

## REQUEST FOR PROJECT/PROGRAMME FUNDING FROM THE ADAPTATION FUND

The annexed form should be completed and transmitted to the Adaptation Fund Board Secretariat by email or fax.

Please type in the responses using the template provided. The instructions attached to the form provide guidance to filling out the template.

Please note that a project/programme must be fully prepared (i.e., fully appraised for feasibility) when the request is submitted. The final project/programme document resulting from the appraisal process should be attached to this request for funding.

Complete documentation should be sent to:

The Adaptation Fund Board Secretariat 1818 H Street NW MSN P4-400 Washington, D.C., 20433 U.S.A Fax: +1 (202) 522-3240/5 Email: afbsec@adaptation-fund.org



## **PROJECT/PROGRAMME PROPOSAL TO THE ADAPTATION FUND**

## **PART I: PROJECT/PROGRAMME INFORMATION**

Project/Programme Category:	Concept for Small-Sized Project
Country/ies:	Federated States of Micronesia
Title of Project/Programme:	Practical Solutions for Reducing Community
Vulnerability to Climate Change in the F	ederated States of Micronesia
Type of Implementing Entity:	National
Implementing Entity:	Micronesia Conservation Trust
Executing Entity/ies:	To be determined when preparing the full
project proposal: Federated States of Mi	cronesia Office of Environment and Emergency
Management and/or the Federated State	es of Micronesia Department of Resources and
Development	
Amount of Financing Requested:	\$1,000,000 (in U.S Dollars Equivalent)

## **Project / Programme Background and Context:**

The Micronesia Conservation Trust (MCT), the National Implementing Entity for the Federated States of Micronesia (FSM), is pleased to present a concept for a project. MCT is simultaneously submitting a Project Formulation Grant application to develop a full project proposal based on this concept. MCT greatly appreciates this opportunity and is looking forward to working with the Adaptation Fund, including integrating all comments and suggestions regarding this concept and its Project Formulation Grant application.

## Introduction to the FSM:

## Overview of the Importance of Ecosystems to livelihoods in the FSM:

The Federated States of Micronesia (FSM) is comprised of four states; Yap, Chuuk, Pohnpei, and Kosrae with a total of 607 islands, over 70 of which are inhabited, and stretches across almost 3 million square kilometers of the Pacific. The total landmass of the FSM is only 4,840 square km, but within that relatively small space exist 12 terrestrial biomes including: atoll forest, littoral beach strand, mangrove forest, swamp forest, freshwater marsh, riparian forest, freshwater rivers and streams, grassland, secondary (agro) forest, primary forest, rain forest, and crest (dwarf or montane cloud) forest. The country's marine biomes include: mangrove forest, estuaries, sea grass beds, lagoons, coral reefs, and open ocean. The biodiversity in these biomes is characterized by a high rate of endemism and a profusion of species. For example, the country is home to more than 1,200 species of ferns and flowering plants, more than half of which are endemic species. More than 1,000 species of fish and more than 350 types of coral inhabit the country's coastal and marine areas. The FSM is also widely



Pohnpei, FSM. Photo © MCT

known as a critical corridor for commercially important migratory fish stocks, including skipjack, yellowfin, and bigeye tunas. The majority of the islands in the FSM are small coral or coralline islands. These islands serve as critical nesting and spawning sites for many species, including: pelagic and reef fish, seabirds, turtles, sharks, rays, and clams. Within the FSM are also 'high' volcanic islands, notably the islands of Pohnpei, Kosrae, and inner lagoon islands within Chuuk such as Weno and Fefan, and the main island of Yap, (Wa'ab). The FSM consists of two ecoregions. The Yap tropical dry forest ecoregion is characterized by a monsoon-like climate with rainy seasons followed by periods of drought. The other three States share the Carolines' tropical moist forest eco region characterized by heavy rainfall.

The services provided by the ecosystems described above are critical for the maintenance of the FSM's population, as the majority of its approximately 100,000 people depend on the country's ecosystems for their livelihoods, both for subsistence and as sources of income. Watersheds, fisheries, fresh water lenses, and agroforests provide the population with food, raw materials, water, and medicines. Many communities practice agroforestry, a farming system characterized by multi-storied crop production. It is widely estimated that these agroforests take up about 35% of the country's landmass and include root crops such as taro and yam, as well as food trees such as banana, coconut, and breadfruit – there are over 133 cultivar names for breadfruit in Pohnpei alone. Due to the relatively small size of the islands of Micronesia, land-based activities quickly and drastically affect adjacent coastal and oceanic ecosystems.

The widespread acceptance of the "ridge to reef" concept in the FSM reflects the understanding of the land–sea connection. Pacific Islanders are aware of, and sensitive to, upstream effects on downstream communities, as activities often affect members of the same village. Coral reef conservation begins on land and requires an integrated watershed management approach<sup>1</sup>. Fisheries provide a principal source of protein and income for the FSM's inhabitants, with widespread subsistence and small-scale commercial fishing of reef fish and marine invertebrates. However, overharvesting of reef fish and invertebrates presents a critical challenge.

In addition to these provisioning services, the islands' ecosystems also provide critical protection against storm surges, king tides, typhoons, and other natural disasters and contribute to mitigating erosion and buffering wind and waves during storms, storage and processing of soil nutrients, natural waste management, pollution control and detoxification, habitats for resident and transient birds and animals and the provisioning of pollinators for the reproduction of plant populations. The FSM's ecosystems are also a key component to the cultures within the country. For more than 2,000 years, inhabitants of the region have lived off the reefs and lands and these environments have shaped island lifestyles, creating strong cultural identities and attachments to the environment that persists today.

#### **Coastal Erosion and Sedimentation**

Sea level rise poses a severe coastal erosion threat to islands in the FSM, with potential impacts on the natural environment, water resources, infrastructure, food production and human habitation. The threat is particularly acute on low-lying atolls, although high islands are not immune.

There is the potential for a self-reinforcing spiral of erosion. Coastal erosion fragments mangrove stands, leaving shorelines more vulnerable to storm damage and further erosion. The resulting increase in terrigenous sedimentation and turbidity in near-shore areas degrades the health of protecting coral reefs, increasing the islands' vulnerability to further erosion and reducing the supply of atoll-building marine sediments.

Healthy marine ecosystems, that are resilient to the impacts of climate change, will help mitigate these impacts by maintaining natural and protective coastal and reefal geomorphic, sedimentary and hydrodynamic processes.

Micronesians still depend heavily on their natural resources with coastal fisheries providing income sources to 50%+ of Micronesian households and ~90% of the animal protein consumed<sup>2</sup> as well as the use of traditional medicines for illness and forestry for shelters. Unfortunately, due to the introduction of a market economy, easy access to new technologies (such as power boats) and some erosion of traditional values, overfishing has become an urgent and critical threat to the marine environments of the region.

Driven by an increased demand for cash and natural resources commercialization, fishing pressure has increased over the last decades and is now a major threat to the coral reefs

<sup>&</sup>lt;sup>1</sup> Richmond, Kostka, Idechong (2009). Reef Ecology and Conservation

<sup>&</sup>lt;sup>2</sup> Micronesia Conservation Trust (2016). Strategic Action Plan 2016-2018.

and to the survival of the marine ecosystem in the region. With a significant decrease in the number of larger, mature fish in the near-shore coastal fishing grounds, fishers are forced to travel further and for longer periods of time in order to catch fewer fish. The efforts needed to acquire these fewer fish for subsistence or sale makes fishing an increasingly unsustainable practice. Properly managed fisheries are vital to a sustainable, healthy, and affordable future for local populations. To this end, marine protected areas<sup>3</sup> (MPAs) have proven one of the most effective measures to maintain diverse and healthy reef communities. Scientists in the region suggest that prioritizing the management of MPAs and fisheries will best preserve the underlying trophic relationships responsible for the ecosystem services that coral reefs provide to Micronesian societies<sup>4</sup>.



Pohnpei, FSM. Photo © Dr. Peter Houk, University of Guam

In sum, appropriate fisheries and MPA management can reverse current trends for fishers who rely on fishing for both subsistence and income, while at the same time strengthening the coastal ecosystems that protect the islands of Micronesia as the effects of climate change increase. Part of this effective management also involves integrating alternative livelihoods components and tools into existing community planning processes, conservation and climate adaptation efforts in order to improve the likelihood of their

<sup>&</sup>lt;sup>3</sup> In this proposal, marine protected areas (MPAs) are defined as any clearly-delineated marine managed area that contributes to protection of natural resources in some manner. They include, but are not limited to, areas with a variety of regulations including marine reserves (areas of ocean that are protected from extractive and destructive activities) and areas with fisheries restrictions upon gear, species, size and access. They also include areas with different governance systems, including government and community managed marine areas.

<sup>&</sup>lt;sup>4</sup> Houk et al. (2015). The Micronesia Challenge: Assessing the Relative Contribution of Stressors on Coral Reefs to Facilitate Science-to-Management Feedback.

success. The Micronesia Conservation Trust envisions promoting sustainable livelihoods in cooperation with the private sector. This includes grooming conservation leaders and professionals while promoting and supporting conservation and climate change adaptation projects to make conservation and effective resource management a reliable way to support families and communities.

#### Specific impacts and changes in the FSM:

The growing body of research about the relationship between climate change and ecosystem health in the FSM confirms anecdotal observations that healthy, functional ecosystems are crucial to the success of climate change adaptation strategies<sup>5</sup>. As described in the FSM's Second National Communication to the United Nations Framework Convention on Climate Change, the climate-change risks facing the country are increasingly documented through extensive vulnerability and adaptation assessments.

While tropical coral reefs are among the most productive and important ecosystems in the world, climate change stressors are guickly affecting their ability to thrive and protect the people and communities that depend on them. Two climate change related impacts pose potentially catastrophic threats to the long-term survival of coral reef ecosystems in the Pacific Islands region: rising sea-surface temperatures and changes in ocean chemistry. Coral bleaching that causes corals to expel their crucial, colorful symbiotic algae and thus turn white is already occurring across the region. A rapid ecological assessment in Chuuk in early 2016 and recent assessments in Pohnpei found significant coral bleaching as evidence of this dangerous trend<sup>6</sup>. Intense coral bleaching is often followed by coral death, though corals can recover from mild bleaching events. Adding to the stress of high temperatures is the increasing acidification of the ocean, caused by rising levels of carbon dioxide in the air that is then absorbed by seawater. One of the impacts of ocean acidification is that less carbonate is available in the form necessary for coral reefs to build their calcium carbonate skeletons. The skeletons that these small coral polyps build are a fundamental building block of coral reef ecosystems, which are in turn, vital for the survival of communities in the FSM.

Shifting weather patterns are affecting the health of the marine environment and food and water security. The tropical west Pacific is the site of pronounced ENSO conditions. El Niño conditions are characterized by a general decrease in the intensity of the trade winds; in the FSM this is already causing a decrease in net precipitation, which is leading to persistent drought, especially during strong events such as those that occurred in 1997-1998 and a 2015-2016 event that caused severe drought and storms across Micronesia. La Niña conditions are characterized by intensification of the trade winds, driving a rise in sea level and precipitation. Rising sea level generates coastal erosion, dangerous marine inundation, and salt contamination of soil, food, and water sources.

<sup>&</sup>lt;sup>5</sup> Federated States of Micronesia (2014) *Fifth National Report to the Convention on Biological Diversity*. Palikir, Pohnpei.

<sup>&</sup>lt;sup>6</sup> Houk, P. et al (2016). *Status and management of coral reefs and fisheries resources in Chuuk Lagoon and Kuop Atoll, Federated States of Micronesia.* Technical report for the Nature Conservancy and the US Department of Interior.

Across the region, the longer-than-usual periods of drought followed by heavier-thannormal rains are also increasing sedimentation run off and causing erosion that directly affects the well-being of the marine environment. Intensified rain can cause overflow from watersheds, contributing to excess nutrient runoff that can affect sea grass beds, which are another critical spawning sites for many species (Houk, Golbuu, Gorong, Gorong, & Fillmed, 2013). Excessive nutrient runoff can also lead to severe algae growth that blocks light that is needed for plants, such as sea grass, to grow. When they die, the process of decay decreases the oxygen in the water killing fish, crabs and other aquatic animals<sup>7</sup>.

There is evidence that air temperatures are also increasing. The charts below show a steady increase in annual mean air temperatures between 1950 and 2010 in Pohnpei and Yap. These charts originally appeared in the FSM's Second National Communication to the United Nations Framework Convention on Climate Change and are based on information from the Australian Bureau of Meteorology and Commonwealth Scientific and Industrial Research Organisation.





<sup>&</sup>lt;sup>7</sup> NOAA (2016). What is nutrient pollution? Retrieved from: http://oceanservice.noaa.gov/facts/nutpollution.html

Already-occurring direct changes in ocean temperatures and chemistry are altering the physiological functioning, behavior and demographic traits (such as productivity) of the marine environment leading to shifts in size, spatial range and seasonal abundance of aquatic species and populations<sup>8</sup>. These changes are reducing the health of marine ecosystems and limiting their ability to provide both nutritional and protective services to the people of the islands. This proposal seeks to increase the resilience of these systems to combat the impacts on marine ecosystem services in the FSM.

In addition to the effects on the marine ecosystem, climate change is causing significant challenges for the other systems in the FSM. Across the country, stakeholders report that changing weather patterns have already resulted in different harvesting patterns than previously known. Because sea level rise has accelerated above rates in the late 20th century when most land use planning and development took place, current land use policies and development planning may not take into consideration issues related to present sea-level rise. These circumstances increase the vulnerability of coastal communities to climate impacts. More than 80% of communities in the FSM are vulnerable to sea-level rise and flooding, given that most villages and settlements are situated in either coastal areas or in areas around rivers and streams. Salt-water intrusion is intensifying in coastal wetlands and groundwater systems and freshwater lenses on outer islands are increasingly vulnerable. The continued rising of sea surface temperatures has already led to the increased intensities of tropical typhoons in the region<sup>9</sup>. In April of 2015, Typhoon Maysak, a category 5 super-typhoon, caused widespread devastation across both Chuuk and Yap with high winds, sea level inundations and heavy rainfall. Nearly 29,000 people, or more than a guarter of the country's population, were directly affected by the storm across the FSM, with costs for recovery exceeding \$8.5 million dollars. While the islands were still reeling from the ongoing effects of Typhoon Maysak, a severe drought caused by considerably lower than usual seasonal rainfall in early 2016 led the President of the FSM to declare a National State of Emergency. The severity of the 2016 drought across the region led local and international government agencies evaluating the situation to proclaim it the worst drought in recorded history.

Policy frameworks and current responses at state and community levels: While there are some scientific data-gaps that make it difficult to assess the exact effects of climate change, wave and sea-level monitoring, and lagoon circulation patterns throughout the FSM indicate that climate change is impacting the country's agriculture, fisheries, forestry and land. Climate change mitigation and adaptation strategies to address the threats are incorporated into the country's Nationwide Climate Change Policy, the National Energy Policy and State Action Plans, and the National Action Plan to Combat Land Degradation to name a few.

<sup>&</sup>lt;sup>8</sup> Doney, S. et al (2012) *Climate Change Impacts on Marine Ecosystems*. Annual Review of Marine Science. (4) 11-37

<sup>&</sup>lt;sup>9</sup> Federated States of Micronesia (2014) *Fifth National Report to the Convention on Biological Diversity*. Palikir, Pohnpei.

In 2012 the FSM National government identified food security as a top priority in an official communication to the United Nations Framework Convention on Climate Change<sup>10</sup>. Given the geographic and economic realities of the FSM, the country's biodiversity and ecosystem services are an immediate and critical component of inhabitants' socioeconomic wellbeing and development. Given its importance, biodiversity management and conservation as a theme runs throughout the FSM's National Strategic Development Plan and is a key part of the FSM's contribution to reaching the Millennium Development Goals.

#### **Ecosystems and Livelihoods**

Ecological degradation in Micronesia threatens not only the myriad of endemic and regional wildlife and ocean systems, but also the foundation of Micronesian cultures and communities. The Micronesian region is intricately connected in a web of ocean currents and widely dispersed islands. Our societal capabilities and economies derive directly from our relationships to each other, and from our fisheries, coral reefs, forests, and watersheds. Micronesia's diverse natural resources support the livelihoods and food security of Micronesians. The natural features that make the islands exceptional also make them highly vulnerable to the principal drivers of biodiversity loss and human poverty: habitat degradation, climate change, unsustainable fishing and other extractive practices, and invasive species and pests. Without immediate action, these threats, both local and external, will further deplete the natural resources upon which the FSM depends to sustain our cultures and livelihoods<sup>11</sup>

**Project Summary:** To address the issues outlined above, this concept note outlines a project to 1) improve the implementation of national and state-level marine protected area management networks<sup>12</sup> (MPAMNs) thereby improving MPA management and maintaining the resilience of localecosystems to the impacts of climate change; 2) Strengthen the enforcement of near-shore fisheries and MPA regulations to maintain coral reef and near-shore marine ecosystem health, climate change resilience and food security 3) build community-level adaptive capacity to climate change.

**Objective 1: Improve the implementation of national and state-level MPAMNs to increase the resilience of local-ecosystems:** In 2006, the FSM joined the Republic of the Marshall Islands, the Republic of Palau, the Commonwealth of the Northern Mariana Islands, and the U.S. Territory of Guam in declaring the Micronesia Challenge. The Micronesia Challenge is a regional effort to effectively conserve and manage at least 30 percent of near-shore marine resources and 20 percent of terrestrial resources across Micronesia by 2020. Towards this goal, in the last decade government and non-government partners across the FSM have championed the creation of new terrestrial

<sup>&</sup>lt;sup>10</sup> Federated States of Micronesia. (2012). *Second National Communication to the United Nations Framework Convention on Climate Change*. Palikir, Pohnpei.

<sup>&</sup>lt;sup>11</sup> Micronesia Conservation Trust (2016). Strategic Action Plan 2016-2018.

<sup>&</sup>lt;sup>12</sup> In this proposal, a marine protected area management network (MPAMN) is defined as a formal network of MPA management entities and their personnel, that facilitates MPA strategy, policy and legislation; design, establishment, administration and coordination; funding access; and knowledge management and exchange.

and marine protected areas. Effective protected areas result in more resilient ecosystems, better able to withstand the impacts of climate change and MPAs have proven to be one of the best ways to protect diverse and healthy marine ecosystems and coral reef communities<sup>13</sup>. Scientists working in the region and investigating ecosystem conditions suggest the healthiest marine ecosystems include those that support the grazing of large herbivore fish, a highly functional diversity of herbivores and high predator biomass – all of which are identified with properly managed MPAs.

The FSM National and State governments and their numerous partners are also working towards sustainable financing for protected areas. This includes the FSM's Micronesia Challenge Endowment Fund sub-account that is intended to support protected area management. As of September 30<sup>th</sup>, 2016, this Endowment was valued at just over \$4,955,000.00.

Across the FSM, MCT and government, NGO and community partners have worked closely together (through participatory processes and consultation) to establish more than 50 state, municipal, and/or community declared protected areas covering a wide range of marine, terrestrial, and atoll ecosystems. The FSM states of Kosrae and Pohnpei have enacted legislation for the operation of state government-supported protected areas. Additionally, the states of Yap and Chuuk have developed protected areas legislation/policy frameworks, currently under consideration in the state legislatures, to organize government-level assistance to municipal and community resource managers. Likewise, the national government is considering a draft national protected areas framework and an associated country program strategy, developed in cooperation with MCT and partners, to guide the disbursement of interest income from the FSM's Micronesia Challenge Endowment Fund. Despite the considerable progress made by local and state communities and governments, the FSM government currently does not have an institutionalized system for providing technical and financial assistance to these protected areas, which contributes to gaps in management.

To solidify national and state-level structures for protected area management, this concept includes support for a national-level protected areas coordinator position, as well as focal point positions in each of the four FSM states. As described in more detail below, these coordinators will work with respective government and non-government partners to finalize the creation of the national and state-level MPAMNs in the country. Moreover, the coordinators will work to establish the necessary institutional arrangements such as MPAMN criteria, rules and regulations as well as long-term financing mechanisms to ensure the sustainability of the program, that will enable protected area managers in all states to begin accessing investment earnings from the FSM's Micronesia Challenge Endowment. Finally, through appropriate control and communication mechanisms the coordinator, along with MCT, will ensure the implementation of monitoring and evaluation and knowledge management frameworks.

Chuuk, FSM. Photo © Dr. Peter Houk, University of Guam

<sup>&</sup>lt;sup>13</sup> Houk et al. (2015). The Micronesia Challenge: Assessing the Relative Contribution of Stressors on Coral Reefs to Facilitate Science-to-Management Feedback.



Objective 2: Strengthen the enforcement of near-shore fisheries and MPA regulations to maintain coral reef and near-shore marine ecosystem health, climate change resilience and food security. While the adoption and establishment of well-designed MPAs and functioning MPAMNs are crucial to addressing the FSM's complex resource management needs, they are not sufficient on their own. Local resource agencies and practitioners also require the technical and financial resources to enforce relevant regulations as part of the wider management effort. Overfishing of near-shore fisheries in the FSM poses a critical threat. More than a decade of scientific research clearly shows declining coastal fisheries across the FSM, and the national and state governments are increasingly recognizing the importance of healthy nearshore fisheries for community resilience to the impacts of climate change, as well as for food security.

In the last ten years, non-governmental organizations, universities, and researchers in Micronesia have made significant progress towards institutionalizing science-tomanagement feedback loops that are positively influencing decision makers and policy across the region, particularly in the area of fisheries management. For example, in June 2015 a team of researchers published: *The Micronesia Challenge: Assessing the Relative Contribution of Stressors on Coral Reefs to Facilitate Science-to-Management Feedback*<sup>14</sup>. The researchers took a standardized approach and scored ecosystem conditions across coral reef monitoring sites in the FSM, the Republic of the Marshall Islands, and the Commonwealth of the Northern Mariana Islands. The analysis showed that fishing pressure, acting alone on outer reefs or in combinations with pollution in some lagoons, best predicted both the decline and variance in ecosystem condition. Moreover, the study suggests that "linking comprehensive fisheries management

<sup>&</sup>lt;sup>14</sup>Houk P, Camacho R, Johnson S, McLean M, Maxim S, Anson J, et al. (2015) PLoS ONE 10(6): e0130823. Doi:10.1371/journal.pone.00823

policies and targeting the management of pollution, will strengthen ... and preserve ecosystem services that coral reefs provide to societies in the face of climate change"<sup>15</sup>.

An example of how near-shore fisheries management is directly related to climate change adaptation is the negative impacts of marked declines in the presence of herbivore fish, a vital component of any healthy coral reef ecosystem. Because microalgae is generally less sensitive to changes in the environment such as temperature or sediment levels, they thrive and grow quickly having the potential to overwhelm and suffocate coral. Herbivores keep the ecosystems functioning by consuming the algae, limiting its density and therefore protecting the coral from overpopulation and possible disease. This provides an important balance in the ecosystem and strengthens the reefs resilience and chances of recovery from climate change impacts such as coral bleaching events. Therefore, strengthened management of near-shore fisheries leads to stronger and more resilient coral reef ecosystems, protecting and supporting the communities and people that rely on them, particularly in the face of climate change related impacts. Although small-island nations have little control over greenhouse gas emissions from developed nations, they can manage their local resources to enhance the ecosystem services that the reefs provide. Ensuring and maintaining healthy coral reef ecosystems is an essential climate change adaptation strategy for FSM as most the population lives along the coasts.

Evaluations of marine ecosystems, like the study cited above, indicate that conservation impact and food security can be maximized by including both effectively managed marine protected areas and effective nearshore fisheries management. However, at the state level effective fisheries and MPA management is hampered by a lack of sufficient human and financial resources to effectively enforce legislation and regulations. To address this issue this proposal includes activities to strengthen the enforcement of existing legislation.

**Objective 3: Build community-level adaptive capacity to climate change:** Communities in the FSM face unique socioeconomic challenges in comparison to other regions of the world. These include limited economic opportunities and resources, high dependency on natural resources, and small land areas for dwelling and livelihood activities. Social and ecological systems are thus highly interdependent. Island and coastal communities often experience the negative impacts of both climate and humaninduced threats as the first 'shock absorbers' of the impacts of shoreline erosion, damage to reefs and fisheries, loss of agriculture and water resources, and loss of land, homes, and public infrastructure. While small island communities that rely on the healthy near-shore mangroves and fringing reefs for protection and subsistence, are among the first to feel the impacts of climate change and some of the most vulnerable to them, they have until recently been largely neglected in the outreach and discussions regarding these issues. MCT will use the Adaptation Fund award to address these impacts by employing an enhanced direct access strategy, issuing a number of small grants that will directly engage at least eight communities to conduct climate change vulnerability assessments

<sup>&</sup>lt;sup>15</sup> Houk P, Camacho R, Johnson S, McLean M, Maxim S, Anson J, et al. (2015) PLoS ONE 10(6): e0130823. Doi:10.1371/journal.pone.0130823 (p.17)

and design and implement ecosystem based adaptation plans to address identified threats with a particular focus on marine ecosystem protection and the advancement of protected areas networks. This will include work with communities in each of the four states of the FSM: Yap, Chuuk, Pohnpei and Kosrae.

**Summary:** The three objectives of this project as defined above support the development of state and national MPAMNs and enabling policy and relevant legislation/regulations; improved fisheries and MPA management; , and provide a small grants program for local communities. The objectives work cohesively to reduce pressures and stresses on coastal ecosystems to maintain their health and climate change resilience. They are intricately linked with the partners' and communities' resources (human and natural), needs, priorities, knowledge, and capacity to determine actions in the management of the MPAs established and implemented under this project. The ultimate effectiveness of the MPAs then depends on compliance with the policies and regulations and on the level of training and knowledge received by those charged with enforcing the regulations. The biological diversity maintained in the protected areas strengthens resilience to climate change impacts and ensures that alternatives to those resources negatively impacted by climate change are available to meet community needs. An effective MPA system will positively affect near shore fisheries leading to optimal use and management of community aquatic resources and increased resilience and protection of ecosystems as they respond to climate stressors. To be successful, locally developed fisheries management and MPA frameworks need to be recognized in policy and legislation at the state and national levels to provide for political support and resource availability to maintain them. In sum, social, ecological, economic and political processes around marine ecosystem management are linked in this proposal because each is essential to the protection of future food security, climate resilience and guality of lives for communities in the FSM.



Nahlap, FSM. Photo © Alyson Gombos

## **Program Logic Diagram:**



## **Project / Programme Objectives:**

#### **Objectives:**

Objective 1: Improve the implementation of protected areas and establish protected area management networks to maintain near-shore marine ecosystem health; climate change resilience and food security Component 1(a): National Level Component 1(b) : State Level

Objective 2: Strengthen the enforcement of MPA and near-shore fisheries regulations to maintain near-shore marine ecosystem health; climate change resilience and food security

Objective 3: Build community-level adaptive capacity to climate change

Project/Programme Objectives/Components	Expected Concrete Outputs	Expected Outcomes	Amount (US\$)*
1 (a). Set up and initial implementation of FSM national protected areas management network framework and country program strategy	<ul> <li>FSM national protected areas management network established and functioning including: <ol> <li>National Protected Areas Management Network</li> <li>Coordinator employed, with responsibility for the start-up and initial implementation of the FSM protected areas management network, including knowledge management for learning and sharing.</li> </ol> </li> <li>1.2 FSM protected area operations manual developed, based on the FSM national protected areas framework and country program strategy,</li> </ul>	State-level protected area management entities receive financial support through the national protected area management network. Indicator of achievement is volume of funding distributed.	\$100,000

## **Project / Programme Components and Financing**

	detailing the roles, responsibilities, functions, and activities of protected areas and the protected area management network.		
	1.3 Process implemented for protected areas management entities to join the national protected areas management network.		
	1.4 Process implemented for management entities to apply for and receive financial support through the national protected area management network (i.e. from government allocation and/or investment earnings from the FSM's Micronesia Challenge Endowment Fund).		
1. (b). Set up and initial implementation of state protected areas and protected area management networks	State protected areas and protected area management networks established and functioning in Yap, Chuuk, Pohnpei, and Kosrae including: 1.5 State Protected Areas Network Coordinators employed in Yap, Chuuk, Pohnpei, and Kosrae, with responsibility for the start- up and initial implementation of state protected areas in Yap and Chuuk;the operation of the existing state protected areas in Pohnpei and Kosrae; and the establishment of state protected area management networks, including knowledge management for learning and sharing.	State-level protected area management entities receive financial support through the national protected area management network. Indicator of achievement is volume of funding received.	\$200,000
	1.6 State-level protected area operations manuals, consistent with the FSM national		

	protected areas network and country program strategy, detailing the roles, responsibilities, functions, and activities of the states' protected areas and protected area management network.		
	1.7 Process implemented for management entities of protected areas to apply for protected area status and join the state protected areas management networks in Chuuk, Yap; Pohnpei and Kosrae.		
	1.8 Process implemented for state-level protected areas apply to join the national protected areas management network.		
2. Improve state-level enforcement of MPA and nearshore fisheries legislation and regulations	<ul> <li>2.1 Training for enforcement officers in each state about existing and proposed MPA and fisheries regulations</li> <li>2.2 Establishment of joint/collaborative enforcement taskforces across the FSM states</li> <li>2.3 Provision of supplies and surveillance equipment including but not limited to: boat fuel and flashlight batteries, radar, marine VHF base radio equipment and CB radio equipment.</li> </ul>	Increase in enforcement officer knowledge and reduction in gaps in essential material resources. Indicators are increase in knowledge, as measured by pre-and post-training surveys; and number of priority material gaps (as identified in early-phase gap analysis) eliminated.	\$100,000
3. Through a small grants program, issue at least 4 sub-awards to support ecosystem- based community climate adaptation actions	Eight communities identified and working towards locally-managed Marine Protected Area Plans through the LEAP process and on- ground actions to control the impacts of terrigenous sediment	Increased resilience of coastal ecosystem to the impacts of climate change, and enhanced food security, through the reduction of anthropogenic pressures	\$412, 860

	and nutrients on near-shore coral reefs.	and stressors from unmanaged resource exploitation.	
4. Project/Programme Execution cost (10% sum of 1 - 4)		\$81,286	
5. Total Project/Programme Cost		\$894,146	
6. Project/Programme Cycle Management Fee charged by the Implementing Entity (base = 7)		\$75,854	
Amount of Financing Rec	juested		\$970,000

\*The amounts are illustrative and will be finalized as part of the Project Formulation Grant activities

## **Projected Calendar:**

Milestones	Expected Dates
Start of Project/Programme Implementation	January 2018
Mid-term Review (if planned)	TBD
Project/Programme Closing	December 2020
Terminal Evaluation	TBD



Mangroves of Pohnpei, FSM. Photo © MCT

## **PART II: PROJECT / PROGRAMME JUSTIFICATION**

A. Describe the project / programme components, particularly focusing on the concrete adaptation activities of the project, and how these activities contribute to climate resilience. For the case of a programme, show how the combination of individual projects will contribute to the overall increase in resilience.

This section details the rationale for this project, including components and illustrative activities. The overall goal of the project is to maintain the resilience of marine ecosystems to the impacts of climate change, by reducing current and predicted pressures and stressors. This will ensure that the ecosystem services currently provided, such as protection from storm damage and erosion and the provision of food resources, are maintained in the face of a changing climate regime.

By engaging communities, local resource management agencies and NGOs, and involving the national government, the project will also strengthen the capacity of people within the FSM to address climate change threats through ecosystem-based adaptation initiatives. Below is a short summary of climate adaptation strategy behind each Objective, followed by a detailed description of each Objective.

Together with the submission of this project concept proposal, MCT will also apply for a project formulation grant to support visiting each of the FSM states in order to hold additional and follow-on consultations with climate change adaptation policy makers and

implementers, natural resource managers, traditional leaders, community members, private sector, and other stakeholders. MCT will continue to work closely with the FSM Designated Authority and will also expand consultations with the FSM national government and its counterparts in the four states as well as local NGOs and CSOs. The intent is to share the concept widely and receive guidance and feedback on this project, its components, and illustrative activities in order to prepare a full proposal that has buy-in and participation from all relevant entities. MCT will also welcome the input of the Adaptation Fund, as well as other technical organizations.

## Objective 1: Improve the implementation of protected areas and establish protected area management networks to maintain near-shore marine ecosystem health; climate change resilience and food security

The two components and the activities under this objective are designed to result in a fully-functioning and institutionalized system for national and state government support for protected areas networks in Yap, Chuuk, Pohnpei, and Kosrae. As such, activities under this objective will take place at the national and state levels. This objective supports climate resilience, as it will improve management efforts to restore and maintain ecosystem health across the FSM.

## Component 1(a): Set up and initial implementation of FSM national protected areas management network framework and country program strategy (National Level)

**Background:** In 2015, MCT worked with the FSM Department of Resources and Development and integrated stakeholder input from FSM states to draft a national protected areas framework for the country. This framework outlines a transparent, fair, and efficient system governing the designation and operation of a nationwide protected areas network, inclusive of state-level protected areas networks in Yap, Chuuk, Pohnpei, and Kosrae. This nationwide protected areas network is designed to facilitate the national government's delivery of assistance to its states in the protection of significant areas of biodiversity, key habitats, and other valuable resources. These habitats and resources are vitally important to the future stability and health of the FSM, particularly given climate change impacts that are already affecting the country. The protected areas network framework establishes procedures for the management entities of protected area sites to apply to join the protected area management network and outlines the benefits of membership in the national network, including access to long-term and sustained technical and financial assistance.

The FSM's national protected areas management network is designed to augment efforts at the state, municipal, and community levels throughout the country to achieve conservation and climate change adaptation goals, which broadly reflect the country's participation in the Micronesia Challenge, the United Nations Convention on Biological Diversity, and the United Nations Framework Convention on Climate Change. Funding for the operation of the FSM's protected areas management network will come from a combination of national government allocations, state financial and in-kind support, and investment earnings from the FSM's Micronesia Challenge Endowment Fund.

Also in 2015, MCT and the FSM Department of Resources and Development prepared a companion document to the national protected areas framework: a country program strategy with guidelines and procedures for the disbursement of investment earnings from the FSM's Micronesia Challenge Endowment Fund. The strategies and procedures for dispersing these earnings described in the document are intended to support the operation of the FSM's protected areas network. This Endowment Fund was established as a result of FSM's commitment to the Micronesia Challenge and the fund is administered by MCT. The government of the FSM must adopt PA laws as a prerequisite for withdrawing funds as is required by the main donors (TNC, CI and GEF-UNDP) to the MC endowment fund. Moreover, MCT will not release any of the funds to the states, even if all the four states have adopted PA laws, until the FSM officially endorses the FSM National PA Framework. Therefore, there is pressure from the states and the local communities for the FSM National Government to adopt the PA framework. MCT anticipates that the FSM Executive Branch and National Congress will endorse the PA policy framework and associated country program strategy by mid-2017, if not earlier. This concept includes illustrative activities to support the start-up and initial operations of this network at the national level. All activities outlined in this concept are based on preliminary consultations

that will be elaborated on

during further consultations

Ant Atoll, FSM. MPA Annual Cross-Site Visit Participants Photo © MCT

to be funded with the Project Formulation Grant.

Activity 1.1: Identify/hire a National Protected Areas Network Coordinator as a full-time government employee within either the FSM Department of Resources and Development or the Office of Environment and Emergency Management. This person will be responsible for the start-up and initial implementation of the FSM protected areas management network including the implementation of monitoring and evaluation and knowledge management frameworks.

**Activity 1.2:** Develop an operations manual based on the FSM national protected areas network framework and country program strategy that further details the roles, responsibilities, functions, and activities for the protected areas network as part of the knowledge management framework.

**Activity 1.3:** Test and implement the process by which management entities of protected areas apply to join the national protected areas management network.

**Activity 1.4:** Test and implement the process by which management entities apply for and receive financial support through the national protected area management network (i.e. from government allocation and/or investment earnings from the FSM's Micronesia Challenge Endowment Fund).

Component 1(b): Set up and initial implementation of state protected areas networks (State Level)

**Background:** The FSM national government has the crucial role and responsibility of providing coordinated technical and financial assistance to support state-level resource management activities. Per the constitution of the country however, the FSM states each have sole jurisdiction and resource management authority for the nearshore marine and terrestrial areas within their borders. Therefore, each FSM state has its own set of resource management agencies, policies, and legislation. To establish a fully functioning national protected areas network, each state is developing its own state protected areas management network that will link up to the national framework.

The FSM states of Pohnpei and Kosrae already have legislation in place for such state protected areas. A bill for an act for the protection of Chuuk's coastal fisheries was submitted to the Chuuk's State Legislature members during the August 2016 session. YapCAP, with the assistance of its legal counsel, revisited the draft protected areas legislation in July 2016 and met with the Yap State legislature in early October. They then submitted the draft legislation submitted to the Yap State Legislature on October 21st, 2016 and are awaiting response from the Governor. These two states have limited jurisdiction over most terrestrial and near-shore marine resources, as most land and coastal areas in these states are either privately or community owned. In Yap, government agencies, non-governmental conservation and resource management groups, and community members created a community-managed network of protected areas in 2015. Additional consultation and design is still required to establish a staterecognized network of protected areas in Yap. Similarly, in Chuuk multiple municipalities have legally recognized protected areas, and the state recently adopted legislation creating the first state recognized protected area (Kuopw). Moreover, protected area and fisheries bills that take into account the unique land and reef tenure systems in the two states are now under consideration by their leaders.

During 2016, MCT and its partners conducted state-level consultations to inform the design of protected areas networks in Yap and Chuuk that are state recognized, and therefore eligible for government technical and financial assistance, while respecting the existing system of private resource tenure in these states. As is outlined above, the main incentive for the states of Yap and Chuuk to adopt their protected areas laws is that it is a prerequisite to withdraw funds from the MC endowment fund. This would leave only Pohnpei and Kosrae receiving the funds until Chuuk and Yap complete their laws. The Governors and legislatures are well aware of this, as well as the communities who may be eligible to receive these funds, which has led to intense pressure for them to put these laws in place. This is the reason why both states have draft bills that are being considered by their governments at this time. The FSM and the states are also aware and keen to meet their commitments to the UN Convention on Biological Diversity (protected areas and Aichi Targets) and this is also another incentive for them to officially adopt the policies and legislation required for them to meet those UN requirements. Therefore, this concept assumes that by the start of the project each of the four states will have in place either legislation (as exists in Pohnpei and Kosrae) or have established policy frameworks (likely for Chuuk and Yap) for state-level protected areas. The proposed activities below are:

**Activity 1.5:** Identify/hire a State Protected Areas Network Coordinator as a full-time state government employee within the appropriate government agencies in Yap, Chuuk, Pohnpei, and Kosrae. In Yap and Chuuk, this person will be responsible for the start-up and initial implementation of a network of State protected areas while in Pohnpei and Kosrae this individual will assume responsibility for the operation of the existing state protected areas networks including the implementation of the monitoring and evaluation and knowledge management frameworks.

**Activity 1.6:** Develop state-level operations manuals that are consistent with the FSM national protected areas network and country program strategy that further details the roles, responsibilities, functions, and activities of the states' protected areas network as part of the knowledge management framework.

Activity 1.7: Test and implement the process by which management entities of protected areas apply for state protected areas status in Chuuk and Yap; continue to implement the process of by which management entities receive state protected areas status in Pohnpei and Kosrae; and implement state protected area management networks.

**Activity 1.8:** In conjunction with the National Protected Areas Network Coordinator, test and implement the process by which state-level protected areas apply to join the national protected areas management network.

**Activity 1.9** In conjunction with the National Protected Areas Network Coordinator, implement the process by which management entities apply and receive financial support through the national protected area management network.

# Objective 2: Strengthen the enforcement of MPA and near-shore fisheries regulations to maintain near-shore marine ecosystem health; climate change resilience and food security

This component is designed to support state-level efforts to ensure compliance with MPA and fisheries regulations. This will reduce overharvesting of near-shore fisheries and maintain coral reef and near-shore marine ecosystem health, resilience to climate change and food security within the FSM.

This management approach to climate change adaption was recommended in a recent major report on the vulnerability of tropical Pacific fisheries to climate change<sup>16</sup> -

<sup>&</sup>lt;sup>16</sup> Pratchett MS, Munday PL, Graham NAJ, Kronen M, Pinca S, Friedman M, Brewer TD, Bell JD, Wilson SK, Cinner JE, Kinch JP, Lawton RJ, Williams AJ, Chapman L, Magron F and Webb A (2011) In: JD Bell, JE Johnson and AJ Hobday (eds) Vulnerability of Tropical Pacific Fisheries and Aquaculture to Climate Change. Secretariat of the Pacific Community, Noumea, New Caledonia.

Apart from urgent actions to keep atmospheric CO<sup>2</sup> concentrations below levels expected to damage coral reefs, a number of management recommendations can be made to optimise benefits from coastal fisheries in the face of ongoing changes to the climate. These measures centre on nurturing the habitats that support coastal fisheries, and avoiding overfishing, which is likely to make some species more sensitive to the effects of climate change. Most of these measures have long been proposed for the toolbox for managing coastal fisheries in the Pacific but now take on added importance to build resilience to climate change. These measures are outlined briefly below.

- Prohibit local activities that reduce the structural complexity and biological diversity of coral reefs, mangroves and seagrasses to assist these important coastal fisheries habitats to maximise their potential to adapt to climate change.
- Keep production of demersal fish and invertebrates within sustainable bounds by ensuring that sufficient spawning adults are safeguarded for regular replenishment of stocks. This constraint requires diagnosis of the internal and external factors affecting fishing by coastal communities, and the implementation of durable, practical and adaptive management to address these various drivers. Important management measures include ....(3) implementing national fishery regulations (e.g. size limits, closed seasons and areas, gear restrictions and export bans) to underpin community-based management in a way that prevents overfishing;

The difficulties that Pacific island nations have in resourcing effective MPA and fisheries regulation enforcement efforts, and thus achieving the climate change adaption benefits that are possible, were highlighted in a recent study of the risks to reef, which stated<sup>17</sup> –

Marine Protected Areas require day-to-day management and enforcement to effectively protect reef resources, yet many [nations] lack the economic resources and staff for effective management.

Governments, donors, NGOs, and the private sector should provide financial and political support to help MPAs build needed capacity, both in terms of equipment (e.g., boats and fuel) and adequately trained staff.

Building capacity for reef management and law enforcement among local communities, agencies and organizations can directly benefit reef resources.

**Background:** As described above, overfishing represents a critical issue faced by communities in the FSM. With a population of around 35,000 individuals and approximately 6,000 households, Pohnpei state serves to illustrate this issue for the FSM. More than 63 percent of these households include at least one fisher (for a total of 7,227 fishers). These fishers constitute more than 20 percent of the total population. Of this population of fishers, 2,976 are commercial/artisanal fishers and 4,251 are subsistence coral reef fishers. While impacts from subsistence fishing cannot be ignored, that catch relies on hook and line fishing and accounts for only 32 percent of the overall catch. The commercial fin fishery, on the other hand, accounts for 68 percent of the total catch, primarily derived through night-time spearfishing and net fishing, both demonstrably unsustainable

techniques<sup>18</sup>. As these Chuuk, FSM. Photo © Javier Cuetos-Bueno

<sup>&</sup>lt;sup>17</sup> Burke L, Reytar K, Spalding M and Perry A (2011) Reefs at Risk Revisited. World Resources Institute, Washington D.C.

<sup>&</sup>lt;sup>18</sup> Federated States of Micronesia (2014) *Fifth National Report to the Convention on Biological Diversity*. Palikir, Pohnpei.

numbers indicate, the smaller group of commercial fishers employing the more unsustainable methods and garnering larger catches overall have a bigger impact on the fisheries, and in turn negatively impact the livelihoods of the larger portion of the population that depends on fisheries as a subsistence protein source.

However, in the past few years there has been significant momentum driven by government, non-governmental, and community partners to address overfishing. These multi-actor/agency activities have resulted in positive advances. Again, taking Pohnpei as the example, state government agencies partnered with MCT and a number of local, regional and international conservation groups and community partners to form a Fisheries Working Group in 2014. Using fisheries and market data gathered with support from a series of complementary projects, the Fisheries Working Group created a clear and easily communicated message about the status of Pohnpei's reefs and marine resources. The Fisheries Working Group also supported the establishment of the state's first fisher and market owner-led Fisheries Advisory Council. Together these groups conducted an extensive fisheries awareness campaign. As a result, municipal and traditional leaders strengthened fisheries management at the community level, calling for moratoriums on several highly threatened and flagship species such as the Napoleon Wrasse, bump head parrotfish, giant clams and giant groupers. Additionally, Pohnpei state adopted a number of new regulations in the second and third quarters of 2015, including size-based regulations for key herbivores as well as additional regulations for harvesting predators.

Building on advances at the state level, this year MCT has initiated work funded under a separate program, with the national government to develop a comprehensive plan to manage all of the states' coastal fisheries under an umbrella FSM-wide management plan. A key part of this plan will involve ensuring sustainable financing for coastal fisheries by tapping into the FSM's national revenues from pelagic fishing and setting aside a percentage to fund fisheries management activities. Sales of international fishing licenses for pelagic fish represent a significant source of revenue for the FSM. For fiscal year 2015 alone the national government collected approximately \$45 million in fishing access fees. Currently this revenue is included in the FSM national government's general fund and allocated to support national and state operations.

While current and planned activities are/will help address overharvesting of FSM fisheries, enforcement remains a critical challenge within each of the FSM states. While well-intentioned, many of the state marine resource agencies and enforcement divisions lack sufficient human and technical capacity and equipment to enforce existing fisheries and marine protected areas legislation and regulations. To address this issue, this proposed project includes direct support to the state agencies to address enforcement gaps. This will include training for enforcement officers in each state regarding existing and proposed regulations in their respective jurisdictions. In addition, one mechanism which is proving effective around the FSM is collaborative enforcement teams that include representatives from communities, non-governmental organizations, and other state agencies not normally involved in enforcement activities. For example, in 2014 Kosrae state created a Conservation and Enforcement Taskforce comprised of five state

government agencies and non-governmental organizations. To support the establishment of similar joint-enforcement teams for Pohnpei, Yap, and Chuuk, this concept includes activities to engage enforcement stakeholders and conduct joint enforcement planning, using *A Guide to Support Development of Collaborative Enforcement Plans*.

This Guide emerged from previous efforts to build enforcement capacity throughout Micronesia and was developed with input from the following groups: Pacific Islands Managed and Protected Areas Community, the Guam Department of Aquatic and Wildlife Resources, Pew Charitable Trusts, Rare, Inc., the National Oceanic and Atmospheric Administration's National Marine Sanctuaries Program, and MCT. The capacity building trainings proposed in this concept will build on this prior technical assistance. In addition to exploring joint enforcement mechanisms and training conservation officers on existing and proposed regulations, MCT proposes using AF funds to procure necessary equipment and supplies, such as boat fuel and flashlight batteries, needed immediately by state agencies tasked with managing and enforcing marine protected area and fisheries regulations.

**Activity 2.1:** Provide training in each state on existing legislation and any newly adopted regulations and associated activities, such as marine protected area management and collaborative enforcement, to improve enforcement capacity.

Activity 2.2: Provide training in the states of Yap, Chuuk, and Pohnpei on jointenforcement techniques to further the establishment of joint enforcement taskforces in these states.

**Activity 2.3:** Procure and distribute necessary equipment and supplies to support states' enforcement personnel with their outreach and enforcement activities.

## **Objective 3: Build community-level adaptive capacity to climate change**

**Background:** In the FSM, local communities play a leading and integral role in managing coastal and marine resources in cooperation with local government agencies. Community-based adaptation that involves stakeholders throughout FSM must be consistent with the traditional community values prominent in Micronesian culture. This Objective is vital to the success of the overall ability of the FSM to adapt to the effects of climate change. Climate risk management in FSM is likely to be most successful if planned and designed with a motivated community. This happens by spending time working with local communities and their leaders, forming partnerships with local stakeholders and non-governmental organizations, and involves a planning structure that involves landowners and those with land use rights. When the community most affected by climate change is involved in designing the tools to manage climate risk, the likelihood that adaptation steps will be successfully implemented is increased significantly.

In 2010, natural resource managers who support community based management efforts in Micronesia recognized the need to begin incorporating climate change adaptation into

community processes such as protected areas development and fisheries management. At that time, community awareness of climate risks and multiple sector engagement were known to be important for effective community-led ecosystem based management. However, adaptation-planning tools were not aimed at communities and did not stress the links between social and ecological dimensions, nor convey climate science in locally relevant and easy to understand terms. Moreover, prior tools did not address the language and technical barriers that often limited local understanding of climate change science and impacts and therefore hampered some community's abilities to develop appropriate actions to build socio-ecological resilience.

To address these issues, MCT, in part through the Micronesia Challenge, launched a collaborative initiative to address climate change and prepare for impacts to ecosystems, natural resources, and the communities that depend on them in a meaningful way\MCT and other Micronesia Challenge partners convened natural resource managers, community leaders, climate scientists, and experts from various sectors to determine what a community-based tool should look like. This collaboration resulted in the development of a tool, "Adapting to a Changing Climate: Guide to Local Early Action Planning (LEAP) and Management Planning." This LEAP process of developing and selecting ecosystem-based activities is a community-lead process with support and input from experts and facilitators. The decisions that emerge from the process are community-lead and driven, as are the actions and strategies selected during the consultations.

## The Local Early Action Planning (LEAP) Tool

The LEAP tool was designed to address gaps in existing vulnerability and adaptation tools to support community efforts by:

- 1. considering socio-ecological linkages and multisector interests at the community level
- 2. integrating local knowledge and climate science to support greater understanding of impacts
  - 3. informing the development of locally relevant adaptation actions to address both climate change and other anthropogenic threats

The LEAP tool was developed in collaboration with community leaders and community facilitators from local conservation organizations to address needs identified by local communities. As such the content of the tool reflects their specific requests and ideas and provides direct guidance on how to facilitate:

- Outreach using visual materials to deliver key messages and information around climate change concepts and the cumulative impacts of climate and non-climate stressors on social and natural resources and participatory exercises that use local knowledge and experience combined with science to improve community understanding of potential impacts that are most important for adaptation planning
- Vulnerability assessments and adaptation planning to help communities assess

and map future climate scenarios, and how natural resources and community members are vulnerable to potential social, economic, and ecological changes. With this information, communities can determine what actions they can take to reduce the exposure and sensitivity of their natural resources, and increase their own adaptive capacity

The process involves minimal technical inputs, requiring only facilitators who are comfortable guiding the community through various participatory activities. Since the introduction of the first draft of the LEAP tool in 2011, a series of community facilitator capacity building workshops have taken place across Micronesia. These initial trainings were led by the LEAP tool developers and were tailored to meet the needs of each country. They focused on two main areas: 1) Climate Outreach and Engagement and 2) Adaptation Planning. The trainings targeted community leaders and facilitators from various organizations who work directly with communities. Several groups and organizations outside of Micronesia recognize the value and efficacy of the tool, including Pacific Resources for Education and Learning (PREL), Rare and Public Broadcasting Service (PBS) all of which have adapted the materials for their own purposes. The LEAP tool has been recognized well beyond Micronesia, and has been adopted and adapted by the Coral Triangle Support Partnership as one of the main tools to implement their climate adaptation work. It is also currently being adapted for communities in the South Pacific and the Caribbean. In the years since the LEAP's initial development, the tool's designers have received constructive feedback on its utility from community leaders and practitioners in the region and have refined it to better address users' needs. The tool led to the creation of the Pohnpei climate change committee, a multi-sector group that worked in local communities carrying out climate change outreach, it has also been used across the FSM through funding under the University of the South Pacific Global Climate Change Alliance (USP-GCCA) vulnerability assessment and adaptation project. In other regional jurisdictions, such as the Marshall Islands, the tool has been integrated into the national conservation and climate change engagement framework. Finally, the tool has been adopted and adapted in the Coral Triangle and the Caribbean in at least 20 communities. The enhanced capacity gained through user and participatory revision proved critical for developing appropriate adaptation strategies for coastal and marine resources that are ecologically sound, and which will reduce vulnerability through long-term climate scenarios. Through this process, users identified the need for information and capacity building around complex issues (i.e. designing resilient marine managed areas incorporating fisheries management components, and coastal change including shoreline erosion and coastal flooding). To address these gaps, top marine and coastal scientists in the Pacific region came together to develop two new tools that complement the LEAP process. The tools are:

Tool 1: Designing Effective Locally Managed Areas (LMAs) in Tropical Marine Environments: Guidance to Help Sustain Community Benefits through Management for Fisheries, Ecosystems, and Climate Change. This tool is focused on helping communities to understand "how to" design LMAs to incorporate the latest science to build resilience of marine resources while increasing the potential for community benefits through

fisheries sustainability, and biodiversity conservation in the face of climate change. This tool includes:

- Outreach to communities to understand key ecological and social factors that contribute to healthy, abundant, and resilient marine resources; and management suggestions that support those ecological and social factors
- Planning steps to specifically develop zones and rules for LMAs that are based on the latest scientific recommendations for managing protected areas that have the greatest chances of supporting resilience to climate change and other threats. Zones and rules are also based on target species that communities are concerned about for livelihoods

This tool was developed with support from USAID's regional Asia program, through the Coral Triangle Support Partnership including Conservation International, The Nature Conservancy, World Wildlife Fund, NOAA, and in collaboration with MCT.

Tool 2: Coastal Change in the Pacific Islands: A Facilitator's Guide to Support Community Understanding and Decision-Making on Coastal Erosion and Flooding Issues. This tool responds to communities' requests for guidance on how to address and reduce the exposure and sensitivity to climate stressors of their coastlines to sea level rise, and associated changes in the frequency and magnitude of coastal inundation events and the potential impacts of shoreline change. Responses to coastal erosion and inundation have typically focused on reactive approaches, such as building seawalls. In many cases, such 'solutions' have adversely affected coastlines and coastal communities specifically, creating conflicts with community values and ignoring the human (development) dimension of the problem. This tool includes:

- Outreach and engagement session to help communities understand coastal processes, what causes shorelines to change (i.e. natural processes and human alternations including climate change), and what communities can do to build long term resilience of coastal resources and the community
- Planning steps to develop local actions that include enhancing natural defenses and ensuring safe development practices wisely to avoid further negative impact to shorelines

Partners involved in development of this tool include MCT, The Nature Conservancy, PIMPAC, Secretariat of the Pacific Community, the Coping with Climate Change in the Pacific Island Region project funded by the German Federal Ministry for Economic Cooperation and Development, USAID, the Palau International Coral Reef Center, Palau Office of Environmental Response and Coordination, NOAA Climate Services, Pacific Region, New Zealand National Institute of Water and Atmospheric Research, and Kosrae Island Resource Management Authority, KCSO; and the Vanuatu Meteorology and Geo-Hazards Department.

The suite of LEAP tools provides a full adaptation and management planning process. Tools 1 and 2 complement the LEAP process when high degrees of natural and social vulnerability are linked to coastal and marine resources and actions need to be developed. Finally, in an attempt to address the possibility of loss of income currently earned through exploiting resources that might be restricted as part of any protected areas plan, MCT is currently exploring methods and options for regionally appropriate alternative livelihood strategies. In the future, a tool to provide community facilitators with skills and knowledge on building social and economic resilience to climate change impacts through alternative livelihoods will be developed. MCT is seeking funding support outside of this Concept to develop this additional tool.

#### **Community Lead Ecosystems-Based Activity Selection**

As is illustrated above, through facilitation and the use of locally appropriate tools, the communities themselves will drive the selection process of ecosystem-based activities as they engage in the LEAP process. The LEAP process provides guidance for informed community-based decision-making. The aim of the tools is to combine local experience and knowledge with key scientific concepts that enable community members to more fully understand complex issues and to make management decisions that increase their chances of success. For example, the LEAP tool includes exercises to lead communities through a historical timeline process that helps them identify which climate hazards may be of concern to them (e.g. drought, flooding, storms) based on their local experience. This information is then combined with information regarding climate projections to identify future impacts of potential concern (e.g. sea surface temperature impacts on reefs) and identify those hazards that are of greatest concern to their community. Participants then complete vulnerability assessments through a series of community focus group questionnaires that foster discussion around their possible vulnerabilities and that help identify and prioritize actions that will reduce said vulnerabilities. As an example, communities are asked to identify the fish species that are most important to them in the beginning of the process. Community members and facilitators then use a combination of local knowledge and science to understand important factors about those species, such as habitats they use, where they spawn, and the range needed for them to thrive. With this information, communities can develop zones and rules to provide the prioritized species with the best circumstances to live, grow, and reproduce. This ensures that the resources remain abundant and available to the community over time. It also allows community members to determine socially and culturally acceptable zoning and rule schemes. Ultimately, communities reach a sustainable balance between what the species needs and what the community needs.

Finally, the coastal change guide asks communities to map their coastlines to identify changes over time, threats to natural defences, and areas vulnerable to increased sea level rise, flooding and erosion. They then use this information to choose actions that can reduce threats to natural resources and foster the use of development practices that promote safety and resilience. Through the use of these tools, communities decide on the ecosystem-based actions they want to take, making informed decisions based in both local understanding of place and sound science principles. This concept proposes using this tool in at least 8 more communities (at least 2 per FSM state) by issuing a series of

grants to state-level local conservation non-governmental organizations to work with communities.

MCT will use the Adaptation Fund award to issue sub-awards to organizations and communities throughout the FSM. MCT anticipates approving at least 4 sub-awards that will together include at least 8 communities within the 4 states of the FSM<sup>19</sup>. MCT's subgrantees will use the suite of tools described above to engage communities in a collaborative process to identify priority climate change impact vulnerabilities and develop and implement specific ecosystem-based activities to address these priority vulnerabilities. This will happen through a combination of outreach, local planning, and technical assistance and communities will develop targeted work plans with actions to reduce the exposure and sensitivity of coastal and marine resources, and build their adaptive capacity.

The needs and actions identified through the LEAP processes will serve as the basis for communities' requests for support through this project's small grants program. MCT will administer this portion of the project through its established process for awarding and managing sub-grants. MCT's standard Call for Proposals process will illicit invitations from community-based organizations and local conservation and climate change NGOs/CBOs. A panel that includes members of the MCT Board Technical Committee and Conservation Program staff, will review the proposals based on eligibility, thoroughness and potential for tangible results including the following:

- Concepts provide for direct and concrete ecosystems- based adaptation projects that address the adverse impacts of, and risks posed by climate change eligible under the Adaptation Fund
- Concepts have been developed through a community-driven and community-based consultative process
- Projects will have a direct and positive impact on the community in which they are implemented
- Projects employ ecosystem-based adaptation actions
- Project proponents must have a plan to participate in learning and knowledge development and dissemination processes according to the knowledge management plan.
- Projects will adhere to both the Micronesia Conservation Trust (MCT) Environmental and Social Safeguards and Gender Policies.

See diagram below for detail flow chart of MCT Grant Review Process<sup>20</sup>:

<sup>&</sup>lt;sup>19</sup> Sub-grant project proposals could include requests for funding for multiple communities and therefore MCT anticipates a minimum of 4 and a maximum of 8 sub-grants to serve the 8 communities per this proposal.

<sup>&</sup>lt;sup>20</sup> Diagram developed for MCT by Nataij LLC 2016.



MCT cannot specify exactly the ecosystem-based activities the small grants scheme will fund in detail, as this will depend on projects developed by each NGO and community based on their specific needs at the time. However, based on prior experience and on consultations with partners, based as well as concepts received from project proponents over the years, ecosystem-based activities are likely to include, but will not be limited to:

- Development and/or strengthening of new and/or expanded protected areas,
- Development and/or strengthening of new and/or expanded fisheries management plans,
- Development of fisheries management regulations (i.e. fish size and quota limits, seasonal bans, gear bans, etc.) or no-take zones,
- Awareness and outreach campaigns that directly link to projects supported by this program.
- Coastal or watershed restoration activities and programs
- Livelihood enhancement projects

Proposals that will not be funded under this grant scheme include:

- Projects that do not define a concrete adaptation action,
- Projects that increase the environmental and/or social vulnerability of beneficiaries,
- Projects that reduce the ability of beneficiaries to adapt to climate change
- Projects that marginalize minority or vulnerable groups,
- Projects that do not show a community/stakeholder-wide consultation process,
- Projects determined to be high risk (Category A under MCT E&S Policy)
- Projects that do not comply with MCT's E&S and Gender Policies

In 2017 MCT plans to pilot sustainable livelihoods tools and approaches for communities, and intends to integrate this effort into the proposed community work as well. To support the implementation of grants awarded through this small-grants program, MCT has established a suite of project management tools, the Grant Tools, that link performance-based workplans to budgets and project-specific monitoring and evaluation tools. See appendix for these tools.

Below are four examples of the types of communities that will benefit from the small grants scheme funds to further illustrate this objective:

Walung, Kosrae: Located on the southwest coast of Kosrae, Walung is a remote community with limited access to health care, disaster management, power sources and other social services. Land transportation poses a challenge, as the road that connects to the area where these services are located is poorly maintained. Most of Walung's approximately 175 residents practice subsistence activities, such as fishing, farming, and wood harvesting resulting in a community highly dependent on local resources. Agroforestry and exploitation of the mangroves and coral reefs provide food, medicine, and income firewood, and shelter. Most community members live on the coastline and have observed elevated rates of coastal erosion and identify themselves as vulnerable to sea level rise exacerbating the current impacts from king tides, which inundate residential and agricultural areas. They are also vulnerable to changes in weather patterns and to coastal storms, which cause high surges and high winds along the coastline. As most community residents depend on the area's natural resources for food and income, the impacts of climate change affect their livelihoods. The community is well organized and has been working with Kosrae Conservation and Safety Organization, a local nongovernmental organization, on specific climate change adaptation activities including the use of the LEAP tool to establish the means to improve community management of natural resources in order to increase the resilience of natural resources and of the community. They are beginning a process to develop a marine protected area to improve resource health and to support fisheries livelihoods. With further support, this community could develop actions around fisheries and protected area management, as well as begin to address concerns about coastal change.

*Mwanukun, Uman, Chuuk:* Mwanukun village on Uman island is located south of Weno, the capital of Chuuk state. The population of Mwanukun consists of 348 individuals with about 40 households, averaging 9 persons per household. Households on Mwanukun are primarily situated along the coastline. Community income is largely derived from small-scale marketing of agricultural products and marine resources. Due to the scarcity of job opportunities, residents rely heavily on exploiting the natural resources of Mwanukun and this results in over harvesting and poor management of both terrestrial and marine resources. The impacts of climate change will exacerbate these threats to the resources unless addressed. In an effort to tackle this issue, Mwanukun's Chief has imposed a traditional closure of part of its marine area. The community sought assistance from the Chuuk Department of Marine Resources and the Chuuk Conservation Society to develop use the LEAP process to develop a management plan for its marine area. Together they

have conducted a baseline survey of Mwanukun's marine area and plan to carry out a terrestrial assessment in order to undertake a ridge to reef management approach. Climate change adaptation activities in this community could support the development of zoning and rules to be incorporated into their locally managed marine area management plan or assist in considering impacts to the coast from upland systems and actions that support sustainable use of natural resources.

Riken, Yap: A small village in the Municipality of Gagil, Riken has a population of approximately 800, on the main Island of Yap. Agroforestry and fishing are vital for the livelihoods and subsistence of community members. In the recent past fish populations have declined, and fish caught have decreased in size. Marine resources are depleting due to several threats including sedimentation, pollution, and over-harvesting. The land has also become less productive over time due to an unusually long-term dry season and other changes in weather patterns. Climate change is likely to exacerbate these threats and impacts on the natural resources and the community. Moreover, customary lands in Riken feature valuable historical sites, which the community views as an opportunity for eco-tourism and as a possible source of income. This community has begun working with the Yap State Marine Resource Management Division and the Yap Community Action Program, a local conservation organization, to explore ways to improve conservation and resources management, including a project to initiate a marine protected area to promote food security, resources, health, and livelihoods. With further assistance, the community could plan and implement actions that consider existing threats and climate change, and build long term resilience of coastal and marine resources as well as community capacity.

Pakin Atoll, Pohnpei: An atoll about 45 kilometers' northwest of Pohnpei Island, Pakin is home to approximately 100 residents. The atoll consists of 17 small islets with a barrier reef surrounding the group and a total land area of only about 1.09 square kilometers. Pakin is surrounded entirely by coral reefs with a shallow, narrow channel that is only passable at high tide. The residents of Pakin rely mainly on the few subsistence crops that grow on coral atolls (breadfruit, coconut, banana, some taro) and reef fishing (traditionally with fish traps, but currently with spear fishing and ground fishing). The ocean surrounding Pakin is well known among fishermen as one of the richest and most productive fishing grounds in the area and many small fishing boats from Pohnpei and beyond fish near Pakin. The community does not directly benefit from these activities and has instead worked hard to improve enforcement of their three near-shore Marine Protected Areas against these small local fishing boats. Like all coral atolls, Pakin's islands and ocean area is large and spread out making it difficult to enforce their existing MPA's against illegal fishing. With further assistance, the community could establish a proper enforcement program that would support the MPA efforts and increase the conservation efforts while at the same time planning for the community's future through sustainable fisheries planning.

For this objective of the project MCT has identified the following illustrative activities:

## Micronesia Conservation Trust (MCT) Activities:

**Activity 1:** Issue grants to local non-governmental organizations in each of the four states of the FSM. Potential grant recipients include the Yap Community Action Program, the Chuuk Conservation Society, the Conservation Society of Pohnpei, and the Kosrae Conservation and Safety Organization. MCT will administer these grants.

**Activity 2:** With support from consultant(s), build skills of community facilitators within local organizations (government agencies and local organization partners) in each of the four states, to:

- 1. Effectively communicate impacts to socio-ecological systems from climate change and other threats, and
- 2. Carry out participatory assessments to develop appropriate community actions that are ecologically sound and consider long term resilience

Activity 3: Be responsible for developing and coordinating activities under the knowledge management framework ensuring wide dissemination of best practices and project successes through various knowledge sharing products. MCT will drive the knowledge management component along with the State and National Coordinators as part of Objective 1.

#### **Community Partner Activities:**

**Activity 4:** Using the tools outlined above, build the adaptive capacity of at least eight FSM communities to cope with potential negative impacts from climate change to coastal and marine resources and associated livelihoods through organization, awareness, adaptation planning, and project implementation

Activity 5: Implement coastal and marine management actions that reduce the exposure and sensitivity of social and ecological systems to climate stressors in at least eight FSM communities. To further illustrate the types of activities MCT would consider funding for community actions under this small grants scheme, we present an indicative list of actions that have either been implemented or which have resulted from the LEAP process in numerous communities throughout the FSM. Below the list, we highlight specific examples of past awards from MCT to our NGO partners to support ecosystem-based adaptation projects that reduce pressures and stress on near shore fisheries and coral ecosystems in the FSM.

#### **Indicative List of Possible Actions**

- -Development of Marine Protected Area management plans
- -Development of Municipal ordinances for MPA's
- -Development of zoning rules for coastal development projects
- -Monitoring training for MPA enforcement
- -Developing no-tolerance agreements in line with state laws to ban destructive fishing practices
-Surveys to support the development of Locally Managed Areas (LMA) for marine resources -Data collection training to support sustainable fisheries planning

-Development of awareness campaigns and materials for MPA's

-Training in standardized fisheries and socio-economic monitoring methodologies

-Re-vegetation of upland forests, coastlines and mangrove areas to decrease coastal runoff of sedimentation

Activities previously funded by MCT as examples of possible actions:

1. Conservation Society of Pohnpei (CSP)

Pohnpei, FSM - \$40,000

*Title:* Building Resilient Protected Area Networks to Achieve the Micronesia Challenge Goals by Promoting Ridges to Reef Conservation Concept Through Policy, Science and Active Community-Led Resource Management

*Key Outputs:* More than 30 community conservation officers under the Pohnpei PAN received monitoring training and conducted hands-on data collection in their respective marine protected areas. Through a Strategic Action Planning workshop, they also developed standard operating procedures (SOPs), which were later endorsed by Pohnpei PAN members. CSP worked with the Nanwap community to finalize and endorse a management plan for the Nanwap MPA, and with co-financing from Rare and Seacology built a community center and a guardhouse, and improved community-led enforcement. The project also assisted the "Grow-Low" sakau campaign and effort, supporting more than 10 farmers in relocating their sakau plantations away from upland forests in order to reduce deforestation in the Pohnpei Watershed Forest Reserve.

2. Chuuk Conservation Society (CCS)

Chuuk, FSM - \$30,700

*Title:* The Pride Campaign for Sustainable Fisheries Management - Chuuk Lagoon *Key Outputs:* In partnership with Rare, CCS conducted a Pride Campaign to support the development of the Parem (Tiun Reef) MPA. Project participants developed and disseminated awareness materials including billboards, posters and pamphlets. They also established a Parem management planning committee, drafted a management plan, and endorsed an ordinance recognizing traditional protection of Parem's waters. Parem community conservation officers were trained on enforcement protocol. Chuuk State Legislature subsequently recognized the Tiun Reef MPA.

3. Pacific Marine Resources Institute (PMRI)

Chuuk, FSM - \$44,695

*Title:* Supporting community-based marine resources management efforts through enhanced fisheries management and monitoring

*Key Outputs:* PMRI collected species-based records on daily landings for local and export markets, conducted fisher interviews, and took biological sampling of key species (over 100,000 reef-fish measurements taken and 800 fisher interviews conducted). PMRI also

provided introductory training in standardized fisheries and socio-economic monitoring methodologies to Chuuk partners, and those involved in the fish surveys also received training in surveying techniques. Moreover, they conducted meetings with fishers, communities, legislators, and market owners, and produced outreach materials for circulation on local radio stations and regional media to share the results of the monitoring for adaptive management

4. University of Guam Marine Lab and the Chuuk Department of Marine Resources Chuuk, FSM- \$49,990

*Title*: Status and dynamics of coral-reef fisheries in Chuuk State, Federated States of Micronesia, with economic considerations for greater Micronesia

*Key Outputs*: UOGML and Chuuk Department of Marine Resources personnel analyzed the collected data and found that Chuuk commercial reef fisheries are perhaps the largest in Micronesia, and largely fueled by exports to the island of Guam. Chuuk reef fisheries appear to be in better condition that those from other Micronesia jurisdictions, yet, clear differences were detected within reefs based on their proximity to populated islands, and within species. The findings provide a scientifically sound understanding of the specific details of Chuuk reef fisheries, and importantly, the foundations for developing tailored ecosystem-based fisheries policies. Findings from the study have already been applied to fisheries management in Chuuk, both at the state and community levels.

# 5. The Conservation Society of Pohnpei, FSM - \$32,400

*Title:* Enhancing Monitoring Surveillance and Control on Ant Biosphere Reserve in Pohnpei, Federated States of Micronesia

*Key Outputs*: As the fish populations at Ant Atoll continue to recover from overharvesting through the enforcement of minimal human presence, active reserve management and credible enforcement and the completion of a fully functional rangers station at Ant Atoll, CSP sought to support this recovery. Project activities also include ongoing team capacity building to actively and efficiently enforce fishing regulations in the extensive waters of the atoll and a review of zoning design to reflect surveillance and enforcement strategies and monitoring results. The project funds also support the hiring of urgently needed rangers' equipment for improved monitoring activities. As well, funds will be used for outreach programs and alternative income generation plans. Moreover, the community is in the process of completing a five-year management plan for Ant.

**B.** Describe how the project / programme provides economic, social, and environmental benefits, with particular reference to the most vulnerable communities, and vulnerable groups within communities, including gender considerations. Describe how the project / programme will avoid or mitigate negative impacts, in compliance with the Environmental and Social Policy of the Adaptation Fund.

This project will provide economic, social and environmental benefits throughout its interconnected components. This project will focus on vulnerable communities in the four states of FSM who depend largely on their natural resources for their livelihoods and who are already facing the negative impacts of climate change. These stakeholders (including

mostly small-scale farmers and artisanal fishers and low income families) constitute more than 50 percent of the population, and approximately 60 percent of those are women and children.

Economic Benefits: As has been highlighted earlier in this proposal, the residents of the



Nahlap, FSM. Photo © Alyson Gombos

FSM remain largely dependent on ecosystem services for income and subsistence. In addition to incomegenerating activities, subsistence livelihoods are prevalent throughout the country. According to the 2010 census, of the country's total labor force of around 32,000, about one in five self-reported as being engaged in the informal subsistence sector (Office of Statistics, Budget and Economic Management, Overseas Development Assistance. and Compact Management, 2010)<sup>21</sup>. Under Objective 1 this project will support more effective protected area management, resulting in improved food security through improved coastal ecosystem health strategies and resource use restoration and rehabilitation of coastal ecosystems to enhance the resilience of ecosystem services such as the protection of coral reefs from sediment runoff to cope with the impacts on corals from rising temperatures. Moreover, recent studies have concluded that well managed MPA's could lead to

healthier stocks due to reduced fishing pressure that may result in spill over of adult fish into adjacent fishing grounds<sup>22</sup> therefore providing for increased food security among populations around the MPA. Objective 2 will also improve food security and marine ecosystem health by strengthening near shore fisheries management.

<sup>22</sup> Vandeperre, F., Higgins, R. M., Sánchez-Meca, J., Maynou, F., Goñi, R., Martín-Sosa, P., Pérez-Ruzafa A., Alfonso P., Bertocci I., Crec'hriou R., D'Anna G., Dimech M., Dorta C., Esparza O., Falcón J.M., Forcada A., Guala I., Le Direach L., Marcos C., Ojeda-Martínez C., Pipitone C., Schembri P.J., Stelzenmüller V., Stobart B., Santos R.S. (2011). Effects of no-take area size and age of marine protected areas on fisheries yields: a meta-analytical approach. Fish & Fisheries, 12(4), 412–426.

<sup>&</sup>lt;sup>21</sup> Federated States of Micronesia (2014) *Fifth National Report to the Convention on Biological Diversity*. Palikir, Pohnpei.

Social Benefits: Whereas the food and economic value of coral reef species is evident: the cultural value of traditional activities is often over-looked and is one of the most essential and important benefits of healthy and functional coral reefs to FSM communities. Communal fishing, sharing of resources, and the physical demands of reef fishing and gleaning are important to societies adjacent to coral reefs, and the value of these activities cannot be replaced by the provision of canned and imported foods alone<sup>23</sup>. As coastal communities depend heavily on their local fishery, the fishery then becomes the key to community sustainability. An intact fishery will therefore lead to increased societal cohesion which in turn increases the health and well-being of community members. Through community-led projects to protect the marine environment on which they depend, traditional conservation methods will be prioritized therefore strengthening and legitimizing local cultural values. Moreover, during recent stakeholder consultations it was suggested that efforts for conservation need to build the support of traditional leaders (empowerment) in conservation efforts. Involving them will help with enforcement, compliance and maintains traditional ways of life while building commitment within communities for biodiversity conservation. Community ownership and community driven projects must reflect the Micronesian culture of sustainable resource use<sup>24</sup>.

Environmental Benefits: The environmental benefits of this project are the maintenance of the resilience of marine ecosystems to the impacts of climate change, by reducing current and predicted pressures and stressors. This will ensure that the ecosystem services currently provided, such as protection from storm damage and erosion and the provision of food resources, are maintained in the face of a changing climate regime.

Vulnerable Groups and Indigenous Peoples: This proposal focuses on the residents of the FSM who depend on the marine environment for their economic and social well-being. Their dependence on subsistence fishing and farming makes them extremely vulnerable to the effects of decreased accessibility and a rapidly disappearing abundant fishery. Moreover, as women carry more of the domestic responsibilities of the home, including responsibility for the health and well-being of their families, this renders them even more vulnerable to the effects of decreased subsistence proteins and higher dependence on a cash economy with which they have little participation.

The people of the 4 states of the FSM, Pohnpei, Kosrae, Chuuk and Yap, are all Indigenous to their islands and are the focus of the entirely of this project. All environmental and social safeguards put in place for this project will be focused on the residents of the coastal communities of all 4 states and therefore the Indigenous Peoples of the FSM. MCT's newly adopted E&S Policy clearly outlines its focus on protecting and enhancing the lives of vulnerable community members. In particular Principle 11: Indigenous Peoples, Marginalized and Vulnerable Groups. Under this principal, MCT will not design or implement projects that are inconsistent with the rights and responsibilities of Indigenous Peoples and other applicable international instruments relating to

<sup>&</sup>lt;sup>23</sup> Richmond, Kostka, Idechong (2009). *Reef Ecology and Conservation*.

<sup>&</sup>lt;sup>24</sup> Federated States of Micronesia (2014) *Fifth National Report to the Convention on Biological Diversity*. Palikir, Pohnpei.

indigenous peoples. MCT will assess and consider particular impacts on marginalized and vulnerable groups and shall avoid imposing any disproportionate adverse impacts on these groups. In October of 2016 and in conjunction with the development of the MCT Gender Policy, all MCT staff attended a training workshop to become familiar with the policies and to understand how to properly understand and use the new Gender Screening Document (attached).

Gender Considerations: As is stated above, as women are more burdened with the domestic responsibilities of the home including the health and well-being and food preparation for the family, they are more vulnerable to the effects of declining fisheries. MCT recognizes this extra vulnerability and considers it at the core of its conservation efforts. Effective management and conservation of natural resources and biodiversity is only attainable when the needs and interests of both women and men are fully recognized in the planning and implementation of activities and interventions. In any conservation activity, the likelihood of success is enhanced if the needs and roles of both women and men are taken into account. The unique roles men and women play in their communities lead to different bodies of knowledge about the environments around them. Women's and men's roles, responsibilities and opportunities affect how they use and manage natural resources and gender relations influence how households, communities and institutions are organized, how decisions are made, and how resources are used, accessed and controlled. Because of the nature of their work, many women are also affected differently and more strongly by environmental degradation. The recognition of the different impact of development on women and men, and the realization that not all women and men are affected equally is a crucial concept in sustainable development. Increasing women and other marginalized group's participation in decision-making will ensure greater success and sustainability of projects while properly safeguarding natural resources and enhancing the shared benefits of their careful use.

MCT has begun work on a proposed gender policy and anticipates a favorable response to its recently submitted application to the Adaptation Fund for technical assistance in completing it. MCT recognizes that to strengthen its role as an effective bridge between the international conservation community, development partners, and Micronesian communities and governments it is important to involve both women and men equally in the planning and management of biodiversity, conservation, and related sustainable development for the people of Micronesia.

MCT's Gender Policy will establish a commitment to gender equality and the empowerment of women, establishes a policy framework and operating principles, and outlines priority areas of action for the institution. Moreover, the following principles underpin MCT's commitment to empowerment, protection, and participation of females and males in their communities:

*Pursue an inclusive approach to foster equality:* While MCT will be sensitive to and respectful of local polices and norms, this policy will be inclusive of all women and men, girls and boys, regardless of age, sexual orientation, gender identity, disability status, religion, ethnicity, socioeconomic status, geographic area, or migratory status. MCT will

also be aware of the diversity of households and family structures, which require particular attention to domestic partners, child-headed households, single-person households formed by older adults, and the presence of secondary families formed by single parents within extended households. This inclusive focus will ensure that key gender gaps are reduced in ways that benefit all citizens, not just those who are the most visible, or vocal.

*Ensure accountability:* Promoting gender equality is a shared responsibility and depends on the contribution and collective commitment of all staff. MCT will hold its selfaccountable for implementing this policy by defining concrete quantitative and qualitative results

*Build partnerships*: MCT will work with their partners to ensure that efforts to mainstream gender into MCT's operations are coordinated and non-duplicative.

Please note MCT's proposed Gender Logic Model below:



# MCT's Gender Logic Model

As a 'Deeply Micronesian" entity, per its Strategic Action Plan 2016-2018 value proposition, MCT supports community/state/national level efforts carried out in culturally appropriate ways. Micronesia is predominantly a matrilineal society where women and women's groups play a strong role in mobilizing community action as well as in decision-

making. Given past and current successes in its partnership with women's groups in conservation projects in Micronesia, and taking into consideration their varied and vital roles as producers and gathers as well as following its own proposed Gender Policy, MCT will continue to support women's leadership in the communities, municipalities, states and national governments to ensure that project activities are successfully and sustainably carried out. MCT will also ensure that the application of the climate change adaptation tools under Objective 3 will be gender-sensitive, ensuring equal opportunities for

participation between men, women and the youth in the communities.

MCT will ensure that the Learning and Knowledge Management framework developed for this project will capture and address any gender issues that negatively affect climate adaptation efforts. Importantly, the project will use participatory monitoring approaches that capture the differences in opportunities, risks and benefits for women and men that result from the adaptation process. The monitoring will also aim to capture gender differences in changes in resilience over the life of the project, and how these relate to other social, ecological, political and economic drivers of vulnerability to climate change. As in past and current efforts, youth groups will be particularly targeted with an emphasis on fostering interests and opportunities for young girls to engage in adaptation outreach, planning and actions.

This project is designed to include the



implementation of concrete interventions and activities involving communities. Successful interventions will result in increased resource availability, access to sources of protein and other nutrition, opportunities for income-generation and other tangible benefits for the islands' residents. Moreover, the effective management of key ecosystems and adaptation to climate change impacts in critical areas depends, in the Micronesian context, on the establishment and implementation of the appropriate combination of interventions.

**C.** Describe or provide an analysis of the cost- Describe or provide an analysis of the cost-effectiveness of the proposed project / programme.

The cost-effectiveness and sustainability of the proposed project involves two key elements: the costs and benefits of the actions funded and the costs and benefits of the re-granting/enhanced direct access delivery method. Given the remoteness of the islands, and the costs associated with purchasing and transporting hard materials and supplies to the thousands of vulnerable communities in the FSM, MCT and its technical and implementing partners have adopted ecosystem-based climate change adaptation as the preferred approach for community-based actions. We have developed and implemented several programs and projects to further this approach with demonstrable success. These programs and approaches require lower levels of technical and financial inputs and yield tangible improvements in both ecosystem and social resilience. The LEAP process and examples of past projects that have been supported by MCT and described in detail in the Objective 3 portion of this concept describe eco-system based actions that have been successful in Micronesia.

IUCN has issued publications analysing the effectiveness and cost benefits of ecosystembased adaption, finding green solutions effective and often also resulting in complementary benefits, thus increasing the value and sustainability of the actions. The Nature Conservancy (TNC), IUCN and other technical partners have also conducted costbenefit studies for adaptation strategies selected by target communities across Micronesia using the LEAP process, considering grey and green solutions.

The preliminary results of the Micronesia-specific cost-benefit analysis work show that adaptation strategies such as restoration of watersheds bear significant positive results. Example studies are attached here. The work conducted also shows that, in addition to the primary adaptation objective, increased water security in a watershed restoration project for example, ecosystem-based approaches also result in complementary benefits, such as reduced erosion, improved water-quality, and enhanced coral reef health. And for a smaller investment in finances and other resources than hard, infrastructure or grey solutions.

Activities under Objectives 1 and 2 will build from existing government structures, thus employing a cost-effective and sustainable approach for MPA management and enforcement. For Objective 1 this will be accomplished by embedding personnel within the executing entity(ies), which are national and state government agencies, to coordinate and spearhead the work of starting up and implementing the FSM national protected areas network and its constituent state-level protected areas networks. MCT envisions that once the project is complete, these positions will have become permanent positions within these agencies funded by national budgets. Under Objective 2, MCT will provide training and material support to existing state government bodies responsible for enforcement of near-shore fisheries policy and management. This is a cost-effective approach as it does not duplicate government efforts, but rather builds capacity within the existing government system. MCT and its Pacific Islands Managed and Protected Areas Community (PIMPAC) partners also rely on local capacity and expertise to facilitate training activities and peer-learning, rather than depending on outside experts and consultants, thus strengthening local capacity and minimizing costs.

Because communities adjacent to and benefiting from the adaption work are best positioned to implement and sustain the work, MCT will deploy a portion of the AF funds via enhance direct access/re-granting. MCT intends to leverage the PFG to conduct detailed analysis of the costs and benefits of its selected approaches. However, for this concept MCT considered the following: Micronesian communities and local grant recipients currently do not have the absorption capacity to design and implement sound projects of more than \$100,000. MCT's decade of grant-making experience shows that projects of \$35,000 to \$100,000 have the most impact and that communities can handle these amounts without causing dissent and social problems. Larger grants require technical and financial management capacity beyond what community members, especially the most vulnerable groups, can effectively provide. Additionally, larger grants usually attract unhelpful members of society who look to find ways to personally gain from such programs/projects. The experiences of the Global Environment Facility-Small Grants Program and other donor entities in the FSM corroborate this assertion.

As the FSM contains 607 islands and stretches across almost 3 million square kilometers of the Pacific, the tools and processes we employ are those that can be scaled up and/or replicated across the country without major equipment or costs. Activities in smaller/rightsized projects also prove more amenable to adaptive management when necessary and can be more practically replicated in other communities across Micronesia. Smaller/rightsized projects also compel communities to practice innovation, to find ways to provide inkind contributions, and to leverage additional resources to the project activities. Conversely, providing larger and/or inappropriate grants to local communities would certainly lead to more dependency on project funds and could lead to the design and implementation of project activities which cannot be maintained and sustained by the participating communities beyond the project period.

Given the above, this concept includes an enhanced direct access approach to a small grants program under Objective 3. Through these targeted small grants, communities will have access to appropriate and sufficient support to assess vulnerabilities to climate impacts and design ecosystem-based activities to address these threats. This is a more efficient and appropriate approach to supporting community activities than the traditional government assistance model.

In addition, MCT and its partners continue to work to advance ongoing sustainable financing efforts related to the Micronesia Challenge and its associated efforts. Through sustainable financing mechanisms such as the FSM's Micronesia Challenge Endowment Fund and the establishment of consistent local funding streams, MCT and its partners will sustain resource management and climate adaptation initiatives (such as this proposed concept) beyond their periods of performance. The Micronesia Challenge Business Plan (available upon request) identifies multiple sources of funds, including government budgets, the FSM MC endowment, international donor grants as well as the establishment of a national protected areas fund from tourism and fisheries fees. The model is a diversity of funds supporting the protected areas system including all ecosystem based adaptation activities. Moreover, each of the states are creating state

level endowments as part of their protected areas laws to also provide further resources. There are a number of different mechanisms working together to ultimately sustain the protected areas and all adaption activities associated with the protected areas and the fisheries management effort. See below FSM Endowment Model for more information about that aspect of the funds. Because the FSM's participation in the Micronesia Challenge Endowment funding program is contingent upon the FSM PAN and Country Program Strategy both being operational and meeting the Micronesia Challenge Steering Committee's standards, the activities in objectives 1 and 2 of this project themselves will result in the availability of sustainable financing for this work beyond the life of the AF project. An effectively implemented PAN will result in sustainable financing. Finally, MCT's core business, per its mission statement is: "We build partnerships, raise and manage funds, influence policy, and provide conservation and financing expertise." MCT's new Strategic Action Plan also prioritizes Climate Resilience as one of its key Impact Areas. Thus, fundraising and providing technical support for climate change adaptation work and projects such as those proposed here represents an organizational priority and will represent a significant portion of MCT's non-AF, work and budgets for the foreseeable future ensuring the sustainability of project results.



# FSM Endowment Model<sup>25</sup>

Endowment (\$M	2008	2009	2010	2011	2012	2013	2014	2015	2016	2017	2018	2019	2020
Contributions	-	-	2.2	3.8	2.8	2.8	2.8	2.8	2.8	2.8	2.8	-	-
Returns	-	-	-	0.2	0.5	0.7	1.0	1.3	1.5	1.8	2.1	2.4	2.5
Payouts	-	-	-	0.0	0.1	0.3	0.5	0.6	0.8	1.0	1.2	1.3	1.5
Total	-	-	2.2	6.1	9.3	12.5	15.9	19.3	22.8	26.5	30.2	31.3	32.3

<sup>&</sup>lt;sup>25</sup>From "FUNDING THE MICRONESIA CHALLENGE: A REGIONAL PLAN FOR SUSTAINABLE FINANCE Part 2 of 3 of The Micronesia Challenge's Sustainable Finance Project". Carried out for the Micronesia Challenge Regional Coordination Office with the financial and technical assistance of Micronesia Conservation Trust and The Nature Conservancy. December 15, 2010 (Updated February 27, 2012)

**D.** Describe how the project / programme is consistent with national or sub-national sustainable development strategies, including, where appropriate, national or sub-national development plans, poverty reduction strategies, national communications, or national adaptation programs of action, or other relevant instruments, where they exist.

This project concept is consistent with the following FSM national government policies, laws, and international commitments:

- FSM's Nationwide Integrated Disaster Risk Management and Climate Change Policy
- Public Law No. 18-43 which corresponds to the FSM's Nationwide Integrated Disaster Risk Management and Climate Change Policy
- FSM's commitment to the United Nations Framework Convention on Climate Change
- FSM's commitment to the United Nations Convention on Biological Diversity
- FSM 5<sup>th</sup> National Report to the Convention on Biological Diversity
- The Micronesia Challenge
- Sustainable Development Goals
- The Pacific Framework for Regionalism
- The Paris Agreement

There are a limited number of sub-national development plans or relevant sectoral plans and strategies in the FSM. Those that do exist and which the proposed project is consistent with are:

- Chuuk State Biodiversity Strategy and Action Plan
- Kosrae Strategic Development Plan 2014-2023
- Kosrae Shoreline Management Plan
- Kosrae State Biodiversity Strategy and Action Plan
- Pohnpei State Strategic Development Plan -Planning for Pohnpei's Sustainable Future: 2023 and Beyond
- Pohnpei State Biodiversity Strategy and Action Plan
- Yap State Biodiversity Strategy and Action Plan

In 2013, the FSM government enacted Public Law No. 18-43 as well as approving the Federated States of Micronesia's Nationwide Integrated Disaster and Climate Change Policy (the "CC Policy"). The combination of the law and CC policy introduces certain legal obligations for departments and agencies of the National Government in relation to climate change. The act and the CC Policy provide the overarching framework for further detailed legislation on climate change, and is part of the FSM's commitment to the United Nations Framework Convention on Climate Change (UNFCCC).

This proposal aligns with the FSMs Intended Nationally Determined Contributions (INDC) under the UNFCCC to reduce greenhouse gas emissions. The FSM unconditionally committed to reduce by 2025, 28% its GHGs emissions below emissions in year 2000.

Further and subject to the availability of additional financial, technical and capacity building support from the international community, the FSM could achieve by 2025 an additional reduction up to 35% below emissions in the 2000 base year. Three of the INDC necessary assumptions and conditions under their INDC commitment are addressed by this proposal through human, technical and institutional capacity development in:

- vulnerability assessment
- adaptation needs evaluation and prioritization
- climate finance access, mobilization and disbursement.

The proposed project directly addresses the Strategic Outcomes (2013-2023) identified by FSM's government in its CC Policy, specifically the following elements of the policy:

### Economic resilience

- Robust agriculture, forestry and fisheries sectors that are able to rapidly recover from hazards and positively adapt to changing environmental circumstances
- Reduced reliance on imported commodities

# And under **Climate Change Adaptation**:

- . Enable adjustments in natural and human systems in response to actual or expected changes in the climate or its impacts in order to moderate harm or exploit beneficial opportunities.
- . Adapt development and economic activities to gradual changes in average temperature, sea level, ocean acidification and precipitation.
- Reduce and manage the risks associated with more frequent, severe and unpredictable extreme weather events.

The project further aims to expand and strengthen the implementation of FSM's protected area network by establishing state-level networks in areas of biological, cultural, and ecosystem significance in places where they currently do not exist, and strengthening the effective management of established protected areas. Building on existing government institutions at the different levels, the project will foster inter-ministerial and cross-sectoral coordination on climate change adaptation issues. These aspects of the project directly support the FSM's biodiversity goals as established in its National Biodiversity Strategic Action Plan, developed as part of the FSM's commitment to the United Nations Convention on Biological Diversity. Specifically, the project supports the following Themes:

**Theme 1: Ecosystem Management:** A full representation of FSM's marine, freshwater and terrestrial ecosystems are protected, conserved and sustainable managed, including selected areas designed for total protection. Objectives 1: (National and state protected area networks fully functioning), (Climate change vulnerability reduced in at least eight communities), Objective 2: (National and state protected area networks fully functioning), and Objective 3: (Climate change vulnerability reduced in at least eight communities), of this proposed program support this Theme. **Theme 4: Agro biodiversity:** The conservation and sustainable use of Agro biodiversity contributes to the nation's development and the future food security of the FSM. Objective 3 of this proposed program supports this Theme.

**Theme 5: Ecologically Sustainable Industry Development:** Economic development activities in the FSM meet the needs of the population while sustaining the resources for the benefit of future generations. Objectives 2 and 3 of this proposed program support this Theme.

**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. All Objectives of this proposed program support this Theme.

As described above, the states have jurisdiction over the natural resources, thus each state in the FSM also developed State Biodiversity Strategic Action Plans. Objective 1 activities are aligned with all five of these planning documents. In addition, each state has a fisheries plan, either as a standalone document or incorporated into broader economic/social development plans. More information about these sub-national plans will be provided in the full proposal.

In addition to these FSM specific standards, this project also supports the Micronesia Challenge. In early 2006, the Chief Executives of the U.S. Commonwealth of the Northern Marianas Islands, FSM, the Republic of the Marshall Islands, the Republic of Palau, and the U.S. Territory of Guam signed the Micronesia Challenge. The Micronesia Challenge is a shared commitment to effectively manage and protect at least 30 percent of nearshore marine resources and 20 percent of the terrestrial resources across Micronesia by 2020. The Micronesia Challenge was a catalyst for creating a regional web of mutually reinforcing projects, programs, and peer-learning networks to improve the management and ecosystem condition of the natural resources Micronesians rely on. Reflecting the region's diverse resource tenure systems and traditional management practices, national and sub-national government agencies with policy, regulatory, and enforcement mandates are partnered with non-governmental organizations (NGOs) with conservation and community outreach and mobilization skills to work with communities and traditional leaders to manage resources, conserve biodiversity, and increase ecosystem and community resilience to climate change. International universities, institutes, and conservation organizations provide scientific knowledge and support, while regional peerlearning networks connect resource managers and NGOs from across the Micronesia Challenge, functioning as capacity building and knowledge sharing platforms.

As described in this concept, MCT and its partners plan to build on this existing framework of initiatives by actively involving NGOs, government agencies, traditional leaders and communities in each of the three project Objectives.

**E.** Describe how the project / programme meets relevant national technical standards, where applicable, such as standards for environmental assessment, building codes, etc., and complies with the Environmental and Social Policy of the Adaptation Fund.

This project reflects identified national technical standards of the FSM. This project is directly aligned with the Climate Change Policy of the FSM 2009 that outlines best practices for technical and infrastructure solutions to climate change risks. Only ecosystem based projects will be supported by Objective 3 adhering to the following guidelines from the CC Policy:

# Adaptation:

a. All development activities in FSM to take into account projected climatic changes in the design and implementation as stipulated in the FSM Strategic Development Plan/Infrastructure Development Plan (SDP/IDP);

b. To use eco-system based approaches where applicable

c. To encourage and strengthen the application of traditional knowledge on conservation practices and other relevant areas.

d. To develop and implement appropriate strategies to improve food production and other relevant sectors.

Technology Transfer:

- a. To optimize the use of local technologies where available.
- b. To identify technology that is locally appropriate.
- c. To enhance easy access to, and sustainable use of new technologies

All potential projects will be screened for E&S risks following the MCT "Project Risk Assessment and Management Tool", and projects identified as Category A, "Projects with the potential to cause significant adverse social and/or environmental impacts that are diverse, irreversible or unprecedented", will not be pursued or funded by this program. The MCT E&S indicators directly reflect the FSM Environmental Impact Assessment Regulations developed to implement the Federated States of Micronesia Environmental Protection Act. In this way, this project will directly comply with the regulations and standards as stated by the FSM government EIA documents. While the National Infrastructure Development Plan FY2016 – FY2025 outlines strategies for their development, the FSM currently does not have official National Building Code Regulations. As none of the project activities will include major infrastructure development, the project will easily comply with any standards as they are developed.

MCT projects adhere to the objectives and requirements of its Environmental and Social Principles. In so doing, they will seek to i) strengthen the social and environmental outcomes of projects; ii) avoid adverse impacts where possible, and where unavoidable, apply the mitigation hierarchy of minimisation, mitigation and compensation / offset; and iii) strengthen MCT and its executing entities, grantees, sub-grantees and partners' capacity for managing social and environmental risks and impacts. MCT will only support projects that comply with national law and obligations under international law, and will

apply the more stringent standard. MCT will work in a collaborative manner with regional, national, and local partners. MCT will ensure that grievance mechanisms are in place so that individuals and communities potentially affected by MCT supported programmes have access to effective mechanisms and procedures for raising concerns about the social and environmental performance of a project.

All MCT projects are screened for E&S risks using the procedures, documents, tools and templates that are embedded in MCT's Policy and Operations Manual. MCT has also developed a 'Project Risk Assessment and Management Tool' which has been expanded to include the identification, assessment, and management of E&S risks. Project E&S risks will be categorized as follows:

*Category* A – Projects with the potential to cause significant adverse social and/or environmental impacts that are diverse, irreversible or unprecedented.

Category B – Projects with the potential to cause limited adverse social and/or environmental impacts that are few in number, generally site-specific, largely reversible, and readily addressed through mitigation measures.

Category C – Projects that include activities with minimal or no risks of adverse social and environmental consequences.

The activities of this proposal, particularly Objective 1, will strengthen National and State standards for the development of protected areas networks. This project will continue to support these developments in conjunction with both National and State Governments, the State Environmental Protection Agencies, FSM Department of Resources and Development, State Departments of Marine Resources and the multitude of stakeholders involved in this work. The FSM states of Kosrae and Pohnpei have enacted legislation for the operation of state government-supported protected areas networks. Additionally, the states of Yap and Chuuk have developed protected areas network legislation/policy frameworks, currently under consideration in the state legislatures, to organize government-level assistance to municipal and community resource managers. Likewise, the national government is considering a draft national protected areas network framework and an associated country program strategy.

Further plans for adherence to National and State technical standards will be identified in the project monitoring and evaluation plan to be developed as part of the full proposal.

**F.** Describe if there is duplication of project / programme with other funding sources, if any.

While many of the activities outlined in this concept align with and/or will build on past and ongoing efforts, MCT and its national executing agencies and local grantees will ensure efforts are not duplicated with other funding sources. Moreover, MCT is both aware of and committed to discovering potential synergies that exist between projects that could be funded through the AF opportunity and those that are either already being implemented or on the horizon in the FSM. For example, projects (listed below) such as the Implementation of Micronesia Challenge and Climate Adaptation Plans for Forest Areas in FSM, Global Climate Change Alliance Adaptation Project and the focus of this AF proposal all feature the development of community-based management plans. As these projects will all be working towards similar outcomes, MCT is committed to maintaining transparent and open communication with project administrators in order to collectively glean best practices to benefit all project proponents to help decrease risk and repetition during project implementation. MCT will also seek to work with other project administrators to determine possible gaps that could be filled by the AF funding. As well, MCT will work with project administrators to identify opportunities to share together at public events, conferences and meetings and support the outcomes of each other's projects.

Current initiatives in place in the FSM that are already supporting the management of protected areas include:

- "Supporting more effective natural resource management in Micronesia Project" with funding from the David and Lucile Packard Foundation, Margaret A Cargill Foundation. Past grants from these donors have allowed MCT to work in more than 30 sites and communities across the region. This funding is currently supporting the following local projects:
  - . Enhancing Montoring Surveillance and Controll on Ant Biosphere Reserve in Pohnpei, FSM
  - . Mobililizing MPA Communities to Increase Adaptive Fisheries Management Capacity in Pohnpei, FSM
  - . Supporting Depehk Takaiou and Lenger MPAs as Model Sites in Pohnpei, FSM
  - . Expansion, Maintenance, Visualization of the Micronesia Challenge Coral Reef Monitoring Database
  - . Ensuring Effective Biodiversity and Ecosystem Management in Kosrae
  - . Update the Marine Protected Area Management Effectiveness (MPAME) Tool and provide training and funds for implementation in all 4 FSM states
  - Development of a comprehensive fisheries management plan for the FSM
  - . Support increased financial and human capacity academic scholarship funding.
    - Organizational capacity building for conservation organizations in the FSM.
- "Implementing Protected Area Networks and Improving Fisheries Management in Micronesia" funded by Oceans5 that is supporting the development and implementation of robust community outreach and media campaigns to garner widespread support.
- "Building the Resilience of Communities and their Ecosystems to the Impacts of Climate Change in Micronesia and Melanesia" funded by the German Government (BMU-ICI) through The Nature Conservancy (TNC) is supporting a number of adaptation projects across the region. In the communities of Tamil in Yap and Malem in Kosrae, funds will provide the foundations for the development of MPA's.

MCT has a positive record of coordination and collaboration and is consistently invited to inception and consultation meetings for projects being implemented in the FSM and the throughout the rest of the region. For instance, the Government of the FSM hired MCT as the local consultant for the development of their protected areas component under their "Ridge to Reef Programme (R2R)" funded by the Global Environmental Facility (GEF5). The MCT Deputy Executive Director was invited to present about the work of MCT and progress made through its implementation of GEF4 project activities at the R2R FSM inception meeting. MCT program staff also participated in the ensuing, detailed discussions planning for GEF5 project activities and strategies for implementation. The partnerships formed by MCT and the R2R program administrators will ensure that our projects are aligned, that MCT will be involved directly with the work of the R2R in the communities and that we will maintain strong communication throughout implementation. MCT prioritizes its relationships with all organizations working towards the same goals in the FSM and will always work to find synergies to develop a truly symbiotic relationship. As well, as the Secretariat of the Pacific Regional Environment Programme (SPREP) FSM Adaptation Fund Proposal: Enhancing the climate change resilience of vulnerable island communities in Federated States of Micronesia has been submitted to the AF, MCT plans to work closely with the project team to the benefit of both projects. As one of the SPREP projects strategies is to provide communities with the resources and technical support needed to adopt and manage concrete climate change initiatives and actions, MCT recognizes numerous places of convergence and will seek to collaborate whenever possible. Moreover, as the SPREP proposal establishes the exact communities and sites that will be the focus of the project, MCT will ensure that funds under our AF project will not duplicate those of the SPREP project funding.

Together with this proposed concept, MCT is applying for a Project Formulation Grant so that it can further consult all relevant stakeholders within each of the FSM states in depth, as well as the FSM national government and other organizations conducting similar work in the country to ensure the activities proposed in the full project proposal will not duplicate other current or planned projects/activities. Additionally, related to Objective 1, FSM has hundreds of communities and MCT and its other partners' efforts are far from working to improve climate resilience within all the vulnerable communities across the FSM.

Below is a table highlighting current major initiatives underway in the FSM. These efforts are complementary to each other and MCT and its partners work regularly with the implementers in the table to ensure that efforts are not duplicated.

Project Name	Objective and Complementarity	Funding	Implement
		Source	er(s)
Ridge to Reef	Improved resilience of PICT's, with a particular focus	GEF	Governme
Programme	on communities through the integrated		nt of the
(R2R)	implementation of sustainable environmental		FSM,
	management, climate change adaptation and/or		
	mitigation and disaster risk. This proposal is not		
	duplicative of this project. MCT was the local		

	consultant on the development of the Protected Areas component of the overall R2R proposal and will continue to coordinate with the National Government on all aspects of implementation. MCT will work closely with implementing partners to ensure that projects funded under the AF small grants scheme and the R2R are not duplicated in any way. In fact, MCT will work to ensure that all projects are complimentary and work together towards the shared project goals.		
Watershed Management Project	Improvement of water quality and reduction of sediment runoff through relocation of piggeries and conversion to dry litter system. This proposal is not duplicative of this project. The Watershed Management project is located in one community on Pohnpei in the FSM and will close by the end of 2016. Under this project farmers are receiving loans to convert piggeries and the community has agreed to limit upland farming in exchange for the construction of a community center. MCT will not fund similar work in this location under its proposed project.	Seacology, GEF Small Grants	MCT & Awak Youth Organizati on
Implementation of Micronesia Challenge and Climate Adaptation Plans for Forest Areas in FSM	Development and implementation of community- based management and adaptation plans. This proposal is not duplicative of this project. This project focuses on improving the management of specific parcels of forests in Kosrae, Pohnpei, Yap and Chuuk. Landowners are partnered with local NGOs to identify and implement targeted forest interventions, such as invasive species management. MCT will not fund similar work in these locations under its proposed project as the AF funds will focus on fisheries and PAN-related funding granting opportunities not forests.	United States Forest Service	MCT and partner NGOs in each of the 4 FSM states
Global Climate Change Alliance Adaptation Project	Build local/community capacity in FSM to be able to adapt to climate change; and to develop climate adaptation plans and implement plans in at least 3 communities (demo sites) in FSM. This proposal is not duplicative of this project. The sites for this project were/are Walung, Kosrae, Pakin, Pohnpei, and Piis Peniau in Chuuk. Under this project local NGOs used the LEAP tools described in the Concept to identify community climate change vulnerabilities and design management strategies to improve resiliency. The experiences of NGOs and communities are relevant to MCT's proposed project,	European Union/Univer sity of the South Pacific	MCT and partner NGOs in Yap, Pohnpei and Kosrae

	particularly 3, but MCT will not fund similar work in these locations again.		
Building the Resilience of Communities and their Ecosystems to the Impacts of Climate Change in Micronesia and Melanesia	Eco-systems based climate change adaptation: community-level adaptation, national and subnational level capacity-building to guide, formation and evaluation of climate change policies and innovative financing mechanisms, such as through PES can support eco-systems based adaptation. This proposal is not duplicative of this project. The sites for this project are Onei, Chuuk; Pakin, Pohnpei; Malem, Kosrae, Tamil, Yap; Melekeok and Kayangel, Palau, and Wotho and Mejit in the Republic of the Marshall Islands. Under this project local NGOs used the LEAP tools described in the Concept to identify community climate change vulnerabilities and design management strategies to improve resiliency. The experiences of NGOs and communities are relevant to MCT's proposed project, particularly Objective 3, but MCT will not fund similar work in these locations again. Funding under this project Tamil Yap and Malem, Kosrae will provide the foundations for the development of MPA's for these communities.	BMU-ICI/The Nature Conservancy (TNC)	MCT, TNC, partner NGOs, technical consultants
Increasing Coastal Resilience of	1.Work with local governments, NGOs and communities to conduct a vulnerability assessment of Pohnpei's manarove forests to identify threats, and create a	US Department of the	US Geological Survey US
Micronesia's Mangroves	mangrove adaptation plan with specific adaptation actions to address threats, 2. Assess the feasibility of funding	Interior, PICCC	Fish and Wildlife
	habitat conservation by marketing carbon credits, 3. Share project results to catalyze similar projects throughout Micronesia. This project is focused on mangrove ecosystems on Pohnpei State, and in addition to the three broad goals above will also support a mangrove protected area in Sokehs, Pohnpei. MCT will not fund similar work under this Concept.		Service, US Dpt of the Interior, TNC, Pohnpei State Gov, MCT, local NOGs, PICCC

FSM Joint National Action Policy and State Action Plans for Climate Change Adaptation and Disaster Risk Management	Assistance to FSM government with the development of this policy and plans. MCT's Concept does not include any activities that are duplicative of this planning project.	EU	SPC, EU, SPREP, FSM OEEM
Supporting more effective natural resource management in Micronesia Project	<ul> <li>Build on the significant successes already achieved in support of the Micronesia Challenge, while advancing fisheries management, expanding necessary support for protected areas networks, and improving protected area effectiveness. Through this project the partners will also strengthen financial and human capacity in the Micronesian conservation community. Through this new project MCT is planning to issue approximately 15 competitively selected grants to partners in the FSM, Palau, and the Republic of the Marshall Islands that support one or more of the following:</li> <li>New protected areas are formally listed as part of jurisdiction PANs</li> <li>New protected area management plans are developed and/or revised</li> <li>Actions under management plans are implemented in protected areas</li> <li>Enforcement is measurably improved at protected area sites</li> <li>Community awareness and behavior change campaigns take place that result in increased</li> </ul>	The David and Lucile Packard Foundation, Margaret A Cargill Foundation	MCT and local partner NGOs

	<ul> <li>At least two people per jurisdiction trained in the use of the Marine Protected Area Management Effectiveness tool, and the tool is routinely used with protected area managers to gauge effectiveness of their efforts</li> <li>Science-to-management research projects conducted that directly influence protected area design and/or management plans</li> <li>It is likely that some of these awards will be to partners in the FSM that will support the country's PAN. However this is not duplicative of MCT's Concept, as Objective 1 specifically focuses on strengthening the PANs at the National and State level by putting in place policies and frameworks. Put another way, MCT's Concept supports the PAN system, while this project will provide targeted support to individual protected areas/site specific projects.</li> </ul>		
United States Peace Corps Small Project Assistance for	Extend USAID's reach to remote communities by supporting, 1. Youth camps to promote awareness, knowledge & skills to become responsible natural resource stewards, 2. Trainings to support	USAID	United States Peace Corps
Ασαριατιοή	capacity for disaster risk reduction, 3. Small-scale community projects that can demonstrate application of climate change & DRR principles. MCT will not fund similar activities in the same locations.		
Coastal Community Adaptation Project	Build resiliency of vulnerable coastal communities to withstand more intense and frequent weather events and ecosystem degradation and sea level rise by, 1. Rehabilitating or constructing new small-scale community infrastructure, 2. Building capacity for disaster prevention and preparedness, 3. Integrating climate resilient policies and practices into land use plans and building codes. MCT will not fund similar activities in the same locations.	USAID	Developme nt Alternative s Inc., USP, Kramer Ausenco Papua New Guinea Limited, FSM OEEM

Pacific	Assistance with risk modelling and assessment tools	WB and	SPC, WB,
Catastrophe	to help better understand, model and assess	ADB	ADB, Gov
Management	exposure to natural disasters and engage in dialogue		of Japan,
and Financing	on integrated financial solutions for the reduction of		Pacific
Initiative	Pacific island countries' financial vulnerability to		Disaster
	natural disaster and climate change. MCT will not		Center
	fund similar activities in the same locations.		

**G.** If applicable, describe the learning and knowledge management component to capture and disseminate lessons learned.

While this section will be more fully addressed as part of the full project proposal submission (based on the detailed follow on consultations), MCT will be developing a knowledge management component as part of the M&E framework for the project. The design of the component will focus on disseminating project successes and lessons learned locally, regionally and internationally through differing mediums and methods. These activities will include products such as: presentations, coordinating and leading workshops, coordinating information between States and the general public, developing peer-reviewed journal articles, working with stakeholders to develop press releases, brochures, pamphlets, and the use of social media. The responsibilities of the National and State Coordinators as well as MCT will entail the implementation of specific activities and development of products as part of the knowledge management aspect of the M&E framework.

MCT recognizes the importance of knowledge management (KM) to enhance impacts and facilitate replication. As such, this project will integrate various KM related actions through the development of its M&E framework. The KM component will ensure the systematic capturing and dissemination of lessons learned and good practices that emerge from the project and a broad range of KM products will be developed (including, case studies, photo stories, posters, and technical reports – these will be in English and in local languages). Moreover, project inception meetings, review and end of project meetings will be planned to ensure that lessons learned are captured and shared.

One of the key KM actions will be to embed a learning mechanism within the small grants component of the project, executing partners in the field, such as Yap Community Action Program, the Chuuk Conservation Society, the Conservation Society of Pohnpei, and the Kosrae Conservation and Safety Organization, will be tasked with monitoring project progress and required to report on lessons and provide qualitative assessments on successes and challenges. As described in Part III D of the Concept, MCT will use its existing suite of project management tools, the Grant Tools, to track individual sub-grantee and project performance.

MCT will share the results of this project with a wide variety of audiences including: national and state-level government agencies, partner non-governmental organizations, and regional and international conservation NGOs and multilateral institutions. At the

regional and state levels, MCT will share project bright spots, lessons learned, and recommended approaches through the Micronesians in Island Conservation Network, the Pacific Islands Managed and Protected Areas Community, and the Micronesia Locally Managed Marine Areas Network. MCT, as a non-voting member of the Micronesia Challenge Steering Committee and frequent attendee/presenter at regional policy forums including the Micronesian Presidents' Summit, the Micronesia Chief Executives Summit, and MCT's sister organization the Association of Pacific Island Legislatures will use these platforms to share the results of the project and cultivate continued support of the Micronesia Challenge. MCT will also continue to share the progress of the Micronesia Challenge and will highlight specific results from this project through either its direct participation at, or through the Global Islands Partnership, at World Bank, United Nations Framework Convention on Climate Change, and the United Nations Convention on Biological Diversity events.

Also, a community of practice will be convened of grant awardees to share experiences, brainstorm solutions to common challenges, and provide a network of support across islands. This community of practice will be integrated into the three peer learning networks that MCT already supports, the Pacific Islands Managed and Protected Areas Community, Micronesians in Island Conservation, and Locally Managed Marine Area Network, Micronesia Node, as well as the Global Islands Partnership. Below is a brief summary of each entity and its role in the proposed project.

**Pacific Islands Managed and Protected Areas Community (PIMPAC):** Under this Concept, MCT and its partners will leverage PIMPAC to share technical and scientific information to guide more effective community climate change adaptation initiatives, ecosystem management activities, and build the capacity of resource managers. PIMPAC's mission is to provide continuous opportunities for the sharing of information, expertise, practice, and experience to develop and strengthen area-based management capacity throughout the Pacific Islands region. PIMPAC does this by providing support to area based management efforts in the region. This includes both land and marine managed and protected areas and aims to support a holistic approach to management from ridge to reef. As a social network, PIMPAC uses four main approaches to carry out its mission. They are: 1) Training and Technical Support, 2) Learning Exchanges, 3) Partnership Building, and 4) Communications/ Information Sharing. PIMPAC is currently co-coordinated by U.S. National Oceanic and Atmospheric Administration (NOAA) and MCT.

Under the Adaptive Management objectives of the PIMPAC strategic plan, capacity development is aimed at moving from management planning into planning that includes learning from experience and modifying approaches based on such knowledge acquisition. One of the main approaches throughout the strategic plan was to develop "jurisdictional teams" that could review the adaptive management process and identify capacity needs through a self-assessment that would be shared with PIMPAC coordinators to drive capacity building efforts (i.e. PIMPAC activities) on the ground. Additionally, the strategic plan also identified the development, training and use of the Marine Protected Area Management Effectiveness (MPAME) tool as a mechanism by

which conservation sites could assess management effectiveness and identify capacity needs. This tool would be used to support adaptive management of site-based conservation.

The SEM objectives of the PIMPAC strategic plan aim to implement new and repeat SE surveys, the results of which will help to understand effectiveness toward achieving the objectives in site plans, establish jurisdictional teams skilled in the SEM-Pasifika monitoring process who actively facilitate the process within their jurisdiction and establish regional and jurisdictional databases (as appropriate) with local teams transmitting data.

Marine biological monitoring has made some significant progress in capacity building, with PIMPAC Advisors and Mentors, Dr. Pete Houk, University of Guam Marine Lab (UoGML) and Dr. Yim Golbuu, Palau International Coral Reef Center (PICRC) leading efforts across the region for monitoring and capacity building for data collection, analysis, management and communication. Monitoring methods are standardized and teams have been trained in data collection and analysis. Additionally, teams are developing and using status of the reef reports to communicate about trends and drivers in reef health and discuss management options. Linking socioeconomic monitoring to management effectiveness has been identified by PIMPAC partners to be maintained as a priority topic area for future training that will also be supported through the proposed concept.

The objectives within the PIMPAC strategic plan for Climate Change Adaptation (CCA) focus on building local partner capacity to carry out and complete vulnerability assessments (e.g. local early action plans). Additionally, there is an effort to support the development and/or understanding of complex climate issues and potential actions to address them specifically in regards to coastal erosion, fisheries and water resources. Sharing lessons learned, tools, and experience to catalyze efforts and successes is continuously promoted. CCA efforts have been completed through a wide variety of partners and funding mechanisms using PIMPAC as the framework for building capacity within projects.

Enforcement is one of the newer topic areas for PIMPAC efforts. However, it is one of the most robust in both sub-national, national, and regional interest and complexity. PIMPAC Objectives for Enforcement revolve around 4 major topic areas: 1) Planning, Implementation, and Monitoring of Regional Capacity Building Activities, 2) Community Based Compliance and Enforcement, 3) Remote MPA Enforcement, and 4) Communications. A main effort of this support is aimed at developing a toolkit that supports assessments to define capacity needs, as well as guidance on how to develop co-management enforcement/compliance frameworks in the islands. Training materials, guides, case studies, laws and best practices would be shared from existing programs and/or be developed for training modules to support these efforts. An emphasis would also be placed on building community conservation officer (CCO) capacity to collaborate with state and national government. Additionally, MPA enforcement for more remote islands would be supported through reviews of innovative ways to address their unique

challenges. Finally, support would be provided to help build effective communications to ensure that enforcement officers have a basic understanding of conservation concepts and can effectively communicate these concepts, laws, and rules to the public.

**Micronesians in Island Conservation (MIC):** Through MIC, MCT and its partners will share policy and management recommendations informed by the results of the activities proposed in the Concept. MIC is a peer-learning network for conservation leaders of government agencies, NGOs, and local/regional initiatives, to leverage financial and human resources for greater conservation impact across Micronesia. Its purpose is increasing the success, effectiveness, and number of conservation leaders in the nonprofit and government sectors. MIC's approach is to create a support structure that fosters shared self-directed learning to address priority organizational and technical needs. In the years since its inception in 2002, MIC has contributed significantly to advancing major conservation and climate adaptation initiatives at the site, national and regional levels – particularly supporting the implementation of the Micronesia Challenge. MCT currently coordinates MIC.

Locally Managed Marine Area Network, Micronesia Node (LMMA Network): MCT and its partners will continue sharing knowledge, science, and recommendations for improved ecosystem management through the LMMA Network. The LMMA Network is a group of practitioners involved in various marine conservation projects around the globe who have joined together to increase the success of their efforts. The LMMA Network is a learning network, with participating projects using a common strategy and working together to achieve goals. Members share knowledge, skills, resources and information in order to collectively learn how to improve marine management activities and increase conservation impact.

**Global Island Partnership (GLISPA)**: MCT leverages GLISPA's international outreach and communications networks to promote the Micronesia Challenge. GLISPA provides a global platform that enables islands to work together to develop solutions to common problems and to take high-level commitments and actions that address these global challenges.

The project will also identify, analyze, and share lessons learned that might be beneficial in the design and implementation of similar future projects in FSM as well as elsewhere in the Pacific. Further details and costing of KM related outputs and activities will be provided in the full project document

**H.** Describe the consultative process, including the list of stakeholders consulted, undertaken during project preparation, with particular reference to vulnerable groups, including gender considerations, in compliance with the Environmental and Social Policy of the Adaptation Fund.

MCT has had the opportunity to consult and receive feedback on this concept from the four Governors of each of the FSM states, from the relevant national, state and local government agencies, as well as from private and civil society representatives.

Specifically, MCT attended and was able to present its concept at the 5<sup>th</sup> FSM Environment and Disaster Risk Management Conference held in Chuuk from August 15<sup>th</sup> -19<sup>th</sup>, 2016. MCT was able to gather feedback and overall support for its concept from the 80 participants at the conference. Below is the list of stakeholder organizations consulted:

State Governors FSM Department of Resources and Development College of Micronesia – FSM Rare, Inc. The Nature Conservancy FSM Office of Environment and Emergency Management FSM Philatelic Bureau FSM Department of Transportation, Communications, and Infrastructure FSM Department of Education Secretariat of the Pacific Community FSM Pacific Adaptation to Climate Change Project **UN Small Grants Program** FSM Department of Health and Social Affairs FSM Department of Foreign Affairs Chuuk Department of Marine Resources Chuuk Environmental Protection Agency College of Micronesia - Chuuk Campus Chuuk Women's Council Chuuk Conservation Society Chuuk Department of Agriculture Chuuk Historic Preservation Office **Chuuk Budget Office** Chuuk Department of Administrative Services College of Micronesia - Cooperative Research and Extension Chuuk UFO Women's Association Chuuk Chuuk Department of Commerce and Industry Chuuk Attorney General's Office Yap Division of Agriculture and Forestry Yap Environmental Protection Agency Yap Fishing Authority Yap Department of Resources and Development Yap Attorney General Tamil Resources Conservation Trust – Yap Yap Community Action Program Yap Department of Marine Resources Nimpal Challenge Protected Area – Yap Kosrae Island Resource Management Authority Kosrae Conservation and Safety Organization

Kosrae Division of Agriculture Kosrae Visitor's Bureau Kosrae Department of Resources and Economic Affairs Yela Environment Landowners Authority - Kosrae College of Micronesia - Cooperative Research and Extension Kosrae Kosrae Attorney General Kosrae Governor Kosrae Recycling Program Kosrae Women's Association Kosrae Conservation and Enforcement Taskforce Kosrae State Land Court Kosrae State Legislature **Conservation Society of Pohnpei** Pohnpei Environmental Protection Agency Island Food Community of Pohnpei Pohnpei Office of Fisheries and Aquaculture Pohnpei Department of Lands and Natural Resources Pohnpei Office of Economic Affairs and Agriculture Pohnpei Attorney General Pohnpei Division of Fish and Wildlife Pohnpei Women's Advisory Council Madolenihmw Municipal Government Pohnpei Office of Foreign Investment Pohnpei Division of Forestry Pohnpei Farmer's Association Pohnpei Department of Public Safety

In the FSM, the indigenous people of the islands form the vast majority of the population and land and political institutions are in their full control. Still, there are vulnerable groups within the FSM who are sometimes left out of the consultative processes or lack opportunities to contribute their perspectives and needs to decisions that affect them. Those from distant outer islands, for instance, often live so far away from the political centres that transportation to and from their communities is infrequent, especially at certain times of year when the winds and tides make travel dangerous. As well, in the case of protected areas, there is the potential for some fishers to be marginalized and effected negatively through bans on certain types of fish or regulations that prevent them from fishing in their familiar fishing grounds. The risk of neglecting outer islanders or fishers in this way is already a consideration for MCT under our Environment and Social Safeguards Policy (E&S) and is identified under Principals 1, 8 and 11 in particular. During project finalization, MCT will abide by its E&S policy to "prevent, minimize and mitigate any harm to the environment and to people" by ensuring dialogue with vulnerable communities that have been sometimes left out of the planning processes. This will ensure their opportunity to identify actions to be taken to enhance their resilience to the effects of climate change and issues of reduced subsistence fishing and harvesting.

There are five primary governing structures within the FSM: the national government, and the Yap, Chuuk, Pohnpei and Kosrae state governments. Furthermore, each state is divided into a number of municipalities each with representative governments, and traditional/religious leaders also play a significant role at the state and national levels. At

the constitutional/legislative level. responsibilities for climate adaptation initiatives, ecosystem, and natural resource management are shared between the municipalities, states, and the national governments. Each state has jurisdiction of its surrounding natural resources out to 12 nautical miles, and manages its resources through combination of policies, а management resource agencies, and delegation to municipalities. The FSM also has diverse land tenure



systems, and communities across the country own and manage large sections of terrestrial and near shore coastal areas. The national government is also responsible for managing resources from 12 to 200 nautical miles. Given this structure, it is imperative that consultations include both national and state-level stakeholders.

However, the geography of the FSM poses severe challenges to conducting a traditional consultation processes, with the four states separated by hundreds of miles of ocean between each state; over thousands of miles of ocean in total. Air travel is prohibitively expensive and communications technology often unreliable. Because of this and because of the time constraints involved with submitting a concept in time for the most recent deadline, MCT and the FSM Designating Authority opted to depend on recently conducted consultations around climate change adaptation issues and projects to inform the development of this concept paper. This concept was also influenced by the results of FSM National Environment Summits. These Summits happen each year and are a forum where stakeholders from across the FSM share biodiversity and climate adaptation needs and solutions.

One of MCT's most extensive and recent stakeholder consultations involved the drafting of the FSM's 5th National Communication to the United Nations Convention on Biological Diversity. The primary method of data collection to inform the report was a series of two-day stakeholder workshops held in each of the four states of FSM and at the national level, as well as individual meetings with key stakeholders. Over a three month period at the end of 2014 the MCT report team met with over 100 individuals, including representatives from 60 national and state government resource management agencies,

local NGOs, members of communities, traditional leaders, educational institutions, the private sector and regional and international donor and conservation organizations. During these workshops and meetings, stakeholders discussed the FSM's progress towards achieving objectives outlined in its national Biodiversity Strategic Action Plan. As a small island nation, conversations about biodiversity and protected area management also included significant discussions about the impacts of climate change and related community vulnerabilities. These discussions were captured in the 5<sup>th</sup> National Communication, which included sections on the accelerating impact of climate change on FSM ecosystems and communities.

Also, MCT's grantees are required to report at least semi-annually and in these reports are encouraged to suggest future areas of programming and identify specific needs. Moreover, MCT keeps close track of our partners' programs and capacity needs through grant reporting, ongoing site visits, daily emails and Skype and telephone communications as well as participation in mutual workshops and meetings. Below is a list of MCT's current grantees in the FSM. The input and reports from these grantees also informed this concept:

Kosrae Conservation and Safety Organization Yela Environment Landowners Authority Conservation Society of Pohnpei Awak Youth Organization (MCT is a fiscal sponsor) Island Food Community of Pohnpei (MCT is a fiscal sponsor) Chuuk Conservation Society Chuuk Women's Council Yap Community Action Program

Further consultations proposed in the accompanying PFG will serve to garner additional input/support from stakeholders and partners, as well as site-specific information and needs for the proposed AF project.

As stated above, MCT is applying for a project formulation grant to visit each of the FSM states to develop the full project proposal with all relevant stakeholders involved. It is also important to note that MCT is a long-time partner to all the relevant national entities who would be eligible to serve as MCT's executing entity(ies) and is an established grant-making organization with more than a decade of experience administering grants in the FSM. Below are two tables. The first includes an illustrative list of the government stakeholders and the second lists non-government stakeholders MCT intends to consult with to develop the full project proposal:

Table 1: Government stakeholders to be engaged in designing the full project proposal					
Location	Agency	Role			
FSM National Government	Department of Resources and Development	National MC Focal Point. Tasked with coordinating the work of the State MC Focal Points; will be responsible for PAN framework and CPS			

	Office of Emergency and Environmental Management	Will be invited to participate in national-level meetings; drafts of the PAN framework and CPS will be shared for feedback
	Congress, Office of the President, Department of Justice	Will review and provide input and necessary approvals to finalize FSM PAN and CPS
	Department of Agriculture and Forestry	Coordinates and implements measures promoting sustainable land management and agricultural practices
	Environmental Protection Agency	Provides for the protection of land, water and quality of air; supports climate change adaptation programming
Chuuk State	Attorney General's Office	Legal review and enforcement of policies and regulations on natural resource management
	Department of Marine Resources	Responsible for the protection, surveillance and sustainable use of marine resources, enforces marine regulations
	Department of Administrative Services	Administers Chuuk State budget
	Governor's Office	Will review and endorse creation of State-level PAN, listing of any State Pas
	Resources and Development (R&D)	Oversees State Divisions responsible for managing land and marine resources
	R&D Division of Agriculture and Forestry	Coordinates and implements measures promoting sustainable land management and agricultural practices
	R&D Division of Land Resources	Responsible for management of public lands
	R&D Marine Resources Management Division	Management of MPAs for the Yap State. Includes community engagement, data collection and monitoring activities in conjunction with other PA stakeholders
Yap State	Environmental Protection Agency	Responsible for protection of land, air, and ocean resources
	Office of Planning and Budget	Coordinates Yap state agencies to develop and implement state-wide plans for coastal and terrestrial management
	Governor's Office	Will review and endorse creation of State-level PAN, listing of any State PAs
	Yap Fishing Authority	State authority charged to manage sustainable fish stock for the state
	Attorney General's Office	Legal review and enforcement of policies and regulations on natural resource management in Yap
	Kosrae Island Resource Management Authority	Manages and monitors statewide marine areas, enforces protected areas. Sets regulatory framework, manages invasive species, conducts biological monitoring
	Department of Resources and Economic Affairs (DREA)	Oversees marine and land resource management. Responsible for fisheries development in support of sustainable livelihoods and marine surveillance unit.
Kosrae	DREA Division of Agriculture	Responsible for agriculture, including quarantine services. Does model farming, has export promotion programs
State	Kosrae Conservation and Enforcement Taskforce	New attempt at collaboration to enforce existing legislation and regulation for natural resource management in general, and PAs in particular
	Attorney General's Office	Legal review and enforcement of policies and regulations on natural resource management
	Governor's Office	Governor signs legislation for the creation of new PAs under the Kosrae PAN
Pohnpei State	Governor's Office	Can introduce legislation to create new PAs under the Pohnpei PAN

Attorney General's Office	Legal review and enforcement of policies and regulations on natural resource management in Pohnpei. Also responsible for trying cases when violations occur
Office of Fisheries and Aquaculture	Lead State government agency for conservation and restoration of Pohnpei marine ecosystem
Department of Lands and Natural Resources	Issue permits, responsible for approving the establishment of PAs, mandated agency for terrestrial management, including watersheds and mangrove areas
Department of Public Safety, Fish and Wildlife	Enforcement agency for protected areas in Pohnpei, supports community awareness and outreach activities
Environmental Protection Agency	Provides for the protection of land, water and quality of air; supports climate change adaptation programming

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Table 2: Non-government MCT partners to be engaged in designing the full project proposal				
Location	Organization	Role		
Regional	The Nature Conservancy	Technical partner, also funding and/or implementing projects that support the Micronesia Challenge. Specifically, The Nature Conservancy is helping the Micronesia Challenge go further by supplying the scientific know-how and conservation creativity needed to develop new environmental approaches. Will contribute in-kind to MCT's sustainable finance and capacity building activities		
	Rare	Technical partner. Rare's approach includes comprehensive marketing campaigns, called Pride campaigns, to inspire communities to take pride in their natural resources. Rare is supporting Pride campaigns throughout the region in support of the Micronesia Challenge		
	Global Island Partnership	MCT leverages GLISPA's International outreach and communications networks to promote the Micronesia Challenge. GLISPA provides a global platform that enables islands to work together to develop solutions to common problems and to take high-level commitments and actions that address these global challenges		
	Micronesians in Island Conservation	A peer learning initiative for Micronesia's established leaders, emerging pioneers, and dedicated champions in conservation within both the non- profit and government sectors. The network creates a support structure that fosters shared, self-directed learning to address priority organizational and leadership needs of its members. MCT coordinates this network		
	Pacific Islands Marine Protected Areas Community	Provides continuous opportunities for the sharing of information, expertise, practice, and experience to develop and strengthen area-based natural resource managers throughout the Pacific Islands. Supports ongoing training and technical assistance for management planning, socio-economic monitoring, and linking biological monitoring to management effectiveness and enforcement. MCT and NOAA co-coordinate PIIMPAC		
	Locally Managed Marine Areas Network	The network provides information and resources on locally-managed marine areas and community-based adaptive management, and training in project design, monitoring, data management and analysis, fundraising, communications and more.		
	Secretariat for the Pacific Regional Environment Program	Has been charged by the governments and administrations of the Pacific region with the protection and sustainable development of the region's environment. Funds conservation and natural resource management programming in Micronesia, MCT will continue to coordinate programming to avoid overlapping initiatives		

	Global Environment Facility Small Grants Program	Provides small grants to local and community based organizations to promote sustainable resource management, increase climate change resiliency, and promote biodiversity conservation. MCT will continue to coordinate programming to avoid overlapping initiatives; will also continue upon request to act as fiscal sponsors for local groups to implement projects through the Small Grants Program
	Chuuk Women's Council	Coalition of women's associations, implements resource management programming in communities. MCT grantee, potential future grantee
	Chuuk Conservation Society	Conservation and resource management NGO, MCT grantee, potential future grantee
	Kosrae Conservation and Safety Organization	Conservation and resource management NGO, MCT grantee, potential future grantee
	Yela Environment Landowners Authority	Locally-based conservation NGO, MCT grantee, potential future grantee under this project
FSM	Yap Institute of Natural Science	Research organization and scientific partner
	Yap Community Action Program	Conservation and resource management NGO, MCT grantee, potential future grantee
	Waa'gey	Locally-based conservation NGO, MCT grantee, potential future grantee under this project
	Conservation Society of Pohnpei	Conservation and resource management NGO, MCT grantee, potential future grantee
	Awak Youth Organization	Locally-based community NGO, MCT currently acting as fiscal sponsor, potential future grantee under this project

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I. Provide justification for funding requested, focusing on the full cost of adaptation reasoning.

The AF funds will be used to enhance the baseline commitments of the FSM government, local NGO's and community efforts to increase resilience to climate related stressors in the islands. While a number of on-going projects and programmes to increase ecological and community resilience to climate change are making some impact in the FSM, MCT and its partners recognize a gap in both local capacity and funding that will decrease with an award of AF funds. This project addresses short and long-term threats to the FSM marine ecosystem and sustainable food sources and will work in tandem with already existing programmes working towards the same objective such as the Micronesia Challenge. The project will further increase the collaborative efforts between FSM policymakers, local communities and NGO's as well as the continued efforts by scientists and regional organizations to support the work done in the FSM. While vital to the resilience and adaptive capacity of the country, a number of adaptation measures that have yet to be fully funded under current programs will be made possible through the AF funds. Adaptation measures such as integrating alternative livelihoods components and tools into existing community planning processes; conservation and climate adaptation efforts and the development of an institutionalized system for providing technical and financial assistance to FSM protected areas and strengthening the enforcement of near shore fisheries regulations will all be made possible by this proposal.

J. Describe how the sustainability of the project/programme outcomes has been taken into account when designing the project / programme.

MCT is only recommending community-level project sizes and activities which can be supported by MCT, the national executing entity(ies) and grants recipients beyond the life of this project. MCT, the national executing entity(ies), and grants recipients also intend to make sure there are linkages between this project's activities with other projects/programs to ensure they can be sustained. For Objective 3 activities, MCT, its national executing entity(ies) and the grant recipients will encourage and/or require that project proponents include sustainable financing and sustainable livelihoods as specific activities. Objective 1 is designed to support the start-up and initial implementation of national and state protected areas networks, and the FSM's Micronesia Challenge Endowment Fund and other national/state government allocations will support the maintenance of these networks. Lastly, Objective 2 largely calls for training and human capacity building activities which are designed to improve long-term enforcement of near-shore fisheries regulations.

In addition, MCT and its partners are continuing to work to advance on-going sustainable financing efforts related to the Micronesia Challenge and its associated efforts. Through sustainable financing mechanisms such as the FSM's Micronesia Challenge Endowment Fund and the establishment of consistent local funding streams, MCT and its partners are working to maintain resource management and climate adaptation initiatives (such as this proposed concept) beyond the project/programme periods of performance. The FSM's participation in the Micronesia Challenge Endowment funding program is contingent upon the FSM PAN and Country Program Strategy both being operational and meeting the Micronesia Challenge Steering Committee's standards. Thus, the activities in all 3 of the objectives of this project themselves will result in the availability of sustainable financing for this work beyond the life of the AF project. Effective institutionalization of the PANs supports and leads to the establishment of funding streams that guarantee continuity of funding and management. Moreover, MCT expects these positions to be made permanent and covered by regular government budgets into the future providing further sustainability of the project. As well, MCT is currently in the process of applying for accreditation with the Green Climate Fund (GCF) that will provide another long-term source of funding beyond the life of this AF grant.

Finally, MCT's core business as stated in its mission statement is: "We build partnerships, raise and manage funds, influence policy, and provide conservation and financing expertise." MCT's new Strategic Action Plan also prioritizes Climate Resilience as one of its key Impact Areas. Thus, fundraising and providing technical support for climate change adaptation work and projects such as that proposed here is an organizational priority and will represent a significant portion of MCT's work and budgets for the foreseeable future.

**K.** Provide an overview of the environmental and social impacts and risks identified as being relevant to the project / programme.

Beyond the static geographic and logistical challenges of working in the FSM, MCT has identified four potential non-climatic barriers. Below is a short description of each and a plan to manage them:

Sub-grantee implementation. MCT is planning to re-grant a significant portion of project funds to local partners throughout the FSM. As such MCT will not have complete control over sub-project implementation and reporting. MCT, through its Capacity Building Program and site visits, will provide assistance with budgeting, project management, and reporting. In addition to the internal organization capacity needs, MCT will also continue providing opportunities for its partners to grow their organizational and technical skills through MIC, PIMPAC, the Pacific Invasive Learning Network, LMMA Network, the Micronesia Challenge Internship Program, and the Professional Forestry Internship Program. In addition, MCT has been invited to submit a project proposal to the David and Lucile Packard Foundation for a project designed to increase the capacity of MCT's executing partners, thus improving the success on the ground of actions. The purpose of the proposed grant is to increase human and financial capacity to manage natural resources in Micronesia by providing targeted training to MCT's grantee partners in the use of its Grant Tool and integration of their monitoring and evaluation with MCT's systems. It will also deepen the human capacity available to the fields of conservation and climate change adaptation by supporting the Bill Raynor Micronesia Challenge Scholarship Endowment Fund. MCT's experience with its partners in the region has demonstrated that the success of their projects and of conservation and adaptation efforts increases as their monitoring and evaluation and grant management improves. Recent assessments of these partners have shown significant gaps in these areas. Through these networks and programs MCT will provide opportunities for technical training. Technical assistance and ongoing training is part of MCT's regular operations that are supported by multiple donors. MCT always continues to seek new donors and diversify our funding sources

**Community implications.** As outlined in Section C above, a main area of risk/social impact is in providing excessively large grants to local communities. To mitigate this risk MCT is proposing to award small/right-sized grants to local conservation organizations experienced in implementing MCT-funded grants. As also stated above, the project will not include any major infrastructure development activities and the community level work will mostly employ ecosystems-based approaches. As such, MCT does not anticipate any negative environmental impacts. However, during planned consultations to develop the full proposal MCT will discuss potential social and environmental risks and impacts of planned activities and integrate feedback as appropriate into the final project design. The newly developed E & S Policy Screening document is attached as an appendix to this concept.

Delays in Institutionalizing the PANs in the FSM. The FSM national government has A reef fisherman at work in Piis-Paneu. Photo © Javier Cuetos-Bueno PAN policy framework or Country Program Strategy, and two states (Yap and Chuuk) yet to pass the legislation/frameworks currently pending with the state legislatures in those two states to establish state-level PANs. MCT has been invited to directly address this risk by providing technical assistance to government partners in those jurisdictions to put in place the legislation/policies as soon as possible. While there is continuing political support for the Micronesia Challenge, and MCT and its partner The Nature Conservancy have already worked to advance drafts at the national levels in FSM, experience to date shows that ongoing technical assistance and support will be required before the legislation/policies are finalized, adopted and implemented.



Uncertain political commitment for improved state fisheries management. Coastal fisheries in the FSM states are an important source of protein and livelihoods for a significant number of FSM citizens. In Pohnpei alone, fishers account for approximately 20 percent of the population and more than 60 percent of households contain at least one fisher. Therefore, the management of coastal fisheries is a highly sensitive political issue at the state levels. In addition, offshore fisheries are an important source of revenue for the FSM National government and a variety of stakeholders are involved in pelagic fisheries management. Therefore, MCT anticipates that improving enforcement and overall fisheries management will require strong political leadership and commitment at the national and state levels. MCT will address this challenge by systematically involving politicians other stakeholders and throughout the process and TNC, MCT and other local partners have committed to providing technical, logistical and policy development support.

Based on a review and analysis of the Adaptation Fund's 14 core principles, MCT has designated this project as a Category B project. A more in-depth analysis will be undertaken during the full project development. MCT has developed our E&S Policy to reflect that of the Adaptation Fund ESP requirements and therefore by ensuring alignment with our own policies, we are in direct compliance with that of the AF. Moreover, MCT has recently developed the "MCT Guide to Project Performance, Environmental & Social Risks Assessment & Management" (see attached). MCT will apply this process to all projects when they are proposed as part of the review process for projects.

Checklist of environmental and social principles	No further assessment required for compliance	Potential impacts and risks – further assessment and management required for compliance
Compliance with the	X	The project is in full compliance with FSM's
Law		national and state laws and policies. In particular,
		It takes into consideration the resource tenure
		systems of the FSM. MCT has more than 10
		programming and has not had any legal issues as
		a result of the technical activities of its projects
Access and Equity		Given the social makeup of the FSM and the
		immediate and significant role of communities in
		managing their natural resources, MCT plans to
		engage and partner with local NGOs, government
		structures, and communities. Women and youth
		will also be engaged adhering to the MCT Gender
		Policy as well its Environmental and Social
		Safeguards Policy. Specifically, Principal 1:
		Human Rights, Principal 2: Gender, Principal 3:
Marginalized and	v	United Protection
Vulnorable Groups	^	Safeguards Policy, Specifically, the E&S policy
vullierable Groups		protects marginalized and vulnerable groups as
		follows: Principal 1: Human Rights Principal 2:
		Gender, Principal 3: Child Protection, Principal 5:
		Labor Rights and Working Conditions, Principal 8:
		Land Acquisition and Involuntary Resettlement,
		Principal 11: Indigenous Peoples, Marginalized
		and Vulnerable Groups
Human Rights	Х	MCT will adhere to its Environmental and Social
		Safeguards Policy. Specifically, the E&S policy
O a mada n E an situ a mad		refers Principal 1: Human Rights
Gender Equity and		Since this project specifically targets community
Empowerment		ampowerment is critical to project success. The
		risk for not engaging is quite low but MCT will
		track and include specific plans on integrating
		gender. MCT has specific strategies in place ways
		for engaging women in the larger community and
		has experience implementing these strategies
		successfully. MCT will adhere to its Gender Policy
		as well its Environmental and Social Safeguards Policy. Specifically, Principal 1: Human Rights and Principal 2: Gender
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Core Labour Rights	Х	The AF funds will not support activities that would infringe on labor rights. MCT will adhere to its Environmental and Social Safeguards Policy. Specifically, the E&S policy refers Principal 5: Labor Rights and Working Conditions,
Indigenous Peoples	X	As stated above, the indigenous people of the FSM are also the political, social, and cultural leaders of the country – the vast majority of the population is comprised of indigenous peoples. MCT will adhere to its Environmental and Social Safeguards Policy. Specifically, the E&S policy refers to Principal 11: Indigenous Peoples, Marginalized and Vulnerable Groups
Involuntary Resettlement	X	The AF funds will not support i activities that would result in involuntary resettlement. MCT will adhere to its Environmental and Social Safeguards Policy. Specifically, the E&S policy refers to Principal 8: Land Acquisition and Involuntary Resettlement
Protection of Natural Habitats	X	Objective 1 is focused on improving the effective management of protected areas in FSM; this is part of the Micronesia Challenge, which has been in place since 2006. MCT will adhere to its Environmental and Social Safeguards Policy. Specifically, Principal 9: Biodiversity Conservation and Sustainable Management of Living Natural Resources.
Conservation of Biological Diversity	X	As described in response to question D above, the FSM's commitments to the UN CBD directly informed sections of the Concept; all three project Objectives support the FSM's goals to conserve biodiversity and MCT will adhere to its Environmental and Social Safeguards Policy. Specifically, Principal 9: Biodiversity Conservation and Sustainable Management of Living Natural Resources.
Climate Change	Х	As a small island nation, the FSM is facing considerable threats from climate change; this concept is intended to help reduce vulnerability to these impacts and will not in any meaningful way increase GHG emissions. MCT will adhere to its Environmental and Social Safeguards Policy. Specifically, Principal 4: Climate Change

Pollution Prevention and Resource Efficiency	X	The AF funds will not support any activities that could increase pollution, and all Objectives aim to improve ecosystem services (i.e. resource efficiency). MCT will adhere to its Environmental and Social Safeguards Policy. Specifically, Principal 6: Resource Efficiency and Pollution Prevention.
		could negatively impact public health. MCT will adhere to its Environmental and Social Safeguards Policy. Specifically, Principal 7: Community Health, Safety and Security.
Physical and Cultural Heritage	X	The AF funds will not support any activities that would infringe on physical and cultural heritage; to the contrary Objective 1 includes strengthening the management and preservation of such sites. Oftentimes traditional resource management practices adopted in the LEAP process reinforce cultural heritage practices. Moreover, the minimal threats to heritage posed by the monetization of cultural practices by ecotourism activities and attractions are acknowledged and will be mitigated. MCT will adhere to its Environmental and Social Safeguards Policy. Specifically, Principal 10: Physical and Cultural Heritage.
Lands and Soil Conservation	X	The AF funds will not support any activities that would infringe on lands and soil conservation. MCT will adhere to its Environmental and Social Safeguards Policy. Specifically, Principal 9: Biodiversity Conservation and Sustainable Management of Living Natural Resources. Implementation of AF funded project activities will have a positive impact on lands and soil conservation.

## PART III: IMPLEMENTATION ARRANGEMENTS

**A.** Describe the arrangements for project / programme implementation.

During the development of the full project document MCT will discuss the arrangements for project implementation and this section will be fully addressed when MCT submits the project proposal. At this concept stage MCT envisions the following:

- The executing entity(s) will be the FSM Office of Environment and Emergency Management and/or the FSM Department of Resources and Development.
- Within the executing entity(s) an individual will be hired/identified to manage the project.
- For Objective 3 MCT will work with the Project Manager to oversee the grants program. MCT will administer and issue the grants directly to the sub-grantees and the Project Manager will work in conjunction with MCT staff to manage the awards.
- For Objective 1 the Project Manager will oversee the work, with input from MCT and/or the FSM Office of Environment and Emergency Management and/or the FSM Department of Resources and Development, of the National Protected Areas Network Coordinator.
- The National Protected Areas Network Coordinator will in turn provide input into the activities conducted by the State Protected Areas Network Coordinators. These Coordinators will be responsible to the Directors/Secretaries of their respective state government agencies.
- For Objective 3, the Project Manager will plan and oversee consultants to conduct the training activities and manage the equipment and supply purchases.
- B. Describe the measures for financial and project / programme risk management.

During the development of the full project document and the state visits, the risks and associated financial and project management measures will be analyzed and elaborated.

**C.** Describe the measures for environmental and social risk management, in line with the Environmental and Social Policy of the Adaptation Fund.

During the development of the full project document, the measures for environmental and social risk management will be developed in line with MCT's new Environmental and Social Policy and that of the Adaptation Fund.

**D.** Describe the monitoring and evaluation arrangements and provide a budgeted M&E plan.

This section will be fully addressed as part of the full project proposal submission. In particular, during the preparation of the full project, MCT and its partners will determine how the work of the Project Manager, the National Protected Areas Network Coordinator, and the State Protected Areas Network Coordinators will be monitored as all positions are envisioned to be full-time government employees. Moreover, a knowledge management component will be developed under the M&E plan that will include an outline of knowledge management activities and responsibilities for the National and State

Coordinators as well as MCT. Regarding the sub-grantees under Objective 3, MCT will use information from each sub-grantee and projects supported to evaluate MCT's overall progress towards project goals. MCT will use its existing suite of project management tools, the Grant Tools, to track individual sub-grantee and project performance. These Grant Tools include a performance-based workplan that is tied to a budget, a monitoring and evaluation plan, and a project risk assessment and mitigation plan. For each sub-award, MCT and the sub-grantees use the Grant Tools to set targets, identify indicators, describe risk mitigation strategies, and track progress. Sub-grantees are required to report against these metrics at least semi-annually and MCT conducts periodic site visits to check in with grantees to review sub-grant objectives and progress. Moreover, the Adaptation Fund Mid-Term Review and Project Final Evaluation reports will be completed by MCT and ensure ongoing monitoring, review and reporting to the Adaptation Fund.

E. Include a results framework for the project proposal, including milestones, targets and indicators.

This section will be fully addressed as part of the full project proposal submission, however see below for an illustrative results framework.

Objective	Milestones	Targets	Indicators
1(a). Set up and initial implementation of FSM national protected areas network framework and country program strategy	1. National Protected Areas Network Coordinator hired	1. FSM adopts protected areas network framework and country program strategy	1. National government resolution adopting the protected areas network framework and country
	<ul> <li>2. Application process to join national protected areas network tested</li> <li>3. Application for funding</li> </ul>	2. At least 10 protected areas successfully join the national protected areas network	<ul><li>program strategy</li><li>2. No. of protected areas admitted to the protected areas network</li></ul>
	process through the national protected areas network tested	3. At least 5 protected areas receive financial and/or technical support through the national protected areas network	3. No. of protected areas that receive financial and/or technical support through the protected areas network
1 (b). Set up and initial implementation of state protected areas networks	<ol> <li>State Protected Areas Network Coordinators hired</li> <li>Yap and Chuuk states adopt government-endorsed protected areas networks</li> <li>All four states put in place policies/procedures to link state-level protected areas networks to national protected areas network</li> </ol>	<ol> <li>All four FSM state have government-endorsed and fully functioning protected areas networks</li> <li>At least 10 state- recognized protected areas admitted to the national protected areas network</li> </ol>	<ol> <li>Chuuk and Yap state resolutions/policies creating state protected area networks</li> <li>No. of protected areas admitted to the protected areas network</li> </ol>

2 Improve state-level enforcement of nearshore fisheries legislation and regulations	<ol> <li>Trainings on existing and pending fisheries laws and regulations held in each of the four FSM states</li> <li>Trainings on joint enforcement best practices held in each of the four FSM states</li> <li>Equipment and supplies necessary for enforcement procured</li> </ol>	<ol> <li>At least 70% of all Enforcement Officers in each of the FSM states receive training on existing and pending fisheries laws and regulations</li> <li>Representatives least 4 agencies/NGOs/communities in each of the FSM states receive training on best practices for joint enforcement</li> <li>Approximately \$5,000 in necessary enforcement equipment and supplies procured for each state</li> </ol>	<ol> <li>No. and location of trainings held</li> <li>No. of participants and participant host organizations represented at trainings</li> <li>Delivery received receipts of supplies and equipment</li> </ol>
3. Build community-level adaptive capacity to climate change	<ol> <li>Grants issued</li> <li>Vulnerability assessments conducted in communities</li> <li>Workplans with ecosystem-based actions to address identified community vulnerabilities developed</li> <li>Completion of adaptation actions</li> </ol>	<ol> <li>Community vulnerabilities to climate change impacts identified in at least 8 communities</li> <li>At least 8 communities' complete ecosystem-based adaptation actions to reduce climate change vulnerability</li> </ol>	<ol> <li>No. of grants issued and location of grantees</li> <li>Completed community vulnerability assessments</li> <li>Completed community workplans</li> <li>Climate adaptation activity completion reports from at least 8 communities</li> </ol>

## **F.** Demonstrate how the project / programme aligns with the Results Framework of the Adaptation Fund

MCT believes its project goals and objectives clearly align with the Results Framework of the Adaptation Fund because the activities of the project will strengthen the ability of vulnerable communities to undertake concrete actions to adapt to climate change driven hazards, strengthen the ability of vulnerable communities to make informed decisions about climate change driven hazards affecting their specific locations, reduce exposure and increase adaptive capacity of coastal communities to flood, sea-level rise, water inundation and ocean surge related risks and hazards, and improve awareness of adaptation and climate change related hazards affecting vulnerable communities. The project will also benefit ecosystem health by supporting the institutionalization of protected area networks and improved nearshore fisheries management.

This project will align directly with the following AF Results Framework outcomes:

a. Outcome 2: Strengthened institutional capacity to reduce risks associated with climate-induced socioeconomic and environmental losses

- b. Outcome 5: Increased ecosystem resilience in response to climate change and variability-induced stress
- c. Diversified and strengthened livelihoods and sources of income for vulnerable people in targeted areas
- d. Improved policies and regulations that promote and enforce resilience measures.

However, a more detailed response, including filling out the Adaptation Fund's table and including the corresponding grant amounts, will be developed prior to submitting the full proposal.

G. Include a detailed budget with budget notes, a budget on the Implementing Entity management fee use, and an explanation and a breakdown of the execution costs.

MCT will develop this section when drafting the full project document after conducting consultations with stakeholders in each of the FSM states and at the national level. For an illustrative estimate for each of the project components, please see MCT's response to Section I under Part II above.

**H.** Include a disbursement schedule with time-bound milestones.



This section will be fully addressed as part of the full project proposal submission.

Pohnpei, FSM. Photo © MCT

## PART IV: ENDORSEMENT BY GOVERNMENT AND CERTIFICATION BY THE IMPLEMENTING ENTITY

**A.** Record of endorsement on behalf of the government<sup>26</sup> Provide the name and position of the government official and indicate date of endorsement. If this is a regional project/programme, list the endorsing officials all the participating countries. The endorsement letter(s) should be attached as an annex to the project/programme proposal. Please attach the endorsement letter(s) with this template; add as many participating governments if a regional project/programme:

Lorin S. Robert, Secretary,	Date: 9 January, 2017
Federated States of Micronesia	
Department of Foreign Affairs	

**B. Implementing Entity certification** Provide the name and signature of the Implementing Entity Coordinator and the date of signature. Provide also the project/programme contact person's name, telephone number and email address

I certify that this proposal has been prepared in accordance with guidelines provided by the Adaptation Fund Board, and prevailing National Development and Adaptation Plans including FSM's Nationwide Integrated Disaster Risk Management and Climate Change Policy and corresponding Public Law No. and subject to the approval by the Adaptation Fund Board, commit to implementing the project/programme in compliance with the Environmental and Social Policy of the Adaptation Fund and on the understanding that the Implementing Entity will be fully (legally and financially) responsible for the implementation of this project/programme.

Willy Kostka

Implementing Entity Coordinator

<sup>&</sup>lt;sup>6.</sup> Each Party shall designate and communicate to the secretariat the authority that will endorse on behalf of the national government the projects and programmes proposed by the implementing entities.

Date: 9 January 2017	Tel. and email: (691) 320-5670	
	director@ourmicronesia.org	
Project Contact Person: Willy Kostka		
Tel. And Email: (691) 320-5670 director@ourmicronesia.org		