, as determined by UNDP, shall be considered grounds for suspension or termination of the Project.
- Social and environmental sustainability will be enhanced through application of the UNDP Social and Environmental Standards (<u>http://www.undp.org/ses</u>) and related Accountability Mechanism (<u>http://www.undp.org/secu-srm</u>).
- 7. The Implementing Partner shall: (a) conduct project and program-related activities in a manner consistent with the UNDP Social and Environmental Standards, (b) implement any management or mitigation plan prepared for the project or program to comply with such standards, and (c) engage in a constructive and timely manner to address any concerns and complaints raised through the Accountability Mechanism. UNDP will seek to ensure that communities and other project stakeholders are informed of and have access to the Accountability Mechanism.
- 8. All signatories to the Project Document shall cooperate in good faith with any exercise to evaluate any program or project-related commitments or compliance with the UNDP Social and Environmental Standards. This includes providing access to project sites, relevant personnel, information, and documentation.
- 9. The Implementing Partner will take appropriate steps to prevent misuse of funds, fraud or corruption, by its officials, consultants, responsible parties, subcontractors and sub-recipients in implementing the project or using UNDP funds.
- 10. In the implementation of the activities under this Project Document, UNDP places reasonable reliance upon the Implementing Partner for it to apply its laws, regulations and processes, and applicable international laws regarding anti money laundering and countering the financing of terrorism, to ensure consistency with the principles of then in force the UNDP Anti-Money Laundering and Countering the Financing of Terrorism Policy.

- 11. The Implementing Partner will ensure that its financial management, anti-corruption, anti-fraud and anti-money laundering and countering the financing of terrorism policies are in place and enforced for all funding received from or through UNDP.
- 12. The requirements of the following documents, then in force at the time of signature of the Project Document, apply to the Implementing Partner: (a) UNDP Policy on Fraud and other Corrupt Practices and (b) UNDP Office of Audit and Investigations Investigation Guidelines. The Implementing Partner agrees to the requirements of the above documents, which are an integral part of this Project Document and are available online at www.undp.org.
- 13. In the event that an investigation is required, UNDP has the obligation to conduct investigations relating to any aspect of UNDP projects and programmes in accordance with UNDP's regulations, rules, policies and procedures. The Implementing Partner shall provide its full cooperation, including making available personnel, relevant documentation, and granting access to the Implementing Partner's (and its consultants', responsible parties', subcontractors' and sub-recipients') premises, for such purposes at reasonable times and on reasonable conditions as may be required for the purpose of an investigation. Should there be a limitation in meeting this obligation, UNDP shall consult with the Implementing Partner to find a solution.
- 14. The signatories to this Project Document will promptly inform one another in case of any incidence of inappropriate use of funds, or credible allegation of fraud or corruption with due confidentiality.

Where the Implementing Partner becomes aware that a UNDP project or activity, in whole or in part, is the focus of investigation for alleged fraud/corruption, the Implementing Partner will inform the UNDP Resident Representative/Head of Office, who will promptly inform UNDP's Office of Audit and Investigations (OAI). The Implementing Partner shall provide regular updates to the head of UNDP in the country and OAI of the status of, and actions relating to, such investigation.

15. UNP shall be entitled to a refund from the Implementing Partner of any funds provided that have been used inappropriately, including through fraud, corruption or other financial irregularity, or otherwise paid other than in accordance with the terms and conditions of the Project Document. Such amount may be deducted by UNDP from any payment due to the Implementing Partner under this or any other agreement. Recovery of such amount by UNDP shall not diminish or curtail the Implementing Partner's obligations under this Project Document.

Where such funds have not been refunded to UNDP, the Implementing Partner agrees that donors to UNDP (including the Government) whose funding is the source, in whole or in part, of the funds for the activities under this Project Document, may seek recourse to the Implementing Partner for the recovery of any funds determined by UNDP to have been used inappropriately, including through fraud, corruption or other financial irregularity, or otherwise paid other than in accordance with the terms and conditions of the Project Document.

<u>Note</u>: The term "Project Document" as used in this clause shall be deemed to include any relevant subsidiary agreement further to the Project Document, including those with responsible parties, subcontractors and sub-recipients.

- 16. Each contract issued by the Implementing Partner in connection with this Project Document shall include a provision representing that no fees, gratuities, rebates, gifts, commissions or other payments, other than those shown in the proposal, have been given, received, or promised in connection with the selection process or in contract execution, and that the recipient of funds from the Implementing Partner shall cooperate with any and all investigations and post-payment audits.
- 17. Should UNDP refer to the relevant national authorities for appropriate legal action any alleged wrongdoing relating to the project, the Government will ensure that the relevant national authorities shall actively investigate the same and take appropriate legal action against all individuals found to have participated in the wrongdoing, recover and return any recovered funds to UNDP.
- 18. The Implementing Partner shall ensure that all of its obligations set forth under this section entitled "Risk Management" are passed on to each responsible party, subcontractor and sub-recipient and that all the clauses under this section entitled "Risk Management Standard Clauses" are included, mutatis mutandis, in all sub-contracts or sub-agreements entered into further to this Project Document.

XII. MANDATORY ANNEXES

- 1. GEF Budget Template
- 2. GEF Execution Support Letter
- 3. Project Map and geospatial coordinates of the project area
- 4. Multiyear Workplan
- 5. Social and Environmental Screening Procedure (SESP)
- 6. UNDP Risk Register
- 7. Overview of technical consultancies/subcontracts)
- 8. Stakeholder Engagement Plan
- 9. Environmental Social Management Framework (ESMF)
- 10. Gender Analysis and Gender Action Plan
- 11. Procurement Plan for first year of implementation
- 12. Draft LOA between UNDP and IP requesting UNDP Support Services
- 13. GEF Core indicators
- 14. GEF Taxonomy
- 15. Partner Capacity Assessment and HACT Assessment
- 16. UNDP Project Quality Assurance Report
- 17. PPG consultations Report
- 18. Tracking Tool and FAO-EXACT calculations
- 19. Climate Risk Screening
- 20. Capacity Development Scorecard
- 21. UNDP Checklist
- 22. Co-financing letters

Annex 1: GEF Budget Template

(<u>Link</u>)

Annex 2: GEF execution support letter

(<u>Link</u>)

Annex 3: Project map and Geospatial Coordinates of project sites

Table 3.1 Project Demonstration Site Information and Maps

State	Demonstration Site	Geographic and demographic Information	Ecosystem and Biodiversity	Land Use	Degradation Threats	Priority recommendations
Kosrae	Tofol-Innem	Includes 3 small river basins, the Tofol, Innem and Srungansralu river and their watersheds plus two additional adjacent watersheds directly north of the Innem watershed as well as one additional watershed adjacent to and directly south of the Tofol watershed. The overall demonstration landscape expands on terrestrial areas but primarily expanding on the nearshore and mangrove areas included in the demonstration landscape. The demonstration landscape is partly owned by government and private landowners and provide water resources for both government offices and residences. The population for the demonstration landscape is likely around 215 individuals and about 90 households.	Significant ecosystems within the landscape include, upland forests, freshwater wetlands, agro-forests, and mangroves. There are several reef platforms behind which is an extensive area of mangroves mixed with native palm swamp forest through which the three main rivers and three supplement water courses traverse before emptying into the bay. The demonstration landscape is part of the East Caroline Islands Endemic Bird Area (EBA) where most of the restricted range species are forest birds (Birdlife International 2022). Kosrae had two island endemic bird species the Kosrae Crake (<i>Zapornia monasa</i>) and Kosrae Starling (<i>Aplonis corvina</i>), but both are now extinct. Kosrae is also considered a Key Biodiversity Area (KBA) as part of the Polynesia/Micronesia Hotspot (CEPF 2022). The upland forests of Kosrae support three globally threatened species and one	Beyond the mangroves and swamp forests is the main infrastructural zone within the demonstration landscape inclusive of the coastal road, Tofol area with a mix of government buildings and other installations and private housing extending north along the coast road and several smaller tracts which head a few hundred meters further inland. Beyond this infrastructure zone, the slope beings to rise and the main agricultural activity is located which consist mainly of agro-forestry. Agro-forestry efforts appear to extend well up the mountainous slopes with much of the interior landscape interspersed with small to medium sized clearings and only a few areas mainly at and just below the ridge lines of relatively intact forest remaining. Agro-forestry activities are mostly associated with small	Unsustainable agriculture practices are evident. The Tofol area experienced past and current agriculture activities conducted by the State with some of these areas now appear degraded, while other degraded areas across the landscape are the result of private activities. Many of the past and current agricultural practices utilize chemical fertilizers and pesticides which are impacting lower drainage/coastal area resources and ecosystem. Invasive Alien Species (IAS) are a significant impactor across the FSM, including the Demonstration Landscape. Key impactors present in the landscape include Merremia (<i>Merremia peltata</i>), the fungus <i>Phillynus noxious</i> which causes Brown Root Disease also known as Black Socks Disease, the Giant African Snail or GAS (<i>Achatina fulica</i>), Mile-a-minute (<i>Mikania micranthra</i>), Wedelia (<i>Wedelia trilobata</i>).	 The development and enacting of land management planning including future infrastructure inputs for that engage SLM principles and support LDN and BD conservation i.e. establish a DLMP. Establish a CLMWG to oversee implementation of the DLMP. Protect entire mangroves/coastal swamp forest area with no degradation and any existing degraded areas addressed through replanting, etc. Protect the reef flats immediately adjacent to the mouth of the Tofol River, including removal of any existing garbage, desilting and as feasible planting new coral polys Developing and implementing a landfill plan that includes LDN and BD concepts and turns the current dump area into a functional landfill with zero or minimal leaching, zero siltation and no

		The overall demonstration landscape to approximately 1,187 ha,	site endemic and is identified as a priority site for conservation investment. Important habitats identified in the landscape are: cloud forests, upland forests (native and secondary/agroforests), historical sites, freshwater wetlands, coastal strand forests, mangrove forests, seagrass beds, reef flats, lagoons/harbor, patch reefs, and nearshore ecosystems. The landscape includes a section of the Lelu Marine Protected Area (MPA) known as Awane. The MPA is community owned and	scale, private landowners cropped subsistence produce and/or items to sell/trade locally. Agriculture related activities within the demonstration landscape include cropping of coconut, sakau, banana, lime, and both soft and hard taro. Additionally fishing and crabbing occur as well as hunting for wild pigs (a non-native).	There appears to be a variety of unstainable infrastructure or outdated infrastructure within the demonstration landscape, including a dam and the state's main landfill. There are also currently two areas undergoing development expansion for government buildings and an access roads including a proposed cross island road that would cross the island from Innem to Okat on the western side of Kosrae Island. Other impacts include mangrove harvesting, pollution from government	 garbage moving beyond the landfill boundaries. Based on the proposed road project over the ridge to the NE side of the island, ensure that if such an infrastructure project is to proceed that it is fully vetted and complies with appropriate environmental assessment considerations Strongly support local community groups with rehabilitation of upland forested areas and engaging in resource protecting agricultural practices. Create conservation zones or accement along streament
			management plan.		buildings, quarrying activities, runoff and garage from the landfill, etc.	and within the upper slopes of the landscape where remanent forests can be protected and degraded areas will be reforested to protect the water supply and native biota, reduce soil erosion, and minimize further siltation of down slope swamp and mangrove forests and reefs.
Pohnpei	Awak River Watershed	The demonstration landscape encompasses the Awak River watershed within the municipality of U on the northeastern side of Pohnpei Island. Households in Awak are estimated at 106 based on roof counts (satellite imagery). Based on estimated households the total population of Awak is	The community of Awak has designated an area to be added to the Watershed Forest Reserve area. While the bill has not been passed, the community itself has opted to tell all its members to refrain from carrying out kava, or sakau as it is known in the FSM, planting in the area (Pohnpei 2018).	Standardized pigpen regulations have been established and removal of pigpens from riverbanks have occurred in some places, with ongoing expansion of this activity. The watershed is about 53% forested of which around 39% constitute good to moderate forest cover. Agroforestry covers about ¼ of te	While impacts to this landscape are thought to be much less currently than in the Pehleng area, if left unregulated and without proper community engagement, support and oversight, it is likely that as with other areas within the state, impacts to the landscape will continue to increase over the coming years as encroachment	 Focus on addressing deforestation, improving ecosystem services with some elements of solid waste management focusing on collecting and processing of green waste at the community level to improve soil fertility. Address pollution from livestock waste (piggeries) near watercourses, which are currently impacting downstream water quality.

		estimated at approximately 450 The demonstration landscape is around 367 hectares	The demonstration landscape currently overlaps with the Watershed Forest Reserve (WFR) at higher elevations. The upland forests of Pohnpei provided significant ecological services including the capture of rainfall and the protection of key rich soils on steep slopes. The upland forest of Pohnpei support at least 110 endemic plant species (Anson and Raynor 1993). 24 species of birds nest in the upland forests, including five endemics (Anson and Raynor 1993).	wtareshed area. Nearshore marine and mangrove swamps cover about 195 of the area	continues into the interior. Unregulated and unplanned land clearing as well as development of unsustainable infrastructure can cause potential impacts. Apart from the upland areas of the Awak landscape, the nearshore marine areas and immediately proximal shore zones have been developed/modified and include substantial agroforestry, livestock (piggeries) and various nearshore marine activities, all of which have impacts on the landscape. IAS are a threat to all of these areas as well as areas up slope.	Forest rehabilitation, enlarging sustainable agroforestry efforts, and improved composting are key activities to be undertaken as part of this project.
Pohnpei	Pehleng landscape	Pehleng Demonstration Landscape is located within the municipality of Kitti on the western side of Pohnpei Island, within Pohnpei State. This area encompasses four main water courses and their associated watersheds. The majority of the population in this demonstration landscape are farmers and fisher folk. The number of households within the landscape is around 150 (based on visible roof counts from satellite imagery). Based on households, an estimate of	The demonstration landscape overlaps with the Watershed Forest Reserve (WFR) at higher elevations. The WFR is denoted as an IBA. WFR as containing a number of conservation targets, including the Pohnpei Island Skink, Pacific Sheath-tailed Bat, and the Pohnpei Flying Fox. The upland forests of Pohnpei provided significant ecological services including the capture of rainfall and the protection of key rich soils on steep slopes. The upland forest of Pohnpei support at least 110 endemic plant species (Anson	The landscape includes around 37% forest cover, of which around 30% is forest in good or moderate condition. Agroforestry accounts for around 34%, while nearshore and mangrove cover 17% of the landscape. Scattered within the landscape are small areas of savannah, taro patches, upland wetlands and riparian areas	In recent decades, there has been elevated impacts associated with deforestation within the uplands of this area (as well as others within the state). This encroachment into the relatively intact upland forests has mainly been associated with the cropping of sakau. The most notable threat related to land degradation is from destructive farming practices mainly for the cultivation of sakau in the uplands. This sakau farming is often conducted with non- traditional methods, including mono-cropping and is chiefly	 This project will focus on addressing deforestation, improving ecosystem services with some elements of solid waste management focusing on collecting and processing of green waste at the community level to improve soil fertility. Furthermore, the project is to address pollution from livestock waste (piggeries) near watercourses, which are currently impacting downstream water quality. Forest rehabilitation, enlarging sustainable agroforestry efforts, and improved composting are key activities to be

		the human inhabitants within the demonstration landscape is approximately 750. The demonstration landscape is around 1,246 hectares	and Raynor 1993). 24 species of birds nest in the upland forests, including five endemics (Anson and Raynor 1993).		due to elevated income potential for this crop. What is more, due to removal of forest cover, disruption of the environment, compaction of soils, and the introduction of chemicals, the immediately landscape, surrounding areas, and those downstream are being negatively impacted. Impacts include loss and reductions in biodiversity, reduce water retention, increased run off, increase siltation, increase presence of harmful chemicals and waste, reduced potential for self- regeneration of native systems, increased threats from IAS and climatic events. ,. Other land degradation threats and impacts include lack of proper livestock management and illegal take of protected species (namely birds). Unregulated land clearing, landfills, quarrying, and road development are all adding to the impacts and reduction in landscape	undertaken as part of this project. • Dry litter piggeries • Value added local food crops- banana/breadfruit/taro flour, chips etc.
					adding to the impacts and reduction in landscape resilience	
Chuuk	Wichen River Watershed	in Chuuk most land and near-shore marine areas are in private hands, with ownership being predominantly inherited or gifted. The Wichen River Watershed Demonstration Landscape is privately owned. The landscape is	The nearshore marine area of the demonstration landscape is part of the Northern Weno Marine ABS and is noted to have reef platforms and seagrass beds. The upper section of the demonstration landscape is part of the South Weno Ridge KBA. This forest	A large part of Chuuk State still relies heavily on subsistence base living, including small scale agriculture and harvesting marine resources. The main agricultural crops are banana, breadfruit	Upland forest lost with subsequent increased runoff leading to increased soil erosion; due to the current loss of forest canopy cover over much of the landscape, this threat is significant and rehabilitation of key areas especially around water	• The develop and enact land management planning through a DLMP including future infrastructure inputs for the entire landscape that engage SLM principles and support LDN and BD conservation

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bisected by the Wichen River and includes a waterfall. The watershed is mostly steep terrain that has been heavily deforested. The demonstration landscape, Wichen River watershed, is located in the north central part of Weno. The number of households within the landscape has been estimated at around 220 and total inhabitants around 1,100 people, with most homes and people located in two coastal villages. The demonstration landscape is around 237 hectares	was listed in the FSM NBSAP (2002) as a potential conservation area. The ridge contains some native forests and is surrounded by highly populated areas on the coasts of Weno Island. This ridge area is also considered an Important Bird Area. The areas of native forest on the high island peaks support endemic species and are a repository of some of the most endangered remnant forest patches and species in Micronesia. The endangered Chuuk Monarch (<i>Metabolus</i> <i>rugensis</i>) occupies the upland forests of the high islands within the Chuuk Lagoon, including those of he demonstration landscape. Due to the highly degraded nature of this forest and increase pressure from the surrounding human populations, such species are in peril. The Chuuk Monarch is already reported as rare on Weno. <i>Cynometra yokotai</i> , a native forest species is also known from the upland forests in this area. The endemic, endangered Chuuk Flying Fox (<i>Pteropus pelagicus</i>) may utilize portions of the	(Artocarpus spp.), coconut and taro. The forest comprises around 45% of the demonstration site and is mostly in degraded state. Agroforestry occupies around 28% of the landscape, while nearshore marine and mangroves (very limited in extent) cover around 16%. Savannah accounts for around 10%	courses and ridge lines should be a priority. IAS are already a significant source of impacts in the demonstration landscape, with species such as <i>Merremia</i> outcompeting native species and effectively preventing regeneration in cleared areas. Fresh water quality loss is impacting livelihood opportunities. Climate change is including storms and ocean water rise are impacting crops and contributing to coastal erosion.	 Establish a CLMWG to oversee implementation of the DLMP. Identify priority areas/resources across the landscape for various land uses including agriculture, future infrastructure, conservation, and restoration \Promote community engagement with SLM LDN and BD through outreach campaigns and through direct support and training Strengthen community engagement in landscape based BMP and specifically for activities such as dry litter piggeries and utilizing traditional knowledge and practices for cropping rather an clearing of forests Community rehabilitation of uplands, including planting trees and other native vegetation to improve upland protection and reduce erosion, runoff and down slope siltation, focus should be on protecting riverine and ridge areas. Create community conservation zones or easements along streams and within the upper slopes of the landscape
	area. The endemic, endangered Chuuk Flying Fox (<i>Pteropus pelagicus</i>) may utilize portions of the demonstration landscape, including coast forests and mangroves.			 Create community conservation zones or easements along streams and within the upper slopes of the landscape Ensure that future infrastructure projects such as the proposed waterworks, if implemented are fully

						compliant with environmental requirements
Yар	Tomil-Gagil	Tomiil-Gagil Island is the second largest of the main Yap islands. Tomil and Gagil are the two municipalities which occupy Tomil-Gagil island. Tomil Municipality includes 12 villages, 11 located on Tomil-Gagil Island and one, Gargey located on Yap Island. The Tomil-Gagil Demonstration Landscape encompasses much of both of these municipalities but neither one completely. The total population in the landscape is around 2,000. The demonstration landscape is around 1,042 hectares	Forest types within the state include upland, swamp, mangrove and agroforests among others. Most of Yap State is within the Yap Islands global ecoregion. Much of the landcover within this ecoregion is open savanna and secondary tropical dry forest. The majority of vegetation cross the demonstration landscape is savanna. Various forest types (secondary forests, agroforests, swamp forests, and mangroves) can also be found within the demonstration landscape. There are three Key Biodiversity Areas (KBAs) that overlap with the demonstration landscape, Northern Yap Channels KBA, East Harbor Marine KBA, and Tomil Mangrove/Marsh KBA. Various Protected Areas (PAs) are located in and around Tomil-Gagil. Some of the PAs associated with this part of Yap include the Fruit Bat Sanctuary, the Manta Ray Sanctuary, the Shark Sanctuary, the Shark Sanctuary, and the Rabbit Fish Sanctuary, and the Rabbit Fish Sanctuary, and the Rabbit Fish Sanctuary, and the Rabbit Fish Sanctuary include fruit bats including the	Tomil and Gagil have many active groups focused on sustainable farming and fishing. Most of the agricultural products for local consumption come from this area including livestock and crops. Farming activities include raising black pigs and at least 5 types of chickens. Agroforestry areas in Tomil are considered "effectively managed areas". Around 31% of the landscape is forest, of which 19% is good or moderate condition. Agroforestry ci=overs 10%, savannah 35% and mangroves (6%), reefs (8%) and upland wetlands (2%). Taro cultivated land is about 8%	It is understood that much of the landscape currently is savanna and degraded barren lands (badlands) but that at least portions of this land may have been forested in times past. Much of the highly degraded landscape is also at or near the ridge lines within the landscape resulting in significant levels of continuing soil and sub-soil erosion with rain events. Soil erosion due to deforestation and a lack of vegetative cover not only is causing high levels of degraded and barren lands but also results in sediments entering water ways, wells, taro patches and the near shore marine environment, filling and blanketing these areas resulting in further degradations across the landscape impacting production areas and water resources. Freshwater security has been impacted by poor water management, including high dependence on a key watershed and the lack of alternative water sources as many wells are degraded or compromised by waste and/or sedimentation due to erosion. A project to upgrade the roads within the demonstration landscape is planned and as part of this project, specific actions need to be	 Identify priority areas across the landscape for various land uses including agriculture, future infrastructure, conservation, and restoration The develop and enact land management planning through a DLMP including future infrastructure inputs for the entire landscape that engage SLM principles and support LDN and BD conservation across the entire landscape Ensure that the road improvement project is fully vetted and complies with appropriate environmental assessment considerations to ensure no impact to the land, water and other resources. Strongly support local community groups with rehabilitation of uplands, including planting trees and other native vegetation to improve upland protection and reduce erosion, runoff and down slope siltation, focus should be on protecting riverine and ridge areas Develop actions for protecting freshwater resources across the
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	endangered Yap Fruit Bat	implemented and undertaken	landscape with a focus on			
	(Pteropus yapensis) and the	to ensure that further land	the large key watersheds.			
	near threatened, endemic Yap	degradation does not result	Reduce soil erosion			
	Monarch (Monarcha	from these efforts	through various methods			
	and effrovi), which inhabits		including establishing soil			
	lowland forests including		catchment devices such			
	mongroups		as check dams and			
	mangroves		planting of vegetation in			
			barren areas (see KIRC			
			1998 for a comprehensive			
			overview of extensive			
			restoration planning and			
			efforts for the Hawai'ian			
			Island of Kaho'olawe)			
			Create construction			
			Create conservation zones			
			of easements along			
			upper slopes of the			
			landscape where			
			remanent forests can be			
			protected and degraded			
			areas will be reforested to			
			protect the water supply			
			and native biota, reduce			
			soil erosion, and			
			minimize further siltation			
			of down slope swamps,			
			mangrove forests,			
			channels, and reefs.			
			Strongly support locs!			
			- Subligity support local			
			conserving and expanding			
			implementation of			
			traditional agricultural			
			practices			
			r			



Table 3-2: Land cover and targeted hectares within the Tofol-Innem, Kosrae State demonstration landscape

	% of the	Area of the		Area of lanc (C.I.	l restored 3)		Area to land improved pract protecte (C.I Area of	scape under cices)excluding d areas) . 4)	Area of marine habitat under improved practices for
Habitat	landscape	landscape (hectares)	Area of degraded agricultural land restored (C.I. 3.1)	Area of degraded forest and forest land restored (C.I. 3.2)	Area of natural grass and shrubland restored (C.I. 3.3)	Area of wetland restored (C.I. 3.4)	landscape under improved management to benefit biodiversity (C.I. 4.1)	Area of landscape under SLM in production systems (C.I 4.3)	C.I. (5)
Upland Forest - Good condition	16	190					190	0	
Forest – Moderate degraded	24	290.21		100			190.21		
Forest – Low degraded	16	190		50			140		
Agroforest	23	275.70	50					225.7	
Savannah	0	0							
River/riparian	1	15.0					15		
Taro patch	1	6.0	5.0					1.0	
Upland Wetlands	1	8.03				7.0	1.03		
Near marine (excluding seagrass, mangroves and swamp forests)	6	69.67							69.67
Mangrove	5	62.49				20.0			42.49
Seagrass beds		0							
Coastal Swamp forest	1	4.51				4.0			0.51
Reef	2	23.53							23.53
Other (Degraded areas/developed/urbanized)	4	52.70							
Total (hectares)	100	1,187.84	55.0	150.0	0	31.0	536.24	226.7	136.2

Agro-forestry activities are mostly associated with small scale, private landowners cropped subsistence



Table 3-2: Awak River Watershed Demonstration Landscape PPG phase land cover types and extents

		Area of		Area of land (C.I.	d restored 3)		Area to land improved pract protecte (C.I	scape under cices)excluding d areas) . 4)	Area of marine habitat under improved
Habitat	% of the landscape	the landscape (hectares)	Area of degraded agricultural land restored (C.I. 3.1)	Area of degraded forest and forest land restored (C.I. 3.2)	Area of natural grass and shrubland restored (C.I. 3.3)	Area of wetland restored (C.I. 3.4)	Area of landscape under improved management to benefit biodiversity (C.I. 4.1)	Area of landscape under SLM in production systems (C.I 4.3)	practices for biodiversity C.I. (5)
Upland Forest – Good condition	25	91.00					91		
Forest – Moderate degraded	14	51.00		10			41		
Forest – Low degraded	14	51.00		20			31		
Agroforest	22	81.00	50					31	
Riparian	3	10.00					10		
Taro patch	1	5.00	5						
Nearshore Marine excluding seagrass beds, mangroves and swamp forests)	17	61.49							61.49
Mangrove	2	6.95				3			3.95
Infrastructure	3	10.00							
Total (hectares)	100	367.44	55	30		3	173	31	65.44



Table 3-4: Pehleng Demonstration Landscape land cover types and extent estimates from the PPG phase

		Area of		Area of land (C.I.	d restored 3)		Area to land improved pract protecte (C.I	scape under ices)excluding d areas) . 4)	Area of marine habitat under improved
Habitat	% of the landscape	the landscape (hectares)	Area of degraded agricultural land restored (C.I. 3.1)	Area of degraded forest and forest land restored (C.I. 3.2)	Area of natural grass and shrubland restored (C.I. 3.3)	Area of wetland restored (C.I. 3.4)	Area of landscape under improved management to benefit biodiversity (C.I. 4.1)	Area of landscape under SLM in production systems (C.I 4.3)	practices for biodiversity C.I. (5)
Upland Forest - Good condition	23	292.00					292		
Forest – Moderate degraded	7	90.00		10			80		
Forest – Low degraded	7	90.00		40			50		
Agroforest	34	429.00	100					329	
Savannah	1	17.16			5		12.16		
Riparian	2	20.00					20		
Taro patch	3	42.90	10					32.9	
Upland Wetlands	1	8.58				4	4.58		
Nearshore Marine excluding mangroves	7	92.27							92.27
Mangrove	10	124.94				30			94.94
Infrastructure	3	40.00							

Total (hectares)	100	1,246.85	110	50	5	34	458.74	361.9	187.21



Table 3.5: Wichen River Watershed Demonstration Landscape land cover types and extents PPG phase

		Area of		Area of lanc (C.I.	d restored 3)		Area to land improved pract protecte (C.I	scape under tices)excluding td areas) . 4)	Area of marine habitat under improved
Habitat	% of the landscape	the landscape (hectares)	Area of degraded agricultural land restored (C.I. 3.1)	Area of degraded forest and forest land restored (C.I. 3.2)	Area of natural grass and shrubland restored (C.I. 3.3)	Area of wetland restored (C.I. 3.4)	Area of landscape under improved management to benefit biodiversity (C.I. 4.1)	Area of landscape under SLM in production systems (C.I 4.3)	biodiversity C.I. (5)
Upland Forest - Good condition	0	0.00							
Forest – Highly degraded	45	105.91		100			5.91		
Agroforest	28	66.58	50					16.58	
Urban cultivated	0	0.69							
Savannah	10	22.68			20		2.68		
Near marine (excluding seagrass, mangroves and swamp forests)	15	35.18							35.18
Mangrove	1	2.21				2			0.21
Infrastructure	1	3.37							
Total (hectares)	100	236.62	50	100	20	2	8.59	16.58	35.39



Table 3.6: Tomil-Gagil Demonstration Landscape land cover PPG stage estimates based on details from PIF, satellite imagery, maps, and published information.

		Area of		Area of land	d restored 3)		Area to land improved pract protecte (C.I	scape under tices)excluding td areas) . 4)	Area of marine habitat under improved
Habitat	% of the landscape	the landscape (hectares)	Area of degraded agricultural land restored (C.I. 3.1)	Area of degraded forest and forest land restored (C.I. 3.2)	Area of natural grass and shrubland restored (C.I. 3.3)	Area of wetland restored (C.I. 3.4)	Area of landscape under improved management to benefit biodiversity (C.I. 4.1)	Area of landscape under SLM in production systems (C.I 4.3)	biodiversity C.I. (5)
Upland Forest - Good condition	6	60.00					60		
Forest – Moderate degraded	13	132.02		60			72.02		
Forest – Low degraded	12	120.00		60			60		
Agroforest	10	104.43	50					54.43	
Urban Cultivated (including taro)	8	7.34						7.34	
Savannah	35	366.49			75		291.49		
Barren	3	27.62			15		12.62		
Upland Wetlands (including riparian)	2	21.21				10	11.21		
Nearshore Marine excluding mangroves and reefs	0	0.55							0.55
Mangrove	6	65.23				20			45.23
Reef	8	86.48							86.48

Infrastructure	5	50.78							
Total	100	1,042.15	50	120	90	30	507.34	61.77	132.26

Annex 4: Multi Year Work Plan

Task	Responsible	YR 0		Year 1				Ye	ar 2			Yea	ar 3			Yea	ar 4			Ye	ar 5			Yea	6	
	Party(les)		Q 1	Q 2	Q 3	Q 4	Q 1	Q 2	Q 3	Q 4	Q 1	Q 2	Q 3	Q 4	Q 1	Q 2	Q 3	Q 4	Q 1	Q 2	Q 3	Q 4	Q 1	Q 2	Q 3	Q 4
Pre-Planning Phase (PPG Phase)		l]					I]										
Constituting of Project Steering Committee	UNDP, GOFSM																									
Hiring of Contractual Staff	DECEM																									
Establishment of Project Special Accounts and Fund Flow Arrangements	UNDP and GOFSM																									
Planning and Implementation Phase				1		1	1	1	1				1	1	1	1	1	1							I	
Component 1. Strengthening the strategic (institutional, pol	icy, regulatory) fra	mework	for a	ddress	ing la	nd de	grada	tion																		
Outcome 1: Strengthened inter-sectoral governance, capac	ity and strategies t	o mainst	tream	susta	inable	land	mana	geme	ent, bi	odiver	sity a	nd LD	N													
Dutput 1.1: A SLM NAP for combating land degradation prepo nto priority policies	ared for adoption b	oy goveri	nment	, inco	rporat	ting in	dicato	ors, ta	argets	and p	priorit	∕ actio	ons fo	r achi	eving	LDN a	icross	each	state,	with	suppo	ort for	main	strean	ning	
Activity 1.1.1. National entity contracted to develop the SLM NAP through stakeholder engagement	DECEM																									
Activity 1.1.2. SLM NAP developed and finalized	DECEM/State EPAs																									
Activity 1.1.3. SLM NAP approved and under implementation	DECEM/ State EPAs																									
Activity 1.1.4. Entity(ies) contracted to develop SLM State Action Plans (SAPs) that are coordinated with the SLM NAP	DECEM/ State EPAs																									
Activity 1.1.5. SLM SAPs developed, finalized and approved	DECEM/ State EPAs																									
Activity 1.1.6 SLM SAPs implemented	DECEM/ State EPAs																									
Activity 1.1.7 Review and updating of selected/priority national policies, plans, programs and budgets for	DECEM																									

mainstreaming of SLM/LDN principles and targets and elements for targeting and schedule developed																										
Activity 1.1.8 review and updating of selected/priority States' policies, plans, programs and budgets for mainstreaming of SLM/LDN principles and targets and elements for targeting and schedule developed	DECEM/ State EPAs																									
Output 1.2. Priority gaps and weaknesses in the regulatory f leading to adoption by state and national governments	ramework and enj	forcemer	nt mec	hanis	ms for	r comi	battir	ng lan	d deg	radat	ion id	lentifi	ed, an	id imp	orover	nents	achie	ved ti	hrougi	h tech	nnical	suppo	ort an	d advo	осасу	
Activity 1.2.1. Comprehensive review of states LDN regulatory frameworks undertaken with gaps and weaknesses identified and prioritized.	DECEM/ State EPAs																									
Activity 1.2.2. Comprehensive review of national LDN regulatory framework undertaken with gaps and weaknesses identified and prioritized.	DECEM																									
Activity 1.2.3. Comprehensive review of states LDN enforcement mechanisms undertaken with gaps and weaknesses identified and prioritized.	DECEM/ State EPAs																									
Activity 1.2.4. Comprehensive review of national LDN enforcement mechanisms undertaken with gaps and weaknesses identified and prioritized	DECEM																									
Activity 1.2.5. Priority gaps and weaknesses in LDN regulatory framework addressed at the states level	DECEM/ State EPAs																									
Activity 1.2.6 Priority gaps and weaknesses in LDN regulatory framework addressed at the national level	DECEM																									
Activity 1.2.7 Priority gaps and weaknesses in LDN enforcement addressed at the states level	DECEM/ State EPAs																									
Activity 1.2.8 Priority gaps and weaknesses in LDN enforcement addressed at the national level	DECEM																									
Output 1.3: State level land use plans and local management	nt plans on the hig	h islands	stren	gthen	ed wit	h enh	nance	d imp	lemer	ntatio	n to a	void,	reduc	e and	revei	rse lan	d deg	rada	tion ai	nd coi	nserve	e biod	liversit	ży		
Activity 1.3.1, Review of high island, states level land use plans with weaknesses and gaps identified and prioritized	DECEM/ State EPAs																									
Activity 1.3.2, Review of high island, local level land use plans with weaknesses and gaps identified and prioritized	DECEM/ State EPAs																									

Activity 1.3.3. Address priority gaps and weaknesses in high island, states level land use plans	DECEM/ State EPAs																								
Activity 1.3.4. Address priority gaps and weaknesses in high island, local level land use plans	DECEM/ State EPAs																								
Activity 1.3.5. Increase awareness and knowledge of LD/SLM/CSA at national and provincial levels, including among extension staff;	DECEM																								
Activity 1.3.6. Strengthen implementation on high islands of states level land use plans	DECEM/ State EPAs																								
Output 1.4: Existing/nascent state level intersectoral workin supported to oversee formulation and mainstreaming of the	g groups for landso NAP, both with er	cape mar Igageme	nagem nt of ti	ent fo he pri	osterei vate s	d and ector	l oper	ationa	alized	to add	dress i	land d	legrad	lation	, and i	nation	al lev	el inte	ersect	oral w	orkin	g grou	ıp est	ablish	ed and
Activity 1.4.1. Ensure that all states have established SLMWG	DECEM/ State EPAs																								
Activity 1.4.2. TORs established for states SLMWGs	DECEM/ State EPAs																								
Activity 1.4.3. SLMWGs are supported by codified language	DECEM/ State EPAs																								
Activity 1.4.4. SLMWGs are fully representational, including the private sector	DECEM/ State EPAs																								
Activity 1.4.5. SLMWGs are functional and meeting regularly to advance state level land management activities	DECEM/ State EPAs																								
Activity 1.4.6. SLMWGs oversee development and implementation of the SLMNAPs	DECEM/ State EPAs																								
Activity 1.4.7 . NLMWG established	MECDM																								
Activity 1.4.8 TORs for NLMWG established	DECEM																								
Activity 1.4.9 NLMWG supported by codified language	DECEM																								
Activity 1.4.10 NLMWG oversees development and implementation of the SLM NAP	DECEM																								

Activity 1.4.11 Development of MOUs between agencies/sectors to enable improved vertical and lateral SLM coordination	DECEM																								
Activity 1.4.12 Establish states councils of SLM experts and practitioners to support the LDN planning processes	DECEM/ State EPAs																								
Component 2: Enhancing information, decision/support too	ls and capacity for	addressi	ng land	degrada	ation		1 1															1		L	
Outcome 2: Enhanced tools and government capacity for SL	M and LDN																								
Output 2.1 National level spatial mapping and strengthenea	baseline informat	ion avail	able to s	states oi	n existi	ng pla	tforms	to as	sess t	rends	s, drive	ers and	l hots	pots o	f land	l degra	datio	n and	l targ	ets se	t for I	LDN sı	ıb-ind	icator	s
Activity 2.1.1. Full time manager for existing national spatial sharing platform hired and in place with clear mandate and necessary resources, establishing a national mapping office	DECEM																								
Activity 2.1.2. full time GIS/IT specialist for existing national spatial sharing platform	DECEM																								
Activity 2.1.3. Identification and resourcing of states level spatial information offices	DECEM																								
Activity 2.1.4. National level mapping of landscapes completed/updated with support from states' spatial information offices inclusive of field data collection	DECEM																								
Activity 2.1.5. National level spatial information consolidated within existing platforms and made available to states	DECEM																								
Activity 2.1.6. Updated land use information input into national spatial sharing platform	DECEM																								
Activity 2.1.7. Training provided to states for using national spatial sharing platform to inform and strengthen SLM/LDN/BD	DECEM																								
Activity 2.1.8 Establish the 2030 LDN targets for achieving neutrality	DECEM																								
Activity 2.1.9 Support provided to states to identify the SLM measures required to meet LDN targets	DECEM																								
Output 2.2 Resilience assessments of landscapes, habitats a	nd land uses to lar	d degrad	dation a	nd clima	ite-ind	uced r	isks to	suppo	ort pla	anning	g and a	zoning	-	1				1	1		I				

Activity 2.2.1 Entity(ies) contracted to conduct state resilience assessments in each state, including determination of degradation drivers and impacts to ecosystem services	DECEM																						
Activity 2.2.2 States level landscape resilience assessments conducted inclusive of habitats and land uses with focus on land degradation and climate-induced risks concerns/potential drivers	DECEM																						
Activity 2.2.3 Assessments input into national spatial sharing platform	DECEM																						
Activity 2.2.4 Using completed assessments, determine drivers of land degradation in hotspots and their impacts on ecosystem services	DECEM																						
Output 2.3 Protocols for monitoring land degradation and p	practical guidelines	for pror	noting/l	mainst	treamin	g SLM	/BD ir	the a	igricu	lture d	and in	frastr	uctur	e sect	ors.							 	
Activity 2.3.1. Contract entity(ies) to conduct states infrastructure and agriculture sector reviews	DECEM																						
Activity 2.3.2, Conduct states review of infrastructure and agriculture sectors in regard to existing practices and how they pertain to SLM and BD	DECEM																						
Activity 2.3.3. Identify best practice materials (internal and external) to assist the states in addressing land degradation	DECEM																						
Activity 2.3.4. Develop protocols for monitoring land degradation in agriculture and infrastructure sectors	DECEM																						
Activity 2.3.5. Develop guidelines for strengthening SLM/BD in agriculture and infrastructure sectors	DECEM																						
Output 2.4: Capacity building for government officers, exte	nsion staff, commu	inity gro	ups, NG	Os, etc	c., plus t	echno	ology t	ransfe	er and	lequi	pment	t for L	DN m	onitor	ing a	nd ma	instr	eamin	g of S	LM/B	D	 1	
Activity 2.4.1 Contract entity(ies) to provide training to stakeholders for monitoring and strengthening of SLM and BD conservation as well as providing extension-based train the trainer style training	DECEM																						
Activity 2.4.2 Provide training the trainer training for extension offices at states and national level For SLM and BD strengthening	DECEM																						

Activity 2.4.3 Provide training on baseline monitoring for achieving LDN and strengthening SLM and BD to broad groups, including women and youth and specific offices	DECEM																							
Activity 2.4.4 Provisioning of equipment	DECEM																							
Activity 2.4.5 Provide training for equipment and technology use to key offices/groups as well as broadly to end users, strengthen linkages and technology utilization	DECEM																							
Activity 2.4.6. Evaluation of the training programs (at mid-term and end-of-project) to ascertain relevance and effectiveness of the training to help adjust and retool the training to achieve targeted impacts	DECEM																							
Activity 2.4.7 Undertake a capacity and core functional assessment of the state and national government departments and extension services concerned with SLM	DECEM																							
1. Component 3: Embedding climate-smart sustainable I	and management	in critical	landscap	es and	coastal :	ones (de	emons	tratior	n activ	vities)														
Outcome 3: Community participation in measures to reduc	e land degradatio	on, sustain	ecosyste	em servi	ces and	biodiver	sity an	d imp	rove l	iveliho	oods a	ind we	ellbein	Ig										
 Output 3.1 Community-led participatory integrated la services and biodiversity 	ndscape manager	ment and	rehabilita	ition pla	ıns co-de	esigned,	agreed	l and i	mpler	mente	d to a	void, r	reduce	e and i	revers	e lan	d degi	radati	on to	prote	ct eco	syster	n	
Activity 3.1.1. Finalize the demonstration landscape within each state, with appropriate coverage for land restoration and improved practices in production systems	DECEM																							
Activity 3.1.2. Establish (or utilize existing) Community Land Management Working Groups (CLMWGs) with appropriate TORs and membership for each demonstration site	DECEM																							
Activity 3.1.3. Ensure that CLMWGs are appropriate resources and linked with state and national partners	DECEM																							
Activity 3.1.4 Contract entity(ies) to develop Demonstration Land Management Plans (DSLMPs) For each of the demonstration landscapes	DECEM																							
Activity 3.1.5 Conduct detailed assessments of each demonstration landscape	DECEM																							

Activity 3.1.6 Develop DSLMPs for each demonstration site ensuring that the development process includes input	DECEM																				
from local, state and national partners																					
Activity 3.1.7 Implement DSLMPs	DECEM																				
Output 3.2: Targeted ecosystem rehabilitation measures (no	ture-based soluti	ons) pilote	ed in in	novati	ve part	nership	s with	comm	nunitie	es and	the priv	vate se	ctor								
Activity 3.2.1. Identification of areas within demonstration sites which have been impacted and that could be rehabilitated	DECEM																				
Activity 3.2.2. Establish partnerships between communities and the public sector for the restoration of degraded habitats such as mangroves, greenbelts, wetlands and traditional taro patches	DECEM																				
Activity 3.2.3. Local communities, inclusive of vulnerable groups, women and youth and the private sector to implement land rehabilitation activities for mangrove, taro patch, greenbelts and near shore areas as well as other key priority areas	DECEM																				
Output 3.3 Smallholder farmers on traditionally owned land	s supported to im	plement t	raditior	nal and	d innov	ative cli	mate-s	smart	agrici	ultural	practic	es for .	SLM an	d clim	ate cha	inge d	adapti	ation		•	
Activity 3.3.1. For each demonstration site, a local entity is engaged to compile information regarding traditional and innovative climate-smart agricultural practices and develop a training strategy	DECEM																				
Activity 3.3.2. Compilation of traditional knowledge and climate smart agricultural practices compiled and completed for each demonstration landscape	DECEM																				
Activity 3.3.3. Local entities contracted to develop a gender sensitive training and extension strategy for each demonstration landscape	DECEM																				
Activity 3.3.4. Develop a gender sensitive training and extension strategy	DECEM																				
Activity 3.3.5. Entity is contracted to provide training to extension offices and similar stakeholders to train and support local communities with implementing both traditional and innovative climate smart agricultural practices	DECEM																				

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Activity 3.3.6. Training provided to extension offices and similar stakeholders to train and support local communities with implementing both traditional and innovative climate smart agricultural practices	DECEM																				
Activity 3.3.7 . Introduce land degradation and SLMSLM/CSA components into the curricula of COM and relevant Rural Training Centers	DECEM																				
Activity 3.3.8. Training provided to local communities for the implementation of traditional and innovative agricultural practices	DECEM																				
Activity 3.3.9 Engage NGO support to identify opportunities to improve farmer/land owner access to small grants, credit (micro-finance) and savings facilities for farm business and product development	DECEM																				
Activity 3.3.10 Engage NGO to provide technical support, advise and private sector linkages to farmers and landowners for product development, quality control and marketing	DECEM																				
Activity 3.3.11 Local communities and farms implementing traditional and/or innovative climate smart agricultural practices	DECEM																				
Activity 3.3.12. Identify at least one product from each State to be promoted to sustain profitable and sustainable local added value businesses	DECEM																				
Component 4. Effective Knowledge management, ger	nder mainstrear	ning and	M&E						E										 	 	
Outcome 4. Increased project impact, replication and	l upscaling thro	ugh enh	anced aw	areness	and ki	nowled	dge m	nanag	geme	nt											
Output 4.1: Awareness-raising program on SLM and the be	nefits of tackling l	and degr	adation de	livered t	hrough	targete	d con	nmuni	icatio	ns, edu	cation	, campo	aigns a	nd coi	mmur	nity pa	rticip	ation <u>.</u>			
Activity 4.1.1. Development/finalization and implementation of the framework for measuring knowledge, attitudes, and practices (KAP) on SLM/LDN and BD mainstreaming	DECEM																				
Activity 4.1.2. Entity contracted to development a communications and knowledge management strategy and development of the strategy	DECEM																				
Activity 4.1.3. Gender mainstreaming plan developed and implemented	DECEM																				

Activity 4.1.4. National awareness and engagement plan developed	DECEM																								
Activity 4.1.5. Entity contracted to train key persons and entities within the FSM to conduct awareness and engagement campaigns, as well as gender mainstroaming activities	DECEM																								
Activity 4.1.6 Training provided to trainers and awareness and gender mainstreaming providers	DECEM																								_
Activity 4.1.7 Support provided by locally trained entities and offices to local communities to facilitate engagement activities	DECEM																								
Activity 4.1.8 National awareness and engagement campaign implemented	DECEM																								
Activity 4.1.9 Implement citizen science and volunteer programs for local communities	DECEM																								
Activity 4.1.10 Support NGOs within the States to promote SLM/LDN AND BD within schools	DECEM																								
Output 4.2 Knowledge management platform and program demonstration farms/farmer associations	to share informati	ion and p	roject less	sons be	etween	state.	s, land	dscape	es and	l comr	nunitie	es incl	luding	g throu	ıgh ai	n on-li	ine po	ortal, İ	earnir	ng exc	hang	es and	l	l	_
Activity 4.2.1 Assess current situation and determine where the SLM/LDN platform and portal should be located and how it should be managed	DECEM																								
Activity 4.2.2 Contract consultant to develop the SLM/LDN platform and portal in conjunction with stakeholders and the designated office	DECEM																								_
Activity 4.2.3. Contract consultant to provide training to key stakeholders at national and states levels with utilizing the platform and portal including inputting information	DECEM																								
Activity 4.2.4 Input knowledge management and other SLM products into the SLM platform	DECEM																								
Activity 4.2.5 Conduct learning exchanges amongst states and local communities on a regular basis with oversite by national, state and local planning groups as appropriate	DECEM																								
Activity 4.2.6 Develop policy notes on project tested approaches	DECEM																								
Activity 4.2.7 Hold end of project national seminar	DECEM																								

Activity 4.2.8 Establish demonstration farms with support from public sector and state planning group	DECEM																							
Activity 4.2.9 Demonstration farms are utilized to further engage local and statewide communities as part of the awareness and engagement campaigns	DECEM																							
Output 4.3 Best practices and lessons learned for addressin	ng land degradatio	on exchan	nged t	hroug	h Sout	th-Sou	uth co	oper	ation	with o	other S	SIDS a	icross	the Po	acific	and el	sewhe	ere to	supp	ort LL	ON/SL	M.		
Activity 4.3.1. Local entity contracted annually to develop overview of project activities and lessons learned and package for dissemination both within the country and regionally	DECEM																							
Activity 4.3.2. Participate in at least two conferences or similar activities annually to provide overview of project activities and benchmarks and to share effective lesson	DECEM																							
Activity 4.3.3. Promote knowledge sharing through formal and informal networks and forums that support vulnerable groups, including women and youth	DECEM																							
Output 4.4 Project M&E , safeguards and gender ma	instreaming to s	upport e	effecti	ive pr	oject	man	agen	nent	and p	orojec	t imp	bact						•				•		
Activity 4.4.1 Development and implementation of monitoring framework,	DECEM																							
Activity 4.4.2 Development and implementation of Annual Project Work Plans	DECEM																							
Activity 4.4.3 Prepare annual reports	DECEM																							
Activity 4.4.4. Conduct mid-term and terminal evaluation	DECEM																							
Preparation of Safeguard Documents	1			1	I	I				I I		1	I I								I	I		
Preparation of SESP checklist	DECEM																							
Implementation of SESP	DECEM																							
Supervision, Monitoring and Evaluation	1	1																						
Monitoring social and environmental risks and implementation of gender action plan	DECEM																							

Supervision	UNDP and DECEM													
Final tracking tool update	DECEM													
Audits	GOFSM													
Final Project Review	DECEM and UNDP													

Annex 5: UNDP Social and Environmental Screening Procedure (SESP)

(<u>Link</u>)

Annex 6: UNDP Risk Register

(<u>Link</u>)

Annex 7 Overview of Project Staff and Technical Consultancies

A) Summary of TORs for Key Staff

Project Director

The Project Director (PD) will be a senior officer from DECEM and financed through co-financing. He/she will have overall responsibility for managing the organization, work plans, programs and activities, as well as progress and financial reporting to Project Steering Committee and UNDP. The Project Director will be the head of the Project Management Unit. The PMU will have operational and financial autonomy, including the authority to select and sub-contract specific project activities or components to local consultants and local institutions. The PD will perform a liaison role with government, UNDP and stakeholders. Terms of reference for this position include the following:

The roles and responsibilities of the PD are:

- Establishment of the staffing and operational functions of the Project Management Unit;
- Guiding the preparation of annual work plans, monitoring and evaluation plans, etc.;
- Overseeing the drafting/reviewing of terms of reference key staff;
- Guiding and overseeing funds requisition, six-monthly progress and financial reporting and monitoring of outputs and outcomes as per GEF standards;
- Coordination with regional and local authorities and stakeholders in implementing project activities;
- Ensuring the disbursement of funds as per operational procedures consistent with financial management standards of the Government and GEF;
- Providing secretariat services to the Project Steering Committee;
- Reporting to the Project Steering Committee and UNDP-GEF Program Manager on the progress and issues in project implementation; and
- Facilitation of monitoring and evaluation missions by UNDP or designated consultants to UNDP.

Project Manager

The Project Manager (PM) will lead the GEF7 Project titled "Securing Climate-Resilient Sustainable Land Management and Progress towards Land Degradation Neutrality in the Federated States of Micronesia". The purpose of this post will be to provide effective and efficient strategic leadership and management of the implementation of GEF7 Project implemented by UNDP and executed by FSM Department of Environment, Climate Change and Emergency Management (DECEM), FSM National Government.

Key qualities of the Project Manager:

- Leadership
- Program management
- Financial management
- Advocacy
- Experience working in the FSM or PICs

The PM will provide 20% of the time for project management duties, and 70% for coordinating and supporting technical aspects of the project, the latter mainly for direct technical support for the delivery of project outputs.

As part of project management responsibilities, he/she will have overall responsibility for managing the organization, work plans, programs and activities, as well as progress and financial reporting to Project Steering Committee and UNDP. The Project Manager will be the head of the Project Management Unit. The PMU will have operational and financial autonomy, including the authority to select and sub-contract specific project activities or components to local consultants and local institutions. The PM will perform a liaison role with government, UNDP and stakeholders. Terms of reference for this position include the following:

The roles and responsibilities of the PM for project management (20%) are:

- Lead and direct the Project Management Unit (PMU). This includes planning and implementation of project activities, monitoring progress against approved work plans and indicators in the results framework and day-to-day management of Project staff;
- Provide oversight over all project processes, deliverables, finances, procurement and contracting of service providers to ensure achievement of project outcomes;
- Provide strategic leadership to the project by building collaboration between project partners including but not limited to DECEM, R&D, State Focal Point Agencies, and NGO partners;
- Be accountable to the Project SC for the efficient management of the Project;
- Manage donor relations including ensuring compliance to donor requirements; communicating key messages from the Project to donors; host donor visits; review donor strategies, etc.
- Responsible for effective financial management of donor funds;
- Ensures that project funds are made available by the Implementing Partner in sufficient quantities and in a timely manner to support project implementation;
- Provide support for completion of assessments required by UNDP, spot checks and audits; and
- Represents the Implementing Partner at major project reviews, evaluations, audits and other important events

The roles and responsibilities of the PM for technical oversight and coordination (80%) are:

- Identify priority gaps and weaknesses in the regulatory framework and enforcement mechanisms for combatting land degradation, provide technical support leading to improvements, and direct advocacy leading to adoption where relevant by state and national governments, including lobbying National and State government departments to align programmatic strategies and funding with the Project and SLM/LDN objectives (Output 1.2).
- Ensure establishment and management of effective governance and technical structures, specifically the Project Steering Committee/NLMWG, lead development of corresponding TORs, and guide MOU development amongst key national entities, and state entities by directing the State Stakeholder Engagement Officers (Output 1.4);
- Oversee the work of the GIS specialist, and ensure that the National level spatial mapping and strengthened baseline information is made available to states on existing platforms to assess trends, drivers and hotspots of land degradation, and targets set for the LDN sub-indicators (Output 2.1)
- Guide the State Stakeholder Engagement Officers in working with smallholder farmers on traditionally owned lands to implement traditional and innovative climate-smart agricultural practices for sustainable land management and climate change adaptation that contribute to LDN, protect ecosystem services, biodiversity, and food security, and enhance incomes (Output 3.3)
- Development of project Steering Committee/NLMWG annual meeting/policy notes (Output 4.2)
- Manage and monitor the project risks including social and environmental risks initially identify and submit new risks to the project Steering Committee (SC) for its consideration and decision on possible actions if required, update the status of these risks by maintaining the project risks log (Output 4.4)

The Project Manager will also be responsible for management of the following posts within the PMU:

- National Technical Coordinator (NTC)
- State Stakeholder Engagement Officers (4)
- State Technical Coordinators (4, to be supervised by the NTC)
- Finance and Administrative Assistant
- Communications Officer
- Required International/National consultants
- Appoint and supervise local and international consultants within the Project Implementation Unit

Responsibility for these positions includes:

Development and planning of work programs, budget allocation, decisions regarding allocation of tasks; setting performance targets; mentorship, management and experiential training; development of performance management agreements and conducting performance evaluations. The PM needs to be able to make reasoned decisions regarding management of resources, staff, and tasks; work programs; and make strategic decisions or manage politically sensitive situations independently.

The level of autonomy associated with the post is relatively high. The PM has to be able to operate with minimal supervision from the Project Director, and DECEM in general. The Project Manager will be responsible for coordinating the SC. The SC will provide the PM with strategic oversight and guidance on project implementation and operation. The PM will be responsible for providing the SC with reports detailing progress of project implementation and financial updates.

A key aspect of the PM's responsibilities will be to build political support for the Project within National and State Governments through regular meetings with National and State Governors and Senators, as well as directors of key government departments. The PM will be required to use the outputs from the Project as a basis for engagement with government and also the broader stakeholder group.

The PM will further be responsible for managing and coordinating project partner interaction. This will include drawing up Memoranda of Understanding/Agreements, preparing regular quarterly reports against work plans and developing future annual work plans. This is not simply a line accountability type of relationship and requires skilled management and diplomacy.

Qualifications:

- 7-10 Years technical and project management experience in the FSM or PICs
- Experience with overseeing and managing donor-funded projects
- Experience with natural resource management, land degradation neutrality, or related environmental field
- Minimum of a Bachelor's degree, Master's preferred
- Advocacy or lobbying experience working with governments to influence development of policy and legislation

National Technical Coordinator

The National Technical Coordinator's chief role is to provide technical support for all components of the project at the national level, and in particular to overseeing the planning, regulatory and institutional framework for development of National Action Plan for NAP. He/she will oversee, guide and provide technical oversight to the state technical coordinators in the planning and implementation of the sites, including in particular for overseeing the planning, regulatory and institutional framework for development of State Actions Plans for NAP, planning and implementation of activities in the demonstration sites, community related aspects, capacity building, knowledge management, gender mainstreaming and M&E. He/she will also be responsible for ensuring project quality and the provision of technical oversight for all project activities and the delivery of its outputs at the National level as well as directly supervise and guide the State Technical Coordinators in the delivery of state level outputs. The National Technical Coordinator will support the work of the Chief Technical Advisor, technical consultants, and coordinate the activities of all partners and project staff as they relate to the implementation of the project.

Key qualities:

- Broad knowledge of systematic biodiversity conservation planning and its application nationally and sub-nationally, including experience of land use and/or marine spatial planning and the development of protected area systems.
- Experience of working in the FSM
- Experience of working with GEF or other internationally financed projects desirable

National Technical Coordinator specific roles and responsibilities:

- Manage the overall coordination and guidance of the technical aspects of the project, ensuring complementarity of state activities, planning methods and experiences
- Provide technical support to the FSM Department of Environmental, Climate Change and Emergency Management and the Project Manager (PM) and liaise with and provide technical support to the FSM Department of Resource and Development in Project related matters
- Liase and coordinate with Regional, National, and State technical and donor partners, networks and initiatives to ensure support is effective and complementary rather than duplicative
- Lead and coordinate the technical inputs from the State Technical Coordinators and directly supervise and mentor them
- Oversee the preparation of the National Action Program (NAP) for combating land degradation prepared for adoption by Government, incorporating indicators, targets and priority actions for achieving Land Degradation Neutrality (LDN) with support for mainstreaming into priority policies, and guide the State Technical Coordinators in the development of the State Action Plans (SAPs). (Output 1.1).
- Oversee the resilience assessments related to land degradation and climate risks (Output 2.2), and guide the State Technical Coordinators in developing protocols for monitoring land degradation and practical guidelines for promoting/ mainstreaming SLM/BD in the agriculture and infrastructure sectors (Output 2.3)
- Steer the SLM training capacity needs assessments for FSM agencies and groups, and support the development of capacity building and training programs for all relevant national and state and community entities, and, disadvantaged persons (Output 2.4)
- Support the conduct of technical consultations and workshops to community management, financial mechanism for conservation of biodiversity, etc. (Output 3.1).
- Conduct regular Project Planning and Monitoring and Evaluation (M&E) (Output 4.4), including:
 - Plan the activities of the project, ensuring alignment with both Project outputs and indicators and FSM National and State plan priorities, assess major and minor amendments to the project within the parameters set by UNDP-GEF, and prepare revisions to the multi-year work, annual, and quarterly plans if required.
 - Monitor activity progress against the approved work plan, track events as determined in the project monitoring plan, and update plan as required.
 - Identify any plan deviations and make course corrections when needed within steering committee-agreed tolerances to achieve results, ensure that changes are controlled and problems addressed, and report progress, measures and opportunities to the Steering Committee
 - Perform regular progress reporting to the Project Steering Committee as agreed with the board, including measures to address challenges and opportunities.
 - Ensure that the indicators included in the project results framework are monitored annually in advance of the GEF PIR submission deadline, and report on progress in the GEF PIR.
 - Monitor implementation plans including the gender action plan, stakeholder engagement plan, and any environmental and social management plans;
 - Monitor and track progress against the GEF Core indicators.
 - Support the development of the inception report no later than one month after the inception workshop.
 - Support the Mid-term and Terminal Evaluation process

Qualifications

- Bachelor's degree in Biology, Natural Resource Management, Environment or related field and at least 8 years of Project technical experience, showing a progressive increase in scope and responsibilities; OR a Master's degree and at least 4 years experience
- Demonstrated coordination and project leadership skills, and ability to multi-task;
- Demonstrated experience on policy and institutional matters, and technical knowledge on aspects relating to biodiversity conservation and SLM;
- Familiarity with the goals and procedures of government institutions, including those of UNDP and GEF as it relates to the Project goals and objectives;
- Availability for extensive domestic travel;

- Strong leadership and team-building skills;
- Self-motivated and ability to work under the pressure;
- Demonstrable ability to organize, facilitate, and mediate technical teams to achieve stated project objectives;
- Familiarity with logical frameworks and strategic planning;
- Strong computer skills;
- Flexible and willing to travel as required;
- Excellent communication and writing skills in local languages;

Chief Technical Advisor

Under the overall guidance of the DECEM) the Chief Technical Adviser will provide high level technical advice to the implementation of the Project. The specific duties are as follows:

- Facilitate lead role in assisting the PMU to review progress to date as well as prioritizing activities between now and project closure;
- Support PMU in developing a Multi-Year Work Plan for the Project from 2024 to project closure;
- Lead development of an exit strategy for the project as recommended in the Midterm Evaluation (Output 4.4);
- Advise the PMU, Steering Committee and DECEM on key strategic and policy issues related to Ridge to Reef strategy and SLM relevant to the FSM and in the context of a Pacific Island Country (Output 1.1)
- Provide technical guidance and oversight to DECEM and consultants for the assessment of regulatory mechanisms and enforcement for combatting land degradation (Output 1.2)
- Provide international to guide DECEM for undertaking the NAP (Output (1.1)
- Provide assistance to the PMU in preparation/review of technical documents including PIR, quarterly progress reports and SC meeting reports.
- Be responsible for quality assurance of SLM and BD conservation analysis and related studies to be undertaken by the project;
- Preparation of TORs and developing methodology in the execution of various technical studies. eg. NAPs, SAPs, LDN regulatory, spatial planning, resilience assessments, etc. (under Components 1 and 2) to be carried out on the project;
- Verifying that TORs have been met and assuring quality of technical reports compiled by IPs and consultants;
- Provide technical inputs to terminal evaluation exercise, especially in updating of tracking tools and scorecards prior to project closure;
- Produce policy-briefing papers, project technical and periodic reports for advocacy and knowledge management as appropriate;
- Provide technical support and mentoring for PMU
- Ensure that sound systematic conservation planning principles are adhered to during project intervention and be responsible for monitoring that intended SLM and Biodiversity conservation outcomes of the project are attained;
- Coordinate and facilitate cooperation and lessons learning/sharing between all Pacific Island nations, specifically facilitate initiatives such as South-South co-operation, sharing lessons learnt & best practices between the PICs; and
- Perform other duties relevant to the project and his/her expertise.

It is critically important for the consultant to carry out these tasks while keeping key stakeholders (including officers of the DECEM) fully involved but at the same time taking a technical lead.

Qualifications:

- Masters' degree in biological or environmental sciences, PhD preferred or experience equivalent to 10 Years international and local project experience with integrated land-use management and protected area development;
- Experience with GEF projects and also working in the PIC region;

- Fluency of English language is required, Broad knowledge of systematic conservation planning and application internationally, especially knowledge of applied spatial biodiversity planning for land use planning;
- Proven track record of project management and project team experience working with government, NGOs, and other key stakeholders;
- Strong analytical, reporting and writing skills;
- Ability to engage various partners and stakeholders and builds strong relationships with clients and other stakeholders;
- Ability to work under pressure and tight deadlines;
- Demonstrates integrity and commitment to UN principles and values and ethical standards;
- Experience working in Pacific Island Countries, experience working in Federated States of Micronesia strongly preferred, Familiarity with FSM environment sector required
- Experience working with GEF projects.

Communications Officer

The Communication Officer will be directly responsible for timely and high quality delivery of the communication, awareness activities and information and knowledge sharing. The officer will work under the guidance of the Project Manager and National Technical Coordinator and support the state Project staff, different partners and stakeholders in the project area. The key responsibilities will be to support all activities under Component 4, including coordination of the State Technical Coordinators and State Stakeholder Engagement Officers in the delivery of communication, awareness and knowledge management activities and of the following:

Roles and Responsibilities

A. Project Communications for advocacy and awareness

- Network and coordinate with implementing partners and external partners, both current and potential, on project matters. This includes representing the Project at meetings, workshops, conferences, and other opportunities, as identified by the Project team.
- Ensure timely and quality production of advocacy and branding materials such as periodicals, annual and donor reports, briefing notes, picture stories, videos, etc. The Communications Officer will develop and archive communication materials, including digital, such as publications, press releases and clippings, photographs, audio-visual materials, web resources etc. (Output 4.2)
- Support and coordinate development and implementation of the Project's Communication Strategy with the PMU and multiple partners in each state, seek alignment on key messages, brand, and oversee roll out of events, materials, and activities (Output 4.1)
- Assist in organizing and generating public support for special events and campaigns to promote strategic conservation goals (Output 4.1)
- Strengthen and expand communications strategy to build awareness and support for ecosystem services and effective management more widely and effectively. (Output 4.1)
- Leverage peer-to-peer learning among partners. (Output 4.2)
- Document best practices and maximize opportunities for increased engagement and buy-in for stakeholders, partners and government leaders. (Output 4.2)

B. Communications and Knowledge Management

- Work with PMU and State Stakeholder Engagement Officers to strengthen the presence and support of the project on the ground through active engagement and information sharing with key project stakeholders including other national and regional projects, government counterparts, Project Steering Committee and committees, and beneficiaries/communities.
- Facilitate development of a SLM/LDN platform and portal, working with the IT consultants to input information and knowledge and train users of information (Output 4.2)
- Coordinate development of communication and awareness materials for the project to ensure visibility of the project achievements and good practices, including promotion of SLM/LDN awareness in schools (Outputs 4.1 and 4.3)
- Help develop and support implementation of a communications monitoring plan.

- Monitor and evaluate impact of communication materials and advocacy events/campaigns to target audiences (Output 4.1).
- Support organization of workshops, seminars, campaigns, events and project review meetings including agendas and meeting minutes. (Output 4.1)
- Develop and maintain contact information, materials and relationships with journalists and media outlets (print, TV, radio, web etc.) within and outside the FSM to increase coverage of conservation issues in the media (print, broadcast and digital). Specific activities may include:
 - Draft and edit articles, press releases and other advocacy/information materials.
 - Collaborate with the media by organizing project site visits, facilitate photo coverage and TV footage and utilizing both web-based and traditional media as appropriate.
 - Monitor and evaluate the use and effectiveness of media materials. Maintain a library of media coverage, clippings etc.
- Maintain and manage project portals/library (e.g. Dropbox, National Environmental Portal, etc.).

C. External Communications and Partner Engagement

- The Communications Officer will work closely with the PMU and state staff to ensure that relevant project materials such as reports, factsheets, info-graphics etc. are developed and disseminated to donors and target groups through relevant media and network channels;
- Maintain information portals and social media sites (e.g. Facebook, Twitter and YouTube) such as daily monitoring, posting and content development, and (output 4.2)
- Identify opportunities and support for South-South collaboration in knowledge exchange, sharing and dissemination (Output 4.3)
- Organize and/or participate in meetings, fora and workshops as needed.

D. Team Planning, Management and Coordination

- Interface closely and communicate regularly with team members to provide timely updates and input regarding campaigns, program deliverables;
- Support planning and implementation of team retreats/trainings, workshops, etc. when applicable, including facilitation of any social marketing related sessions or components, and;
- Represent the team in calls, meetings and workshops within UNDP and FSM related to communications, in order to ensure cross-learning and application of new approaches to the Project

QUALIFICATIONS

- Associate's degree in social science, marketing, communications or related field and 7+ years of experience in a previous communications role, OR a Bachelor's degree and 5+ years of experience;
- Previous experience working on social marketing, communications, and/or community mobilization in an international context;
- Knowledge of and experience with the basics of marketing--branding, positioning, understanding key audiences, etc.;
- Demonstration of extensive social media experience is an added advantage;
- Candidates with basic design and layout skills and proficient in using Adobe Photoshop or other programs are an added advantage;
- Excellent written and oral English communication skills are required;
- Advanced working knowledge of MS Office (Word, PowerPoint, Excel and Publisher);
- Demonstrated ability to interact, coordinate, and collaborate with local partners and stakeholders;
- Outstanding interpersonal, oral and written communication skills, with the maturity, integrity, and cross-cultural experience to gain the trust and confidence of the project's donors, leadership, staff, colleagues, and partners, and;
- Ability to work independently and as part of a team.

State Technical Coordinators (4)

The State Technical Coordinator's chief role is to provide technical support for all components of the project at the State level, and in particular in the demonstration sites, including in particular for overseeing the planning, regulatory and institutional framework for development of State Actions Plans for NAP, planning and implementation of activities in the demonstration sites, community related aspects, capacity building, knowledge management, gender mainstreaming and M&E. He/she will also be responsible for ensuring project quality and the provision of technical oversight for all project activities and the delivery of its outputs at the State level. The STCs will support and coordinate the activities of all partners, staff, and consultants as they relate to the implementation of the project in the State. The STCs will be responsible for the following specific tasks:

Specific responsibilities include:

- Manage the overall coordination and guidance of the technical aspects of the project, in particular coordinate the preparation/update of State Actions plans related to the NAP (Output 1.2), Land use planning, (Output 1.3) planning at the demonstration sites (Outputs 3.1 and 3.2), management and support monitoring (Output 4.4)
- Coordination of the technical inputs from the State coordinating bodies (Output 1.4)
- Support a capacity building and training programs for all relevant local agencies, special interest groups and local communities (Output 2.4)
- Support the conduct of technical consultations and workshops to develop the demonstration site management plans, strategies for SLM, including mapping and zoning (Output 3.1), oversee and guide the State Stakeholder engagement officers in community engagement (Output 3.2 and 3.3) and planning and knowledge management and M&E planning and implementation of related guidelines, tool kits and manuals and regulations, etc.
- Support the development and organization of awareness and publicity programs and materials at state level (Output 4.1)
- Support plans and protocols for inter-agency coordination during the preparation of management planning in demonstration sites, support for restoration activities and livelihood activities
- Monitor events as determined in the project monitoring plan, and facilitate update the plan as required.
- Perform regular progress reporting to the NTC, including measures to address challenges and opportunities.
- Oversee progress related to project risks including social and environmental risks;
- Closely work with State implementing partners in planning and execution of technical activities;
- Convene and coordinate meetings for technical groups, State and Community consultations and compile minutes to support project quarterly reports;
- Strengthen the presence and support of the Project on the ground through active engagement and information sharing with key project stakeholders including other national and regional projects, government counterparts, the project steering committee, beneficiaries and communities; and
- Undertake other duties assigned by the Project Manager and/or National Technical Coordinator.

Qualifications

- Associate's degree in Environment Management, conservation or closely related fields with 10+ years of experience of Project technical experience, showing a progressive increase in scope and responsibilities, OR a Bachelor's degree with 5+ years of experience, OR a Master's degree with 3+ years of experience;
- Demonstrated coordination and project leadership skills, and ability to multi-task;
- Ability to work with multi-disciplinary environment stakeholder including line government departments and NGOs;
- Be fully computer literate with Microsoft Office Programs; and
- Demonstrated initiative in carrying out his/her duties and ability to work independently on tight deadlines.
- Flexible and willing to travel as required;

State Stakeholder Engagement Officers (4)

- Responsible for organizing, consulting, and mobilizing and informing state government agencies, community leaders, church leaders, and all rural inhabitants about project planned activities on a regular basis, as well as ensuring a warm working relationship is maintained throughout the project (Output 3.1)
- Strengthening existing community working groups in demonstration sites to plan and coordinate SLM/LDN and biodiversity activities (Output 3.1)

- Coordination and planning with partners and community members in terms of implementation of on-the-ground activities in the demonstration sites, including ecosystem restoration works (Output 3.2), improving small holder climate smart agricultural activities (Output 3.3) and ensure training activities are targeted to key local stakeholders in the demonstration sites
- To secure agreement on project activities, coordinate community activities with significant community influencers including state, municipal, traditional and religious leaders
- Spearheads and actively participate in project and community planning initiatives in terms of promotion of awareness and knowledge (Output 4.1).
- Liaison with target areas on planned activities on a regular basis
- Assist in coordination of workshops and trainings at the state/community level
- Assist the project's implementation on the ground with effective logistical support and procurement
- Facilitates and mobilizes technical support by sector agencies to enable communities to implement on-the-ground activities. community project activities with rural residents are carried out
- Conduct site visits and monitoring trips to target sites to capture lessons learned.

Qualifications

- Associate's degree and 7+ years of experience OR Bachelor's degree and 3+ years of experience
- Good leadership, coordination, communication and facilitation skills are essential;
- Ability to work with multi-disciplinary environment stakeholder including line government departments and NGOs;
- Good interpersonal skills;
- Be fully computer literate with Microsoft Office Programs;
- Demonstrated initiative in carrying out his/her duties and ability to work independently on tight deadlines;
- Strong organizational skills;
- Knowledge of basic budgeting and procurement.

Project Finance and Administrative Assistant

The Project Finance and Administrative Assistant (FAA) will be responsible for the financial and administrative management of the project activities and assists in the preparation of quarterly and annual work plans and progress reports for review and monitoring by the Project Director and UNDP. The FAA will have the following responsibilities:

- Report and facilitate advance requests to UNDP for the provision of financial resources, using the Fund Authorization and Certificate Expenditures (FACE) form;
- Prepare and submit requests for direct payments and reimbursements to UNDP;
- Assist the PM and the Project Director in project budget monitoring and revision;
- Prepare project financial reports and submit to the PM for clearance and furnish to the project Steering Committee and UNDP, as required;
- Facilitate, guide and monitor the financial aspects of the national Project Management Unit (PMU) and state-based agencies;
- Establish and maintain an expense ledger for the Project;
- Maintain an inventory file to support purchases of all equipment/assets for the Project;
- Manage all activities of the Project, within the agreed budget, to achieve the expected outputs of the project, in consultation with the DECEM;
- Update and share financial activities/output/outcome progress with DECEM and UNDP, likely key challenges/risks and proposed way forward if and when necessary;
- Facilitate payment and acquittals as per yearly procurement plans for the Project in line with the activities indicated in the Project Annual Work Plans;
- Liaise with national government departments and State based agencies to ensure adequate financial monitoring and acquittal of advances/payments;
- Work to continuously improve systems and procedures to enhance internal controls to satisfy audit requirements;

- Prepare monthly project account reconciliation statements;
- Document and share records of meetings, decisions and actions, as required; and
- Undertake other relevant matters assigned by the PM

Other duties and responsibilities:

- Check and ensure all expenditures of the Project are in accordance with FSM/ UNDP/GEF guidelines;
- Ensure support is provided in organizing Steering Committee and other relevant events/meetings;
- Prepare and submit financial reports from the Department of Finance PM, as required;
- Support the PM in submission of payment requests to ensure timely implementation of project activities;
- Assist with other Project related activities, where required. These may include planning for meetings, local and national
 consultations, trips and other project related activities; and
- Assist in ensuring the Project is executed in a timely and appropriate manner.

Qualifications and Skills:

- Bachelor's degree in management, administration, economics, environment or closely related field or equivalent work experience;
- At least 3 years of experience in financial management, preferably working with the FSM National financial systems;
- Experience dealing with national experts and international institutions is an added advantage;
- Exposure to environmental issues or biodiversity desirable, but not required;
- Be fully computer literate with Microsoft Office Programs;
- Experience in providing a streamlined financial service role to a project management team, including experience in developing and delivering financial reports;
- Familiar with financial and procurement process within UNDP;
- Demonstrated initiative in carrying out his/her duties and ability to work independently to tight deadlines; and
- Ability to operate standard office equipment and familiarity with principles of accounting and office practices are esse
Consultants and Contractual Services

Consultant	Time or Cost	Tasks, Inputs and Outputs
	Input	
International Cons	ultants	
Safeguard Expert	40 days (\$30,000)	Environmental and Social Safeguards Specialist Consultant to review the Environmental and Social Management Framework (ESMF), including the collection of all required data, information and materials, review and revise the current SESP and develop an Environmental and Social Management Plan (ESMP) or targeted management plans as required This shall provide clear, comprehensive and practical guidance for integrating an environmental/social due diligence process into the project implementation process.
MTR Evaluation Expert	25 days (\$20,000)	Conduct the formal Mid-Term Evaluation (MTE) according to UNDP and GEF templates and requirements. The overall objective of the MTE is to review for categories of project progress – project design, progress towards the project'sobjectives and outcomes, adaptive management, and sustainability. The MTE will identify strengths and weaknesses in implementation, and identify risks and counter-measures. Specifically, the MTE IC assessment will be based on document review (i.e. PIF, UNDP Initiation Plan, Project Document, SESP, Project Inception Report, PPRs, MTE Tracking Tools, Project Appraisal Committee meeting minutes, financial and administration guidelines, project operational guidelines, Project Steering Committee minutes, etc.), as provided by the Project Team, followed by targeted interviews and site visits. An important aspect of the evaluation is to assess the likelihood of the project achieving its objectives and delivering its intended outputs, and to providerecommendations and lessons to help the project design and modifications to increase thelikelihood of success, as appropriate.
TE Evaluation Expert	30 days (\$25,000)	Produce formal Terminal Evaluation according to UNDP and GEF templates and requirements. The objectives of the evaluation are to assess (i) the achievement of project results, against expectations set out in the Project Logical Framework/Results Framework; (ii) the key financial aspects of the project, including the extent of co-financing planned and realized; (iii) to draw lessons that can both improve the sustainability of benefits from this project, and aid in the overall enhancement of UNDP programming. The evaluation must provide evidence-based information that is credible, reliable and useful. Following a participatory and consultative approach ensuring close engagement with government counterparts, in particular the GEF operational focal point, UNDP Country Office, project team, UNDP GEF Technical Adviser and other key stakeholders, the evaluator will review all relevant sources of information, such as the project document, project reports – including Annual APR/PIR, project budget revisions, midterm review, progress reports, GEF focal area tracking tools, project files, national strategic and legal documents, and any other materials that the evaluator considers useful for this evidence-based assessment.
SLM/LDN planning expert	40 days (\$30,000)	International Consultant to update priority national plans, policies, etc. to incorporate SLM/LDN (Output 1.1). The consultant will oversee and guide the SLM NAP development process to set national policy guidance, identify LDN targets. The consultant will also help identify actions to improve institutional capacity, training needs for mainstreaming LD into relevant policies, strategies and plans. and the means to achieve e LDN targets as well as information and database management.
Gender planning and training expert	50 days (\$32,000)	This expert will assess measures identified in the gender mainstreaming action plan and develop a work plan to implementing these actions, identify capacity building and training needs to mainstream gender based on conduct of a gender needs assessment, develop curriculum and modules for gender training and work with local institutions and NGOs to strengthen their capacities for continuing to deliver gender training programs
Local / National cont	racting	
Outcome 1		

Consultant	Time or Cost	Tasks, Inputs and Outputs
	Input	
SLM NAP Development Specialist (Output 1.1)	60 days (\$18,000)	 Assist the National Government of FSM to develop a National Action Program (NAP) to address land degradation. The NAP document will be developed in the framework of a participatory approach involving local communities, government and other stakeholders to spell out the practical steps and measures to be taken to combat land degradation in specific ecosystems of the FSM. The national consultant will work closely with the National-State inter-sectoral working groups and through a process of extensive consultation with key stakeholders support the development of the NAP that would: Identify and incorporate priority issues and actions for sustainable land management in FSM including those identified in previous community, national and international consultations Identify activities aimed at preventing and/or minimizing land degradation and rehabilitating degraded land. Empower communities through awareness raising and supporting their participation in land use planning and rehabilitation and sustainable development. Upscale the knowledge on Sustainable Land Management and its benefits among decision-makers in FSM
SLM State action Plans (SAPs) development Specialist (4 positions) (Output 1.1)	40 days/state for 4 states (total 120 days) Total - \$10,000 x 4 =\$40,000	Each state is to develop a SLM SAP. For each state, the SLM SAP development specialist will support the State with developing its SAP. The coordination of these efforts will be undertaken by the state level EPA or equivalent. Each of the state's SAPs will be developed within the broad framework of the NAP through a participatory approach involving local communities, government entities and other state-level stakeholders to spell out the practical and priority steps and measures to be taken to implement comprehensive SLM across each state, combat land degradation including implementation of activities within specific ecosystems, and strengthen BD across the state. Each of the SLM SAP development specialists will work closely with their states SLMWG through a process of extensive consultation with key stakeholders.
Land Use and GIS Specialist (Component 2)	\$25,000/year = \$150,000	A position is to be developed, filed and supported within the national government with the duty of providing technical support to the GIS platform land use specialist in regard to managing and keeping current the national GIS sharing platform. The technical specialist will work closely with national and state stakeholders to support their data gather activities and ensure that stakeholders are utilizing BMPs and developing data that is both relevant and harmonized ensuring that it can be incorporated into the sharing platform. The GIS specialist will support stakeholders with inputting new and updated data into the sharing platform. This position is envisioned as a long term role that over the course of the project will be taken over and supported as a permanent position within the national government.
National Consultant to identifying LDN targets and specific activities (Output 2.1)	80 days -\$20,000	Consultant to work with the NLMWG to facilitate setting LDN baselines, targets, monitoring and reporting of land degradation. Ensure that methods are compatible/equivalent with the work undertaken by UNCCD and the Global Mechanism through the LDN Target Setting Program, and that the format and software will be compatible for the next reporting cycle using PRAIS and eventually Earth.Trend.
National Consultants for resilience assessment (4) (Output 2.2)	\$10,000/State for 4 States= \$40,000	Consultant to undertake state resilience assessment with focus on land degradation and climate induced risks/impacts in each of the 4 States. The assessment will entail detailed evidence-based assessment of landscapes, habitats and land uses in the State that are particularly exposed to land degradation, identifying land degradation hotspots by comparing the LDN baseline assessment with the spatial changes over a period of 10-15 years to assess rates and intensity of change. Priorities will differ between the States but will include watershed assessments/mapping of forest loss, soil erosion and landslide vulnerability (Chuuk, Kosrae, Pohnpei); Coastal vulnerability inundation assessment to sea level intrusion (Kosrae, Yap); Mangrove vulnerability assessment (all states except Pohnpei); Dredging, land reclamation and landfill survey (Kosrae, Pohnpei); Water quality vulnerability assessment (Pohnpei).

Consultant	Time or Cost	Tasks, Inputs and Outputs
	Input	
National Consultants for agriculture and infrastructure (Output 2.3)	\$10,000/State for 4 States= \$40,000	Consultant(s) (overseen SLMWGs to identify key gaps and weaknesses in each states' infrastructure and agriculture sectors in regard to SLM and BD and develop prioritized recommendations to address these barriers, including: (i) Protocols for monitoring the three LDN global indicators for assessing and monitoring LDN based on global best practices including identifying data sources, frequency of monitoring etc.; water testing protocols; protocol for earth moving, including checklist, permit conditions and land use application form; protocols for reducing the impact of coral/sand dredging (e.g. requiring use of silt curtains); protocol for climate-proofed roads and banks which ensure critical hydrological flows in the freshwater/saltwater interface. (ii) Guidelines such as Coastal/beach strand rehabilitation guideline; riparian habitats management/rehabilitation guideline; mangrove/wetland rehabilitation guideline; on SLM traditional agroforestry and climate-smart practices (in collaboration with GCF project); Guidebook on smallholder farm business development (diversification, food processing and value-addition); Guidebook on SLM best practices in the infrastructure sector.
National Consultants to compile and provide training on traditional and climate smart agricultural practices (Output 3.3)	- \$15,000/state x 4 = \$60,000	National Consultant(s) for each demonstration site, to compile information regarding traditional and innovative climate-smart agricultural practices and develop a training strategy. The Strategy will support training to transfer climate-smart and traditional agricultural practices and will build on successful experiences such as Yap's Climate Adaptive Agriculture and Resilience project, supported by USAID's Pacific-American Climate Fund. The above-approach will attempt to catalyze efforts to attain LDN, including recognition of land degradation issues, also SLM and CSA approaches to halt and reverse land degradation.
National Communication and KM Consultant (Output 4.1)	\$44,000	To develop communications and knowledge management strategy, including gender mainstreaming plan and awareness plan through rapid survey to assess level of awareness of communities on SLM and BD conservation, identify gaps and means (including awareness methods and tools to be used) to design an awareness program at national and State levels. This will include design of citizen science program SLM/LDN strategy with specific implementable programs for each state that will focus on programs is to be on environmental and land degradation issues, including monitoring, land and coastal conservation, and SLM good practices. Programs will be inclusive of gender mainstreaming and youth, promotion of SLM/LDN in schools,
Land Use Specialist	\$18,000/year = \$108,000	A position is to be developed, filled, and supported within the national government with the primary duty of managing the national GIS sharing platform inclusive of setting priorities and goals, establishing BMPs, meeting goals, promoting the use of BMP by those collecting data, and continual advancing and strengthening the platform and data availability to stakeholders through coordination with the state and national key offices and stakeholders to ensure that the platform is both functional and has relevant and updated data available and that data layers are regularly update on a rolling basis so that updating and/or develop of policy, plans and activities can rely on recent (current or near current) land and near shore status. This position should be considered a long-term role that the government over the course of the project will fully integrate and support as a permanent and necessary position.
Land Use and GIS Specialist	\$25,000/year = \$150,000	A position is to be developed, filed and supported within the national government with the duty of providing technical support to the GIS platform land use specialist in regard to managing and keeping current the national GIS sharing platform. The technical specialist will work closely with national and state stakeholders to support their data gather activities and ensure that stakeholders are utilizing BMPs and developing data that is both relevant and

Consultant	Time or Cost	Tasks, Inputs and Outputs
	Input	
		harmonized ensuring that it can be incorporated into the sharing platform. The GIS specialist will support stakeholders with inputting new and updated data into the sharing platform. This position is envisioned as a long-term role that over the course of the project will be taken over and supported as a permanent position within the national government.
Contractual Services	– Firms	
Land Use Planning Update State Land Use Plans for 4 States (Output 1.3)	\$17,000/state x 4 States = \$68,000	The consultancy will support the will support strengthening of existing land use plans as well as local management plans for the high islands to address land degradation. This will entail the review of existing plans to identify gaps and weaknesses, identify priority actions = that contribute to achieving LDN targets and response hierarchy, including specific targets to achieve LDN as well as SLM NAP and SAPs
Technical support to address LDN/SLM for 4 States (Output 1.3)	\$25,000/State x 4 = \$100,000	Provide technical support and advocacy to identify measures/recommendations to strengthen and harmonize land use planning across each state, as well as design of implementation measures to achieve LDN targets. The implementation measures will be designed through a consultative process with the relevant stakeholders (state agencies, municipalities, community groups and the private sector).
Landscape management planning (Output 3.1)	- \$15,000 x 4 (I National level and 4 States) = \$60,000	Consultancy will use the demonstration landscape assessments to support a detailed community-driven consultative process to identify priority areas in each landscape to avoid (i.e., no-go areas), reduce and reverse (i.e. areas to be rehabilitated land degradation. These priority areas will be accurately mapped, zoned and prioritized. A simple and costed plan will be developed identifying actions towards achieving LDN identifying delivery mechanisms and partners. The DLMPs will identify It will facilitate identification of (i) areas for conservation of biodiversity, in particular for endangered and endemic species and their habitats and their dispersal corridors, such important ecological areas (including water sources and along rivers); (ii) areas for sustainable community natural resources management and use, including sustainable harvesting and extraction, community based conservation and forest management, watershed conservation and climate risk management; (iii) degraded areas for community forest restoration and fire management; (iv) degraded agricultural areas for restoration using SLM/CSA for sustainable agricultural development; (v) area of mangroves; and (vii) areas and activities that can promote blue/green livelihood improvement.
Consultancy services to implement land management practices with local communities in the 4 State demonstration sites (Output 3 2)	- \$250,000/State x 4 = \$1,000,000	The Consultancy will support implementation of well-designed, climate-smart nature-based solutions identified under Output 3.1 to reduce and reverse land degradation across natural habitats in the demonstration landscapes including: (i) rehabilitation of degraded native forests in critical watersheds through implementation of community reforestation/tree planting projects including fire breaks where necessary; (ii) rehabilitation of riparian corridors including vegetated buffer strips and setbacks for piggeries and waste disposal to improve water quality; (iii) rehabilitation of strand forest/green belts to stabilize and reduce coastal erosion; (iv) rehabilitation and conservation of mangrove forests mitigating climate change and coastal degradation following the principles of ecological mangrove restoration ⁹¹ where possible encouraging natural restoration resulting in heightened survival rates, faster growth, and a more diverse, resilient forest structure; (v) rehabilitation of formerly productive land degraded by infrastructure development (e.g. small-scale land levelling and replanting with native vegetation petc. where appropriate with support of private sector

⁹¹ https://mangroveactionproject.org/mangrove-restoration/

Consultant	Time or Cost Input	Tasks, Inputs and Outputs
		partners ⁹²). To implement these innovative rehabilitation projects, this consultancy will provide technical and investment support to community/landowner groups. This will include providing support for community tree nurseries that can provide planting materials both for the rehabilitation of natural habitats, but also for sustainable agroforestry.
Consultancy services for implementation of traditional and climate smart BMPs in state demonstration site (Output 3.3) -	\$36,250/State x 4 = \$145,000	Consultancy services to support local farms with implementation of traditional and climate smart BMPs in each state demonstration site. The consultancy services will provide training, extension and investment to promote "farming as a business" with the aim of increasing profitability and creating jobs (particularly for women and youth) focusing on value-added marketable products from sustainable agriculture and agroforestry. This will include focus on implementing innovative agricultural practices to reverse ongoing land degradation and rehabilitate degraded areas, increasing resilience to Climate Change through SLM/CSA towards achieving LDN, protecting ecosystem services and improving incomes through increasing crop/livestock yields.
Consultancy support to promote local products and marketing (Output 3.3) -	\$15,000/State x 4 = \$60,000	Contractual services to: (i) Review of on-going livelihood-based activities in the two project sites to assess constraints, barriers and opportunities for promotion of improved alternative livelihood programs; (ii) Identification of biodiversity-friendly enterprises and Analysis of Value Chains based on market potential, economic and environmental feasibility; (iii) Mapping and Analysis of suitable Value Chains, Promotion of local products and marketing
Consultancy services for demonstration farms (Output 4.1)	\$\$18,5,00/State x4 = \$74,000	Consultancy services for Develop and advance demonstration farm outcomes for each State

 $^{^{\}rm 92}$ Options for private sector partner involvement were considered during PPG stage

Annex 8: Stakeholder Engagement Plan

(<u>Link</u>)

Annex 9: Environmental Social Management Framework (ESMF) and other SES frameworks/plans, if required (Link)

Annex 10: Gender Analysis and Gender Action Plan (Link)

Annex 11: Procurement Plan (Link)

Annex 12: Draft LOA between UNDP and IP requesting UNDP Support Services

(<u>Link</u>)

Annex 13: GEF Core indicator Worksheet

(<u>Link</u>)

Annex 14: GEF 7 Taxonomy

Level 1	Level 2	Level 3	Level 4
X Influencing models			
	Transform policy and regulatory		
	environments		
	X Strengthen institutional capacity and		
	decision-making		
	X Convene multi-stakeholder alliances		
	X Demonstrate innovative approaches		
Y Stalzaholdona	instruments		
X Stakenoluers	Indigonous Dooplos		
	Indigenous reoptes		
		Capital providera	
		Einancial intermediaries and	
		market facilitators	
		X Individuals/Entrepreneurs	
		Non-Grant Pilot	
		Project Reflow	
	X Beneficiaries		
	X Local Communities		
	X Civil Society		
	X Givii bociciy	X Community Based	
		Organization	
		X Non-Governmental	
		Organization	
		X Academia	
		☐Trade Unions and Workers	
		Unions	
	X Type of Engagement		
		X Information Dissemination	
		X Partnership	
		X Consultation	
	V. Communications		
		Y Awaronoss Paising	
		X Education	
		X Public Campaigns	
		X Behavior Change	
X Capacity, Knowledge and Research			
	Enabling Activities		
	X Capacity Development		
	X Knowledge Generation and Exchange		
	Targeted Research		
	X Learning		
		X Theory of Change	
		X Adaptive Management	
		X Indicators to Measure	
	V Innovation	Change	
	X Innovation		
	A MIOWICUEC and Leaf Inne	X Knowledge Management	
		X Innovation	
		X Capacity Development	
		X Learning	
	X Stakeholder Engagement Plan	5	

X Gender Equality			
¥_ÿ	X Gender Mainstreaming		
	5	X Beneficiaries	
		X Women groups	
		XSex-disaggregated indicators	
		X Gender-sensitive indicators	
	X Gender results areas		
		X Access and control over	
		natural resources	
		X Participation and leadership	
		Access to benefits and	
		services	
		X Capacity development	
		X Awareness raising	
		X Knowledge generation	
X Focal Areas/Theme			
	Integrated Programs		
		X Commodity Supply	
		Chains (Good Growth	
		Partnership)	
			Sustainable Commodities Production
			Deforestation-free Sourcing
			Financial Screening Tools
			High Conservation Value Forests
			High Carbon Stocks Forests
			Soybean Supply Chain
			Oil Palm Supply Chain
			Beef Supply Chain
			X Smallholder Farmers
			Adaptive Management
		☐Food Security in Sub-Sahara	
		Africa	
			Resilience (climate and shocks)
			Sustainable Production Systems
			Agroecosystems
			Land and Soil Health
			Diversified Farming
			Integrated Land and Water
			Management
			Smallholder Farming
			Small and Medium Enterprises
			Gender Dimensions
		M. David Court M. 1911	Iniuiti-stakenolder Platforms
		X Food Systems, Land Use and Restoration	
			USustainable Food Systems
			X Landscape Restoration
			USustainable Commodity Production
			X Comprehensive Land Use Planning
			X Integrated Landscapes
			UFood Value Chains
			Uperorestation-free Sourcing
			X Smallholder Farmers
			Untegrated urban planning
			Urban sustainability framework
			Transport and Mobility
			□ Municipal waste management
			Lucreen space
			Urban Biodiversity
			Urban Food Systems

		Energy efficiency
		Municipal Financing
		Global Platform for Sustainable Cities
		Urban Resilience
X Biodiversity		
	X Protected Areas and Landscapes	
		Terrestrial Protected Areas
		Coastal and Marine Protected Areas
		X Productive Landscapes
		X Productive Seascapes
		X Community Based Natural Resource Management
	X Mainstreaming	
		Extractive Industries (oil, gas, mining)
		X Forestry (Including HCVF and REDD+)
		X Tourism
		X Agriculture & agrobiodiversity
		X Fisheries
		X Infrastructure
		Certification (National Standards)
		Certification (International Standards)
	X Species	
	A opecies	Illegal Wildlife Trade
		Threatened Species
		Wildlife for Sustainable Development
		Crop Wild Relatives
		Plant Constic Resources
		Animal Genetic Resources
		Livestock Wild Relatives
		X Invasive Alien Species (IAS)
	X Biomes	x musive men species (ms)
	X biomes	X Mangroves
		X Coral Reefs
		X Sea Grasses
		X Wetlands
		X Rivers
		Lakes
		Tropical Rain Forests
		Tropical Dry Forests
		Temperate Forests
		X Grasslands
		Paramo
		Desert
	Financial and Accounting	
		Payment for Ecosystem Services
		Natural Capital Assessment and
		Conservation Trust Funds
	Supplementary Protocol to	
		Biosafety
		Access to Genetic Resources Benefit
V Foracto		Sharing
^ FUTESIS	Forest and Landacere	
	Restoration	
		LIKEDD/REDD+
	LForest	
		∐Amazon
		Congo

	X Land Degradation		
		X Sustainable Land Management	
			X Restoration and Rehabilitation of Degraded Lands
			X Ecosystem Approach
			X Integrated and Cross-sectoral approach
			X Community-Based NBM
			X Sustainable Livelihoods
			X Jucome Concrating Activities
			 K Sustainable Agriculture
			Sustainable Pasture Management
			Sustainable Forest /Woodland
			Management
			X Improved Soil and Water Management Techniques
			Sustainable Fire Management
			Drought Mitigation/Early Warning
		X Land Degradation Neutrality	
			X Land Productivity
			X Land Cover and Land cover change
			X Carbon stocks above or below ground
		Food Security	
	International Waters		
		Ship	
		□ Coastal	
		Freshwater	
			Aquifer
			River Basin
			Lake Basin
		Learning	
		Fisheries	
		Persistent toxic substances	
		SIDS : Small Island Dev States	
		Targeted Research	
		Pollution	
			Persistent toxic substances
			Plastics
			□Nutrient pollution from all sectors
			except wastewater
			Nutrient pollution from Wastewater
		Transboundary Diagnostic	
		Analysis and Strategic Action	
		Plan preparation	
		Strategic Action Plan	
		Implementation	
		∐Areas Beyond National Jurisdiction	
		Large Marine Ecosystems	
		Private Sector	
		Aquaculture	
		Marine Protected Area	
		Biomes	
			Mangrove
			Coral Reefs
			Seagrasses
			Polar Ecosystems
			Constructed Wetlands
	X Chemicals and Waste		
		Mercury	
		Artisanal and Scale Gold	
		Coal Fired Power Plants	
		Coal Fired Industrial Boilers	
L			

	Cement	
	Non-Ferrous Metals	
	Production	
	Ozone	
	Persistent Organic Pollutants	
	Unintentional Persistent Organic Pollutants	
	Sound Management of chemicals and Waste	
	X Waste Management	
		Hazardous Waste Management
		Industrial Waste
		le-Waste
	Emissions	
	Disposal	
	New Persistent Organic	
	Polluchlarinated Pinhanyla	
	DDT - Vector Management	
	Industrial Emissions	
	Onen Burning	
	Best Available Technology /	
	Best Environmental Practices	
X Climate Change		
	X Climate Change Adaptation	
		Climate Finance
		Least Developed Countries
		X Small Island Developing States
		Disaster Risk Management
		Sea-level rise
		X Climate Resilience
		X Climate information
		X Ecosystem-based Adaptation
		Adaptation Tech Transfer
		 X National Adaptation Programme of Action
		X National Adaptation Plan
		X Mainstreaming Adaptation
		X Private Sector
		Innovation
		Complementarity
		X Community-based Adaptation
 		X Livelihoods
	X Climate Change Mitigation	
		X Agriculture, Forestry, and other Land Use
		Energy Efficiency
		Sustainable Urban Systems and
		Technology Transfer
		Renewable Energy
		Financing
		Enabling Activities
	Technology Transfer	
1		Doman Strategia Drogramma on
		Technology Transfer
		Chord and a strategic Programme On Technology Transfer Climate Technology Centre & Network
		Poznan Strategic Programme on Technology Transfer Climate Technology Centre & Network (CTCN) Endogenous technology

		Technology Needs Assessment
		Adaptation Tech Transfer
	United Nations Framework	
	on Climate Change	Nationally Determined Contribution
🛛 Rio Markers		
	Paris Agreement	
	Sustainable Development Goals	
	Climate Change Mitigation 0	
	Climate Change Mitigation 1	
	X Climate Change Mitigation 2	
	Climate Change Adaptation 0	
	Climate Change Adaptation 1	
	X Climate Change Adaptation 2	

15. Partners Capacity Assessment and HACT Assessment

(Available upon request)

16. UNDP Project Quality Assurance Report

(See separate folder)

17. PPG consultations Report

(<u>Link</u>)

18. Tracking Tools and FAO-EXACT calculations

(<u>Link</u>)

Climate Risk Screening Report

The following climate change risk screening has been completed to ensure that the project sufficiently considers risks associated with climate change impacts that may affect project planning and implementation. It is intended that the project will be prepared for, and resilient to, potential impacts of climate change, thus enabling more effective and impactful contributions towards national and global environmental benefits, despite ongoing and inevitable climate change effects.

The Government of FSM has recognized that climate change is an existential threat and made significant strides to counter it but more action and sustained international support is required. Increasing frequency and intensity of coastal storms threatens infrastructure and livelihoods, as do increased risks of coastal flooding and drought. FSM has recognized this by engaging forcefully in international discussions, setting out an ambitious agenda for mitigation and putting in place a wide range of adaptation policies and strategies. However, significant gaps remain particularly with regard to a National Adaptation Plan and a comprehensive Disaster Resilience Strategy (DRS). The challenges facing the country remain daunting and will require sustained international support along with increased private sector participation and domestic revenue mobilization. International support should focus on grant financing for adaptation investments and disaster response and capacity building to complete strategies and improve public investment management.

The FSM Government has committed to proactive mitigation and adaptation responses to address climate change, including high level policy and institutional changes. The Department of Environment, Climate Change & Emergency Management (DECEM) is the lead government department for climate issues. The International Monetary Fund (IMF) undertook a Climate Change Policy Assessment (CCPA) in 2019 to assist the country understand and manage the expected economic impact of climate change, while safeguarding long-run fiscal and external sustainability. It explores the possible impact of climate change and natural disasters and the cost of FSM's planned response. It suggests macroeconomically relevant reforms that could strengthen the national strategy and identifies policy gaps and resource needs. The CCPA recognizes that investment thus far has been skewed towards mitigation, despite FSM's negligible contribution to global emissions. FSM has made progress towards its NDC mitigation pledge by beginning to expand renewable power generation and improve its efficiency. The authorities plan to continue this and encourage the take-up of energy efficient building design and appliances. Short-term mitigation options for the transport sector are more limited, The CCPA also recognizes that accelerating adaptation investments is paramount, which requires addressing critical capacity constraints and increasing grant financing. FSM's overall planning for adaptation is fragmented and individual sectoral projects include varying levels of adaptation measures. Progress has been hindered by capacity constraints, particularly in investment project execution at the state level. However, FSM has a financing gap of \$400-500 million over the next 15 years between its ambitious climate change investment plans and currently available grant funding and increased domestic financing is constrained by the fiscal cliff facing the authorities due to the expiry of Compact grants in 2023. Improvements in public financial management, such as more rigorous project appraisal and prioritization, improved budget classification and chart of accounts will support an acceleration of adaptation investment in a fiscally sustainable manner. FSM needs to increase its capacity to address natural disaster risks following the expiry of

Current Climate Trends and Predictions

The World Bank's Climate Risk profile for FSM notes the following current trends evidenced from climate science for the country:

Due to its location in the western area of the Pacific, and the strong influence of the northeast trade winds (which generally prevail December through April), FSM experiences a tropical climate. FSM experiences little seasonal variation in mean air temperatures across the year (less than 1.5°C between the average hottest and coolest months) which is driven mainly by sea surface temperatures around the islands. In general, across the island group, the mean annual temperature averages 27.1°C over the period 1901-2019. Rainfall is high on the volcanic islands of Kosrae, Pohnpei and Chuuk primarily during the wet season from May to November when the Intertropical Convergence Zone (ITCZ) is strongest and furthest north, with annual totals exceeding 400 inches (1,016 cm) and up to 22 inches (559 mm) in a given day. Western islands receive additional rain due to the West Pacific Monsoon. The islands, especially within the western states, are generally affected by storms and typhoons, as well as excessive rainfall and drought as associated with the warm and cold phases of the El Niño- Southern Oscillation (ENSO). The most western state of Yap is in an area affected by a monsoon climatic pattern and can tend to experience more frequent periods of drought. Relative to the other states, Yap receives the least rainfall, with annual averages of around 122 inches (3,100 mm); Chuuk receives about 140 inches (3,556 mm), Pohnpei receives just under 190 inches (4,826 mm), and Kosrae receives around 203 inches (5,156 mm). However, it is noted that the mountainous interior of Kosrae may receive as high as 300 inches (7,500 mm).

The Federated States of Micronesia (FSM) is a Pacific Island country highly vulnerable to various natural disasters which are destructive, often unpredictable, and occur frequently. The FSM has climate and disaster risks, including rising sea levels, water shortages from extreme climate variability, coastal erosion and typhoons. Most of the outer islands are low-lying atolls and are consequently vulnerable to rising sea levels. Increases in ocean temperatures and acidification cause coral reef damage and bleaching. This contributes to coastal erosion, leaving the islands more vulnerable to storm surges and floods. Disasters have negative impacts on the social sectors of health, education, and livelihoods, resulting in deeper inequalities of opportunity to the population, which are transmitted over generations. The FSM, like many Pacific island countries and territories, face a triple burden including communicable diseases, non-communicable disease, and the health impacts of climate change. The number of deaths caused by non-communicable diseases is among the highest in the world, while various communicable diseases also still burden the Pacific. Despite these setbacks, FSM has experienced some positive health trends in the past last thirty years. For example, life expectancy has been increasing, while child mortality has been decreasing. The people living in FSM have drinking water shortages and their food security is in critical danger due to rising sea level. As rising sea levels mix saltwater with the groundwater in several areas, it makes it more difficult to irrigate agricultural land. The high level of salinity also poisons the ground, making it infertile for years. In addition, FSM's remote and dispersed island geography can adversely prevent economic development.

- Temperature: Sea-surface temperatures around FSM influence the seasonal variations in air temperature, such that there is little seasonal variation in monthly mean maximum and minimum air temperatures, with less than 3°F (1.5°C) between the average hottest and coolest months. Sea surface temperatures also influence the trends in air temperature. Historical changes in sea surface temperatures around FSM are consistent with the broad-scale sea-surface temperature trends for the wider Pacific region (Australian Bureau of Meteorology and CSIRO, 2011). Warming was relatively weak from the 1950s to the late 1980s. This was followed by a period of more rapid warming (approximately 0.20°F (0.11°C) per decade and approximately 0.14°F (0.08°C) per decade from 1970 to 2009, in the eastern and western regions respectively). At these regional scales, natural variability plays a large role in determining the sea surface temperature, making it difficult to identify long-term trend. Trends for seasonal and annual mean air temperatures at both Pohnpei (1950–2009) and Yap (1951–2009) are positive. The strongest trend occurs for Pohnpei in the wet season (May-October), with a mean air temperature change of (+0.43°F (0.24°C) per decade). For Pohnpei, annual and seasonal trends in minimum air temperature are greater than those observed in maximum air temperature. However, for Yap, the trends in maximum air temperature for the annual and dry season (November-April) are much greater than those observed for the minimum air temperatures (Australian Bureau of Meteorology and CSIRO, 2011). All three locations have experienced increases of the annual maximum air temperatures of between 0.18 and 0.25°F (0.10 and 0.14°C) per decade. The return periods for extreme high temperatures have been estimated for Pohnpei. These are based on observed data and projections of future return periods using the output of global climate models, for given emission scenarios and model sensitivity (Hay and Takesy, 2005).
- Rainfall and droughts: On the large scale, there is an east-west zone of maximum annual rainfall from 4-8°N across Micronesia. The amounts drop off steadily as one progresses northward, where the dry season becomes more prolonged, due to the mid-Pacific subtropical high pressure area and its accompanying trade winds. The wet season occurs from May to September when the Intertropical Convergence Zone is strongest and furthest north. The West Pacific Monsoon affects rainfall in western FSM, bringing additional rain during the wet season (Australian Bureau of Meteorology and CSIRO, 2011. Annual and seasonal rainfall trends for Pohnpei for the period 1950–2009 and Yap for the period 1951–2009 are not statistically significant (Australian Bureau of Meteorology and CSIRO, 2011). Trends in annual rainfall have also been calculated by the National Weather Service in Pohnpei. Values were -0.31in (7.9mm) per decade for Yap, -3.46in (88mm) per decade for Pohnpei and -1.93in (-48.9mm) per decade for Chuuk. FSM's climate and sea level are both strongly modulated by the ENSO. Under El Niño conditions the country typically experiences drought. Severe drought events have resulted in water and food shortages as well as the occurrence of fires. Effects of El Niño on the FSM involve the persistence of a high-pressure weather zone over the Western Tropical Pacific for many months, blocking low-pressure, rain-bearing air masses. Nearly all extremely dry years on Pohnpei occur during the year following an El Niño event (Figure 19). In some years, drought conditions have continued through the wet season. The driest year on record in Pohnpei and throughout most of Micronesia occurred in 1998, following the major El Niño of 1997. Some El Niño years are very wet depending upon the behavior of typhoons and the monsoon trough. Most La Niña and neutral years have precipitation that is near normal to slightly above normal, unless it is a year following an El Niño, when rainfall is below normal. Deleterious effects include desiccation of grasslands and forests, draw-down of streamflow and well-heads, and wildfires. The droughts of the past were especially severe on terrestrial habitats, increasing localized threats to biodiversity. Groundwater sources were taxed, agricultural systems damaged and problems associated with wildfires and invasive species were greatly aggravated. Insufficient rainfall caused water and food shortages, including staples such as taro, coconut, breadfruit, banana, yam, sweet potato, citrus, and sugar cane. High near-surface lagoon and ocean water temperatures, especially associated with low water spring tides,

caused coral bleaching and damage to inshore marine ecosystems. Poor potable water quality resulted in cases of typhoid and cholera. There was also a decrease in fish catch, possibly due to the variations in water temperature that occur during El Nino events.

- Sea level rise FSM is located in part of the global ocean that has experienced some of the highest rates of sea-level rise. The ٠ complex surface reflects the influence of warm and cool bodies of water, currents and winds. Since 1993 sea level in the tropical western Pacific has been rising an average of 0.2-0.4in (5-10 mm) per year. For FSM specifically the value is over 0.39 in (10 mm) per year. This is well above the global mean of about 0.12 in (3mm) per year over the same period. The rise is partly linked to a pattern related to climate variability from year to year and from decade to decade (Australian Bureau of Meteorology and CSIRO, 2011). The extent to which these increases are tied directly to global warming, or to a combination of warming and natural oscillations in the earth-atmosphere system, or some other process. FSM's climate and sea level are both strongly modulated by the ENSO. These variations are important as drought, floods and marine inundation due to high sea levels may damage soil and degrade food resources and drinking water. During an El Niño year, the mean sea level drops across most of Micronesia. During La Niña, the sea level is elevated above its normal value. These changes in sea level are highly coherent across the region from Yap to Guam, Chuuk, Pohnpei, and Kosrae. Typically, the sea level in the region of Pohnpei falls to its lowest value in December of the El Niño year, then quickly recovers by the spring of the year following El Niño (Figure 23). For the SEAFRAME data set, and accounting for the inverted barometric pressure effect and vertical movements in the observing platform, the sea-level trend from 2002 to 2010 is +0.67in (16.9mm) per year. By comparison, in its Fourth Assessment Report the Intergovernmental Panel on Climate Change (IPCC) estimated that global average sea-level rise over the last hundred years was of the order of 1 to 2 mm/yr. (IPCC, 2007). For the unadjusted Pohnpei-B Joint Archive the sea-level trend from 1974 – 2006 was 0.07in (1.8mm) per year. Pohnpei typically experiences its highest monthly mean sea levels around March and its lowest around November and December. The mean sea level over the duration of the SEAFRAME record is 2.44ft (0.745 meters), with a maximum of 5.77ft (1.758 meters on 27 October 2007, and a minimum of -0.16ft (-0.050 meters) on 7 September 2002. Low sea levels were recorded at the end of the El Niño years (1987,1991, 1997, and 2002), while high sea levels were observed in the summers of La Niña years (1988, 1994, 1996, and 1998-2001). Since 2000 FSM has been occasionally experiencing a periodic rise of sea level in the low lying coastal areas of both high and low islands. These "king tides" cause marine inundation that damages groundwater resources, taro beds, soil, and agro-forestry resources in coastal settings, especially on low atoll islets. On high islands, coastal communities that experience both intensifying storm runoff and rising ocean waters are experiencing increased flooding and other drainage problems (Fletcher and Richmond, 2010). Protracted La Niña-like conditions during the first decade of the 21st century caused marine inundation that required provision of emergency food and water supplies to some FSM communities. In 2007, and again in 2008, many FSM communities were flooded by a combination of large swell and spring high tides that eroded beaches, undercut and damaged roads, intruded aquifers and wetlands, and inundated communities. Food and drinking water were in short supply. Seawater flowed into coastal wetlands and surged up through the water table, killing taro, breadfruit, and other foods. Fresh water ponds and wetlands turned brackish and have not yet recovered fully. On approximately 60% of inhabited atoll islets cropping sites in use for generations were physically and chemically damaged, or destroyed.
- Extreme events: The western North Pacific is the most active tropical cyclone basin in the world. On average, 28 tropical storms and typhoons occur annually, compared to about ten for the North Atlantic Basin. Of the 28 tropical cyclones, 18 become typhoons, and four become super typhoons. Another distinguishing feature of the western North Pacific basin is that tropical cyclones, although most common in late summer and autumn, can occur at any time of the year, whereas for other basins, off-season occurrences are rare. In the Pohnpei region the frequency of tropical cyclones of tropical storm intensity or higher is less than one per 5-degree latitude-longitude square per year. The frequency of tropical cyclones passing Pohnpei is less than one every three years within 75 n mi, with a sharp gradient that features almost no tropical storms south of 5° N to over three tropical storms or typhoons passing within 75 n mi of Yap each year, on average.

Climate Change Impacts

 Coastal environment: According to its Second National Communication to the UNFCCC, the islands of the Federated States of Micronesia are in an area of the global area that has "experienced some of the highest rates of sea-level rise." Sea-level rise threatens significant physical changes to coastal zones around the world. Since sea level changes in FSM is also modulated by ENSO activity, these are likely to continue to affect a myriad of coastal concerns. For instance, observational evidence shows that mean sea levels are often lower during an El Niño year, but higher during La Niña. As well, this should be considered in context of another natural phenomenon — tides. Coastal flooding has been associated with "king tides", which are exceptionally high tides or the "highest predicted high tide of the year at a coastal location" which have occasionally affected FSM since 2000. As tsunami waves are likely to increase in height and damage potential due to sea-level rise, this highlights the critical need for adaptation action. FSM has faced destructive tsunamis at least three times since the 1800s, and it is noted that the state of Yap lies closer to the Pacific "ring of fire" and may be more susceptible to such impacts. These changes in sea level have contributed to coastal flooding which has damaged groundwater resources, especially on low-lying atolls, as well as general flooding and drainage issues. Further, this has profound effects on drinking water and food supplies, as agricultural products and soils are compromised. This is especially felt on low-lying atoll islets, which are not only more vulnerable to sea level rise than the higher volcanic islands, but on which are usually traditional low-technology communities which are highly dependent on the coastal areas and sea for their livelihood. As such, sea level rise and related effects not only threaten physical resources and infrastructure, but also cultural norms, traditions and language, as well as ancestral lands. but some studies published more recently have highlighted the potential for greater rises. Like many low-lying island nations FSM faces the prospect of permanent loss of land and displacement of communities. Studies have highlighted the above average rates of sea-level rise in Yap State, and its low-lying atolls, as a vulnerable area. Sea-level rise is not just a threat due to long-term encroachment on coastal areas, but also due to the projected increase in the frequency of extreme sea-level events. The return period of exceptionally high sea-levels, driven by climate circulations, is expected to reduce and low-lying Pacific island nations are particularly at risk. Studies have shown that the extent of wave-driven flooding is impacted by coral reef height and health, highlighting the importance of coral conservation as an adaptation. Without successful adaptation some studies have estimated that wave-driven flooding will make many atoll islands uninhabitable by the mid 21st century. Other studies have shown that atoll islands have potential to sustain and even grow despite sea-level rise thanks to geomorphological processes which build land. The future picture is likely one of dynamic ecosystems, which will demand adaptive lifestyles and livelihoods from inhabitants.

- Coral Reefs and Fisheries: While there is a high degree of confidence of the increased risk of coral bleaching due to a warmer ocean, there is only medium confidence in the ranges of estimates of projected changes in severe coral bleaching risk for FSM. This is due to limited confidence in the sea surface temperature change projections as well as complexities of understanding reefscale changes. As well, such potential changes may not include other reef stressors, such as local environmental concerns, and impacts of ocean acidification are also likely to affect the entire marine ecosystem impacting the key ecosystem services provided by reefs. The fisheries sector in FSM has been identified as a sector with economic potential to contribute to the local economy, and has been developing within recent years. The fishing sector is estimated to contribute about 2% to the local economy, with average annual catches valued at around US\$50 million. FSM also gains revenue through fishing licence fees — "licensed foreign fishing vessels consist of mainly purse-seine and long-line tuna boats and earn around US\$150 million per annum from fishing in FSM waters." FSM's EEZ includes much of the world's major equatorial tuna migratory paths, highlighting the value of offshore tuna. Not only is this important for local diets, as tuna is an essential source of nutrition within the Micronesian diet, but ensuring the viability of the tuna fishery stock in the local EEZ is also essential for the interconnected global fish stock. While it is difficult to fully analyse and explain the influence of climate change, among other factors, on the local fisheries product, it is likely that warmer global temperatures, coral bleaching, as well as ocean acidification may play a central role. Climate change and human resource exploitation represent a dual threat to fisheries. Species living in and around coral reefs, either permanently or in their juvenile period, and particularly larger species, face an extinction threat. As a result of changes in temperature, dissolved oxygen, and acidity, the maximum catch potential of currently resident species has been forecast to decline significantly in FSM. As a result there have been strong calls or support to communities to identify suitable responses and financing mechanisms, and to adapt to the changing marine environment.
- Habitat destruction: Sea-level rise not only threatens humans residing on Pacific islands, but also their unique ecosystem functions and ecology. Indeed, island biodiversity faces a variety of human pressures. Research has shown that inundation of low-lying islands has the potential to remove important refuges for migrating sea birds. As climate changes, so the suitable range for species to inhabit shifts, typically either upslope or away from the equator. In the Island environment the capacity for species to shift is extremely limited and as such loss and extinction are becoming increasingly likely. Major concerns have been raised for the terrestrial ecology of Pacific islands, for example endemic lizards, which may become trapped in a shrinking habitat. Research has also highlighted the risks to biodiversity in the Pacific through study of tree richness in New Caledonia, where the range sizes of 87–96% of species was projected to decline, typically by 52–84%.
 - Agriculture and Food: For the Federated States of Micronesia, while commercial agriculture only contributes about 1% to the local economy, small-scale agriculture is the main source of food and labour. In country agricultural activities are responsible for over 60% of local food and about 50% of the labour force (full-time or seasonal basis). Despite suitable climate for year-round agriculture, diversity in terrain affects arable land supply, especially on the mountainous volcanic islands, and inhibits commercial-

scale farming. Livestock production is important and largely for subsistence and cultural use.in considering land resource management in the Federated States of Micronesia, it is important to note local land and marine ownership rights and patterns. There is a variety of public and private ownership between states, with private land likely acquired through inheritance and subject to traditional control. Such tenure patterns have likely affected landlessness in an environment of growing population and urbanisation, and squatting is already a major problem in Pohnpei. FSM's Second National Communication to the UNFCCC also notes that "access to land is compounded by a low employment rate as well as low food production." It will become important to note if and how these tenure patterns may affect future changes in land use, including land available for agricultural purposes, given climate change impacts and effects.

- Tourism: Pre-Covid, tourism was an emerging economic sector in the Federated States of Micronesia, representing about 2% towards the local economy and with potential for long-run growth and comparative advantage. Current low levels are contrasted to growth in tourist numbers in the early 2000s by as much as 10%. Tourism infrastructure on the islands is limited at the moment, but there is reported potential for "boutique-style tourism to cater for the scuba diving, surfing and sailing communities". As with other small islands, tourism sector development should be reconciled with concerns for environmental sustainability, especially in the face of climate change impacts. The dual threats of rising sea levels and coastal erosion could reduce the quantity and quality of available beach space and, without significant adaptation measures, could therefore reduce the attractiveness of the country as a tourist destination. As well, potential losses to land area due to sea level rise would need to be considered for the building of desirable beachfront properly locations. However, rates of coastal erosion are not currently measured and there is limited understanding of how to confront beach loss. Challenges to already-limited freshwater could become a problem in times of drought conditions, and storm threats could hinder the sun, sea, sand experience and require sufficient disaster preparedness actions. In addition to direct physical impacts, climate change may affect the tourism sector in FSM through global efforts to mitigate climate change. Changes to the cost of international flights can certainly potentially affect visitor arrivals. One study estimated that while the cost of achieving an emissions-target compatible tourism sector may be proportionately low (3.6%), the necessary increase in trip costs (estimated at \$11 when averaging across every global trip but potentially higher on a long-haul destination) may further reduce a country's attractiveness as a tourist destination. Further research is required to better constrain the suite of potential climate change impacts on the sector.
- Water resources: The diversity of the inhabited islands of the Federated States of Micronesia makes it difficult to quickly summarise the nature and state of freshwater in the country. Generally, roughly 60% of water resources are in the form of surface water in small, intermittent streams, although this water requires expensive treatment before use. The remaining 40% of freshwater comes from groundwater sources, although drilling for this is also expensive. Noting the disparity in rainfall rates across the 4 states, one of the main challenges for FSM is in limited rainwater storage. This is further intensified by ENSO-related seasonal variations, which is often linked to drought, as well as tropical cyclone events. Awareness and preparedness to better utilise available climate information is not yet developed in this regard. As well, there is a rich traditional culture and indigenous knowledge about effective water management which is not yet tapped into. However, since limited water availability and poor water quality has been linked to health hazards, and as well, increased population growth and urbanization, developing industries, and the emerging tourism sector all demand increased freshwater, such knowledge would be vital for a sustainable FSM. As is for other small island states, rising sea levels are also a threat to water resources. FSM's small size, minimal amount of storage, and limited fresh water render it highly susceptible to threats to fresh water availability and groundwater supplies are threatened by salt-water intrusion as a result of increasing sea levels. Associated damage to water supplies, water treatment and hydrological research infrastructure may also prove to be significant and costly.
- **Communities:** The current rate of poverty in the Federated States of Micronesia is estimated at 41.2% in 2013. However, there are local socio-economic challenges due to low local food production due to limited arable land (and especially in atoll islands), imported food preferences affecting local consumption and low nutrition, high unemployment rates, high dependency rates, high reliance on foreign aid, and high migration affecting the rural labour supply. Such compounded vulnerability, and in particular, dependence on foreign imports and aid, limits local resilience in times of external shocks. Further, climate change effects such as increasing temperatures, sea levels, and extreme weather events, alongside changing precipitation, has the potential to further exacerbate local vulnerability, disrupting local freshwater supplies and agricultural practices, affecting subsistence incomes, food security and cultural traditions. As for many countries, most of the climate changes projected are likely to disproportionately affect the poorest groups in society. For instance, heavy manual labour jobs are commonly among the lowest paid whilst also being most at risk of productivity losses due to heat stress. Poorer farmers and communities are least able to afford local water storage, irrigation infrastructure, and technologies for adaptation.

• Gender: Research has shown that that climate-related disasters have impacted human populations in many areas including agricultural production, food security, water management and public health. The level of impacts and coping strategies of populations depends heavily on their socio-economic status, socio-cultural norms, access to resources, poverty as well as gender. Research has also provided more evidence that the effects are not gender neutral, as women and children are among the highest risk groups. Key factors that account for the differences between women's and men's vulnerability to climate change risks include: gender-based differences in time use; access to assets and credit, treatment by formal institutions, which can constrain women's opportunities, limited access to policy discussions and decision making, and a lack of sex-disaggregated data for policy change.

Climate Change Projections

A summary of climate change and disaster risks and their likely impacts on FSM is provided in the sections below⁹³:

Temperature: Across the Pacific, temperature are projected to increase between 1.4°C and 3.1°C, with localized temperature increases expected across FSM. However, future temperature rises in FSM as suggested by most models show a slight increase of around 1°C in annual and seasonal mean air temperatures by 2030. By 2090, under high emission scenarios, temperature increases are expected to be greater that 2.5°C with variations from east to west, compared to a global average around 3.7°C. This difference may reflect the moderating effects of the large amounts of nearby ocean. In addition, it is projected that the temperature on extremely hot days is likely to increase in tandem with average temperature increases – projected temperature increase of the 1-in-20-year hot day by the 2090s is 0.8°C for RCP2.6 and 3.1 to 3.2°C for RCP8.5.It is also expected that there will be an increase in the frequency and intensity of extremely hot days and a decrease in the frequency and intensity of cool days in FSM, although the magnitude of the projected changes is less certain.

Rainfall: While FSM experienced an increase in mean precipitation over the 1979–2006 period, especially within the western islands, and rainfall projection estimates indicate an increase in the long-term rainfall., with 'year-to-year' rainfall variability will likely be the same or larger than the projected change. It is possible, then, that the historical increase could be due in part to natural variability, rather than purely driven by global warming. There is also uncertainty around future changes in average annual precipitation since none of the model ensemble predictions are statistically significant and the estimated ranges are large. Generally, there is medium confidence in increases in long-term rainfall, due to general understanding based on either models or physical processes that a warmer climate may be associated with increased rainfall in the ITCZ and the West Pacific Monsoon. Challenges to the certainty of the model average rainfall change are affected by the usual complexity in simulating tropical rainfall, as well as uncertainty in ENSO changes, which especially influences year-to-year rainfall variability within the region. In terms of extreme rainfall events, a warmer atmosphere is likely to lead to an increase in their frequency and intensity. However, the magnitude of such changes in extreme rainfall is not as certain due to possible underestimation and difficulty to capture certain process related to extreme rainfall events, the influence of the SPCZ over the islands, as well as the general coarse spatial resolution of GCMs.

Heatwaves: Heatwaves are defined as a period of 3 or more days when the daily temperature remains above the 95th percentile. The projected change in heat wave probability under RCP8.5 (compared to 1986–2005), highlighting the daily probability of a sudden heat wave in subsequent time periods. For FSM, this probability steadily increases in the long term. This is held within the global context in which the probability is expected to increase. It is noted that the tropics are particularly where systematic warming might lead to the largest increases in heat wave probability, simply because the historic (baseline) day-to-day and month-to-month variability is small. FSM regularly experiences high temperatures, with a mean annual temperature of around 27.1°C and highest temperatures in March to May. Ensemble-based mean annual temperatures anomalies in FSM are projected to reach up to 3°C by 2100, with a projected ensemble mean change in the maxima of daily maximum temperature of 3.1°C by 2100, compared to the historical mean. When this rise is considered in combination with local humidity, as captured in the Heat Index measure, this highlights a significant increase in the number of days in which uncomfortable temperature conditions are reached. The projected change for the Federated States of Micronesia likely signals the potential for extremely uncomfortable conditions, with local impacts and serious health repercussions. However, it is noted that further research is required to better understand the implications of climate change, and its interaction with the ENSO phenomenon, for its future regime and potential heat waves. An additional factor for consideration is the potential for marine heat waves. Research has shown that "from 1925 to 2016, global average marine heat wave frequency and duration increased

⁹³ World Bank Climate Country Risk Profile 2021 and Second National Communication to UNFCCC

by 34% and 17%, respectively, resulting in a 54% increase in annual marine heat wave days globally".18 While such research has not specifically identified FSM under threat, the consequences of these trend may be serious for marine ecosystems in the region, which are adapted to survive under very stable temperature regimes, as well as the livelihoods dependent on them.

Droughts: For FSM, it is expected that likely that the percent of time spent in drought may decrease, and this is generally shown across emissions scenarios. However, it should be noted that complex processes relating to rainfall projections, including the limited consensus of future ENSO influence for the region, hinder the confidence of these projections of drought frequency and duration, as well as magnitude of change.

Floods, Cyclones and Storm Surge:

Analysis from the World Bank's Climate Change Knowledge Portal highlights that the most extreme rainfall episodes have the danger of leading to significant floods. Individual daily rainfall is often linked to flash-floods of limited spatial extent, but multi-day rainfall generally has a broader spatial footprint and thus more extensive flooding can be explained. Rare precipitation events are often referred to as events of a certain return level, and the 5-day cumulative rainfall indicator focuses on the maximum rainfall amount over any 5-day period that can be expected once in an average 25-year period. Changes in this indicator may have potentially significant impacts on infrastructure and endanger life and property through direct physical effects and perhaps through water quality issues. As such, any significant changes in their magnitudes would need to be understood. Sea levels are likely to rise between 17 and 38 coms by 2050, though not uniformly across the region. For FSM, the general projection is for a decrease in cyclone genesis (formation) frequency for the south-east basin, with high confidence, consistent with a general global projection for decreased cyclone frequency by 2100. However, there is much model inconsistency in these results — some show that conditions for cyclone formation are favorable within some models, while specific parameters might show unfavorable conditions otherwise—and as this should generally be understood in the context of ENSO, which is not well understood for the region. There is also the likely projection that there will be more than a 20% chance of potentially-damaging wind speeds for the country in the next 10 years. While climate change is expected to interact with cyclone hazard in complex ways which are currently

poorly understood, known risks include the action of sea-level rise to enhance the damage caused by cyclone induced storm surges, and the possibility of increased wind speed and precipitation intensity. Modelling of climate change impacts on cyclone intensity and frequency conducted across the globe points to a general trend of reduced cyclone frequency but increased intensity and frequency of the most extreme events. Further research is required to better understand potential changes cyclone seasonality and routes, and the potential for cyclone hazards to be experienced in unprecedented locations..

How the climate scenarios are likely to affect the project

Climate change is a significant threat to ecosystems and to the livelihoods, wellbeing, culture and survival of islanders throughout the FSM, compounding the effects of land degradation. As climate changes and sea levels rise and severe weather events become more frequent, the country will become more vulnerable to risks and disasters unless effective adaptation and mitigation measures are taken. The national and state governments have recognized these and other challenges and initiated a series of policy reforms to ensure that development is more inclusive, resilient and sustainable, leading to some recent, progressive environment-related policies and strategies.

The project has been screened using the World Bank Climate and Disaster Risk Screening Tool, which provides high-level screening to help consider short- and long-term climate and disaster risks at an early stage of project design. The tool applies an Exposure–Impact– Adaptive capacity framework to characterize risks. Potential risks are identified by connecting information on climate and geophysical hazards with users' subject matter expertise of project components (both physical and non-physical) and understanding of the broader sector and development context. It is worth noting that the Climate and Disaster Risk Screening Tool does not provide a detailed risk analysis. The tool informs on the need for further consultations and analytical work to strengthen resilience measures in the course of project design.

Table 1: Types of Climate Risk Management Measures for Typical Natural Resources Projects

OBJECTIVE	EXAMPLES
	• Develop alternative livelihoods where existing climate-sensitive livelihoods may no longer be viable.
Support new livelihood opportunities	• Ensure new livelihood opportunities are available for women and other marginalized populations, and look out for unintended consequences, such as increasing women's unpaid work burden and/or increasing the length of their work day.
	 Encourage fishing communities to take advantage of fish species that are becoming more abundant due to climate change.
	• Explore opportunities for payment for ecosystem services that support the conservation or restoration
	of areas that provide key services.
	 Ensure that women-led businesses have access to financing opportunities.

Promote ecosystem- based approaches to adaptation	 Reduce the vulnerability of related sectors, such as agriculture and water, to climate impacts through support for conservation efforts, which provide co-benefits for ecosystems and their services. Protect ecosystems that buffer or mitigate climate impacts for stakeholders in related sectors. Promote climate-smart agricultural practices, including agro-forestry systems. Support the use of green infrastructure for flood management or coastal protection. Explore opportunities to increase water security through protecting and restoring watersheds. Maintain and expand large intact landscapes and seascapes. Protect key, representative habitats within landscapes andseascapes. Conserve biodiversity and manage natural resources in ways that maintain their long- term viability. Increase conservation outside of protected areas. Increase conservation outside of protected areas, and incorporate mixed natural systems (e.g. agroforests). Protect areas that are likely to become refugia as temperatures increase and sea levels rise. Achieve co-benefits for ecosystems and climate change mitigation through sustainable land and forest management.
Build information collection and management systems	 Support research that assesses future potential impacts of climate change on biodiversity. Incorporate climate information into landscape-level conservation, land-use planning, and protected area management. Seek information from women, indigenous peoples, and other marginalized populations who are often the custodians of local knowledge about wild plants, seeds, and other elements of biodiversity.
Reduce Other Human Stressors that Exacerbate Climate Change Impacts	 Reduce the effects of non-climate stressors, such as pollution, overexploitation, land use change, urbanization, and invasive species. Account for predicted changes in demand for ecosystem services that may exacerbate climate impacts. Consider whether human adaptation to climate risks is going to increase or create new stresses on ecosystems and biodiversity.
Strengthen policies, planning and systems	 Strengthen institutions that are responsible for conservation and management of ecosystems and natural resources, including their ability to incorporate climate change into their activities. Support conservation efforts in related sectors, such as agriculture and water. Support the use of carbon finance to monetize future cash flows from the advanced sale of carbon credits, as means to finance conservation costs. Encourage partnerships between governments and private business to protect forests and promote climate change mitigation (e.g., manufacture and distribute fuel-efficient cook stoves, which reduce emissions while also providing an alternative to burning fuel wood). Promote zoning restrictions on coastal development to allow coastal wetlands to migrate inland as sea levels rise, protecting the goods and services they provide. Support REDD+ to help achieve climate change mitigation goals while also providing conservation-based, income-generating opportunities. Work with governments to design gender-informed policies that address climate impacts that affect women and men differently, encourage women's participation and leadership, leverage women's knowledge and perspectives, and reduce risk of further gender inequality caused by climate change.

Sources: USAID Climate Risk Screening and Management Tools: Environment and Biodiversity Annex; IPCC Technical <u>Paper on Climate Change and Biodiversity</u>

User Notes:

The project interventions are designed to strengthen national mechanisms and equip and empower local communities to safeguard FSM landscapes and seascapes, natural ecosystems and food production systems from unsustainable land use and resource use practices. In turn, these interventions will support resilience building of natural and food production systems, as well as the adaptive capacity of local actors, to the threat of climate change.

The overall risk to the outcome / service delivery of the project is considered **MODERATE**.

The project will implement a series of measures to mitigate the risks associated with climate and disaster hazards on outcome/service delivery. The project will undertake a multi-stakeholder approach, inclusive of high-level policy makers as well as NGOs and community groups, advocating for the mainstreaming of more sustainable and resilient practices to improve the management of land, wetlands, ecosystems, food production systems and biodiversity. To this end, it will generate co-benefits for ecosystems and their services, including strengthening resilience to events such as flooding, erosion, and other negative impacts to indigenous species, natural ecosystems and food production systems.

The project will work to facilitate sustainable natural resources and livelihood options that provide good return on investment through the demonstration of sustainable management practices, ensuring that qualified professionals are engaged and provide supervisory and advisory support and coordination throughout. Knowledge generated from the demonstrations will be disseminated among key stakeholder groups, facilitating mainstreaming and upscaling in other regions in the country.

RISK	RATING	MITIGATION MEASURES
Project outcomes are at risk because of climate change.	Moderate	Project activities have been developed in line with national land management and climate plans/frameworks/ actions/agendas, ensuring they are cognizant of and resilient against climate threats, thereby supporting FSM's efforts in enhancing the abilities to adapt to such risks. Activities have been designed with a climate lens applied and will be conducted with readiness to adapt management should unforeseen impacts arise that affect project implementation. Project activities will be planned and executed efficiently to ensure that issues are mitigated, and experienced options remain for adaptive strategies.
Climate sensitivity has not been adequately addressed.	Low	Climate sensitivity is applied to all activities to varying degrees. This document has been developed in collaboration and consultation with key stakeholders who hold significant knowledge/experience relating to climate/disaster action and mitigation. Hence, climate sensitivity is believed to have been applied comprehensively. Furthermore, project activities aim to enhance the country's ability to respond to climate risks and mitigate its vulnerability and sensitivity to climate threats.
Resilience practices and measures do not address projected climate risks and impacts adequately.	Moderate	Strong consultation and collaboration between various stakeholders, including Government agencies, CSOs and the general public will ensure that project activities adequately address national goals and interests, including mitigation against climate risks and impacts. This collaborative and inclusive approach is already underway with inclusion of the key stakeholders contributing to the development of the project. This support will continue throughout project implementation.
There is inadequate technical and institutional capacity and information to address climate change impacts.	Moderate	Capacity building forms a core part of project activities, and it will include a climate lens throughout to ensure these considerations are sufficiently included. Strong collaboration with national and regional partners will also ensure the collective intellectual and technical capacities of FSM and the Pacific region are harnessed and maximised in response to climate threats and impacts.

Climate Risk Assessment and Mitigation Measures to Protect GEBs:

Climate and Disaster Risk Screening Report for Securing Climate-Resilient Sustainable Land Management and Progress Towards Land Degradation Neutrality in the Federated States of Micronesia. in Micronesia

Table 1: Project Information

Project Title:	Securing Climate-Resilient Sustainable Land Management and Progress Towards Land Degradation Neutrality in the Federated States of Micronesia.
Project Number:	6567
Project TTL:	DECEM
Assessment completed by:	Malcolm Jansen
Estimated timeline for PCN Year:	2023
Screening Tool Used:	Rapid Screening Assessment

The Climate and Disaster Risk Screening Tool provides high-level screening to help consider short- and long-term climate and disaster risks at an early stage of project design. The tool applies an Exposure–Impact–Adaptive capacity framework to characterize risks. Potential risks are identified by connecting information on climate and geophysical hazards with users' subject matter expertise of project components (both physical and non-physical) and understanding of the broader sector and development context.

The tool does not provide a detailed risk analysis. Rather, it is intended to help inform the need for further consultations, dialogue with local and other experts and analytical work at the project location to strengthen resilience measures in the course of project design.

¹This is the output report from applying the World Bank Group's Climate and Disaster Risk Screening Project Level Tool (Global website:climatescreeningtools.worldbank.org; World Bank users: wbclimatescreeningtools.worldbank.org). The findings, interpretations, and conclusions expressed from applying this tool are those of the individual that applied the tool and should be in no way attributed to the World Bank, to its affiliated institutions, to the Executive Directors of The World Bank or the governments they represent. The World Bank does not

guarantee the accuracy of the information included in the screening and this associated output report and accepts no liability for any consequence of its use.

Summary Climate and Disaster Risk Screening Report



3. Risk to the outcome/service delivery of the proje delivery that the project is aiming to provide based on previou	Ct: This step assesses the level of risk to the outcome/service s ratings.
Outcome /	Moderate

	1. Exposure of the Project Location	Exposure Rating	High
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This step provides information on exposure to climate and geophysical hazards at the project location. **The Exposure rating is High.The project location has experienced climate and geophysical hazards in the past and is expected to experience these in the future with high intensity, frequency, or duration.** The rating is based on climate information drawing on global, quality controlled data sets from the <u>Climate Change Knowledge Portal</u>. It is useful, for example to understand the temperature range and the rate of annual or decadal increase in a region; or precipitation patterns for historical and future time frames and seasonality shifts. Understanding the trends of hazards is important as they act individually and collectively on project components/subsectors.

The following guiding questions are used to assess exposure:

- What have been the historical trends in temperature, precipitation and drought conditions?
- How are these trends projected to change in the future in terms of intensity, frequency and duration?
- Has the location experienced strong winds, seal level rise, storm surge, and/or geophysical hazards in the past that may occur again in the future?

2. Modulation of risks by the project's soft components and development context

Modulation of risks by the project's soft components



This rating reflects how the project's soft components (enabling and capacity building activities) can modulate risks. The right kind of capacity building measures could increase preparedness and long-term resilience and reduce risk.

User Notes: The project includes capacity enhancement awareness raising for target beneficiaries on the impact of climate change on the productivity of land and wetland resources. Project includes support for diversification out of climate-sensitive livelihoods to improving sustainable land management practices, climate smart agriculture and climate sensitive livelihoods. The intent through these activities is to reduce the anticipated risk from climate and geophysical hazards.



3. Risk to the outcome/service delivery of the project

Outcome/Service Delivery Rating Moderate

This step provides an indication of the level of risk to the outcome/service delivery that the project is aiming to provide. **The risk to the** outcome/service delivery of your project is Moderate. This rating is derived from hazard information, subject matter expertise, contextual understanding of the project, and modulated on the basis of the project's soft components and broader development context. Keep in mind that in considering resilience measures for risk management, each element of risk should be taken into account, not just the collective risk rating at the outcome/service delivery level.

User Notes: The project aims to enhance the capacity of local communities and other key stakeholders within the target demonstration sites to enhance their knowledge, best management practices and investment in climate smart measures to protect critical ecosystems, land and agriculture productivity and diversify incomes to enable them to better cope with climate risks

Guidance on Managing Climate Risks through Enhanced Project Design

By understanding which of your project components are most at risk from climate change and other natural hazards through initial screening, you can begin to take measures to avoid impacts by:

- Enhancing the consideration of climate and disaster risks early in project design.
- Using your risk screening analysis to inform follow-up feasibility studies and technical assessments.
- Encouraging local stakeholder consultations and dialogue to enhance resilience measures and overall success of the project.

Table 1 provides some general guidance based on the risk ratings for Outcome/Service Delivery, and Table 2 lists some climate risk management measures for your consideration. Visit the "Screening Resources" page of the tool for additional guidance and a list of useful resources

Note: Please recall that this is a high-level screening tool, and that the characterization of risks should be complemented with more detailed work.

Table 1: General Guidance Based on Risk Ratings for Outcome/Service Delivery

Insufficient Understanding	Gather more information to improve your understanding of climate and geophysical hazards and their relationship to your project.
No/Low Risk	If you are confident that climate and geophysical hazards pose no or low risk to the project, continue with project development. However, keep in mind that this is a high-level risk screening at an early stage of project development. Therefore, you are encouraged to monitor the level of climate and geophysical risks to the project as it is developed and implemented.
Moderate Risk	For areas of Moderate Risk, you are encouraged to build on this screening through additional studies, consultation, and dialogue. This initial screening may be supplemented with a more detailed risk assessment to better understand the nature of the risk to the project.
High Risk	For areas of High Risk, you are strongly encouraged to conduct a more detailed risk assessment and to explore measures to manage or reduce those risks.
20 Capacity Development Scorecard

(<u>Link</u>)

21. UNDP Checklist

(<u>Link</u>)

22. Co-financing Letters

(<u>Link</u>)