

Practical Solutions for Reducing Community Vulnerability to Climate Change in the Federated States of Micronesia



National Implementing Entity , FSM







- ✓ Federated States of Micronesia
- ✓ Republic of the Marshall Islands
- ✓ Republic of Palau
- ✓ Commonwealth of the Northern Marianas
 - ✓ Guam

MISSION

We build partnerships, raise and manage funds, make grants, influence policy, and provide conservation and financing expertise

Overall Goal:

To Improve the quality of life for communities across Micronesia



>1,000,000 square miles of ocean/607 islands

>112,000 people in 4 Island States: eclectic geography, ecology, language and cultures

More than 1,200 species of ferns and flowering plants, 1000 fish species, 350 coral species

More than 80% of communities in the FSM are vulnerable to sea-level rise and flooding: sea level rise has averaged 11 mm per year since 1993





Adaptation Fund Project:

Practical Solutions for Reducing Community Vulnerability to Climate Change in the Federated States of Micronesia

- MCT Accredited in March 2015
- Concept submitted January 10th, 2017
- Proposal approved March 27th, 2018
- Project Dates July 3rd 2018 July 3rd 2021
- > Total funded: \$970,000 USD + \$30K Planning Grant



Problem Statement:

Fisheries declining

- > Fishery
 - ➤ Main source of dietary protein
 - ➤ Largest economic sector in the FSM
- Declines in fish
 - increasing subsistence and commercial harvesting
 - demise of traditional management
 - exasperated by climate change (changes in temperature, acidity, erosion, etc
- Trends threaten long-term sustainability of fisheries and the fundamental role they provide for local food and economic security



Assumption/variables: Climate Change, especially effects of sea level rise, sea warming and ocean acidification are affecting the Pacific Islands and FSM in particular

Proof: anecdotal, reality of life

Scientific Basis and Impacts:

Data: difficult to attain as most climate projections are regional not island specific

Solution:

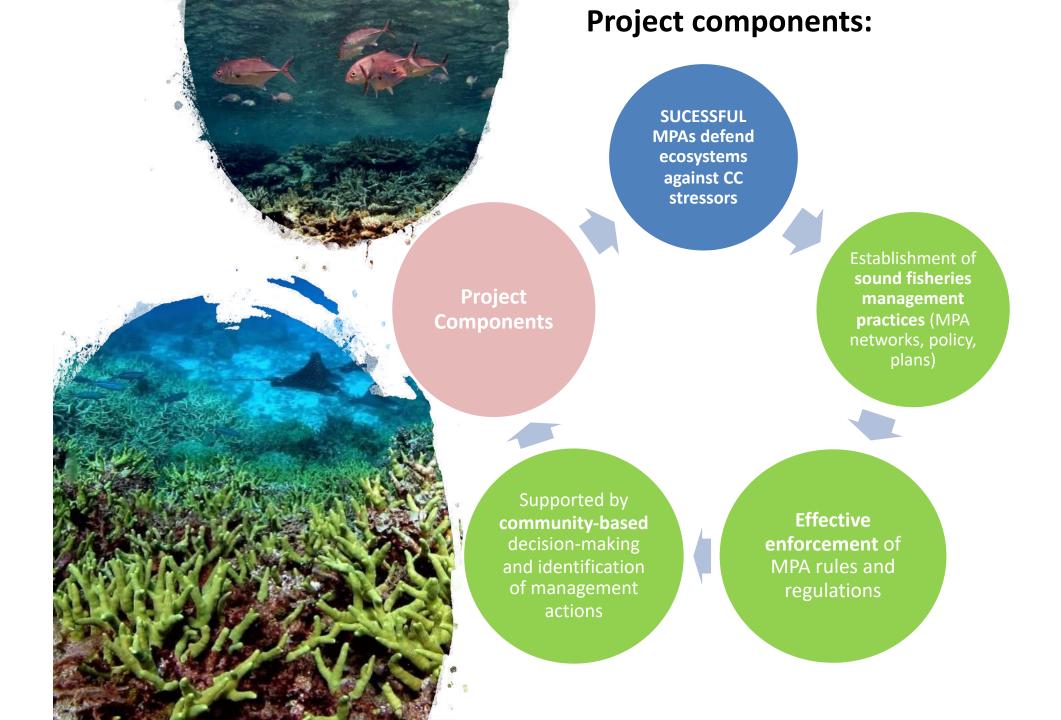
- ✓ Used regional projections for trends AND:
- ✓ Focus groups with fishers and other community/stakeholders
- ✓ Long term community observations from management plans
- ✓ Data collected from coral reef monitoring projects
- ✓ Community based science to management feedback loops



Climate Adaptation Intervention <u>Marine Protected Areas:</u> Mitigate effects through maintenance of diverse and healthy reef communities:

Expanding
Protected
Areas and
Management

- ✓ Coastal/community protection from sea level/storms/inundations
- ✓ Protection of fish/shelter
- ✓ Source of nitrogen/nutrients for food chains
- ✓ Relieve pressures/enhance species response to change/affects
- ✓ Boosts the resilience of ecosystems to safeguard their wildlife
- ✓ Increases community resilience through planning and empowerment





Alignments with Commitments, Priorities and Strategies

- Convention on Biological Diversity and Sustainable Development Goal 14: below water
- Micronesia Challenge: Regional commitment to effectively conserve 30% nearshore marine resources by 2020.
- FSM National Biodiversity Strategy and Action Plan (NBSAP)



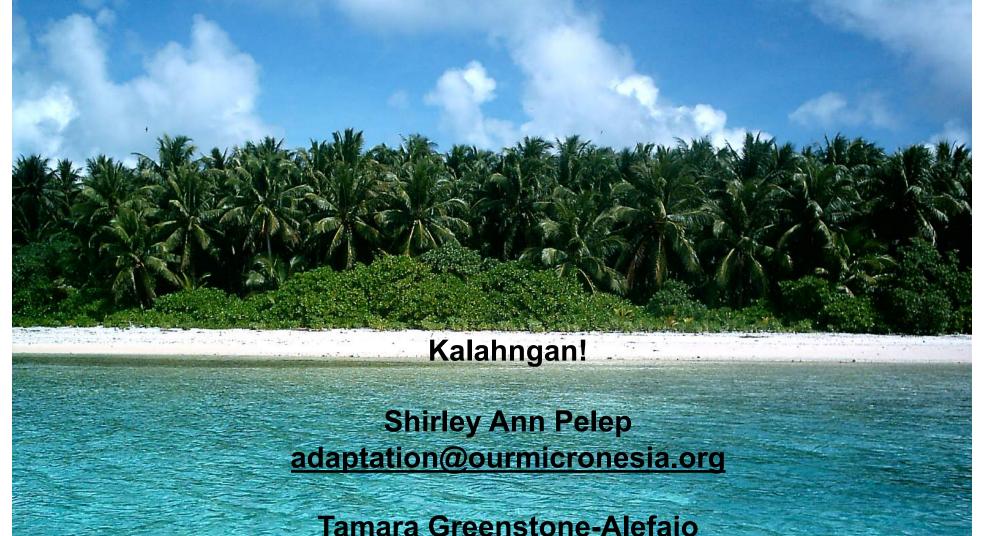
Resource/Process Challenges:

- ➤ There is a clear need for more studies to provide specific impacts of climate change on marine ecosystems in the FSM
- ➤ Marine protected areas as climate adaptation intervention is new/unique
- Eclectic geographies mean effects can change within small distances
- ➤ Geographically isolated communities and islands make information gathering and sharing more difficult
- ➤ The effects of climate change has long been faced by communities with their own mechanisms for adapting that are not always recorded
- ➤ Past projects were not always documented so the data, lessons learned, project successes and interventions are challenging to locate



Project Outcomes Summary:

- Resources for the sustainable finance of the marine ecosystem through protected areas networks
- enforcement and policies
- funding for small scale eco-system based adaptation projects in communities, positive impacts on health and nutrition
- local community empowerment to implement projects and in turn experience higher levels of social cohesion and capacity
- preservation of traditional values and pride in local culture
- ➤ a reduction in the stressors of climate change on the marine ecosystem
- Knowledge Management component sharing lessons learned



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