

**PACIFIC ADAPTATION TO CLIMATE CHANGE:  
Inception Workshop  
Apia, Samoa  
29<sup>th</sup> June-3<sup>rd</sup> July 2009**

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# Federated States of Micronesia

A scenic landscape photograph of the Federated States of Micronesia. The foreground is a dense, lush green forest. In the middle ground, a calm body of water reflects the sky, with a small island visible in the distance. The background features a range of green, forested hills under a blue sky with scattered white clouds.

## Country Information

607 high islands and atolls (65 inhabited)

Politically divided into four states

Total land area is 271 sq. miles

1,149,500 sq. miles of EEZ

Population is approx. 107,000 (2000)



- General Information of Kosrae State, FSM

- Geographical Conditions:

- Kosrae is roughly triangular in shape with a land area of 42 square miles.

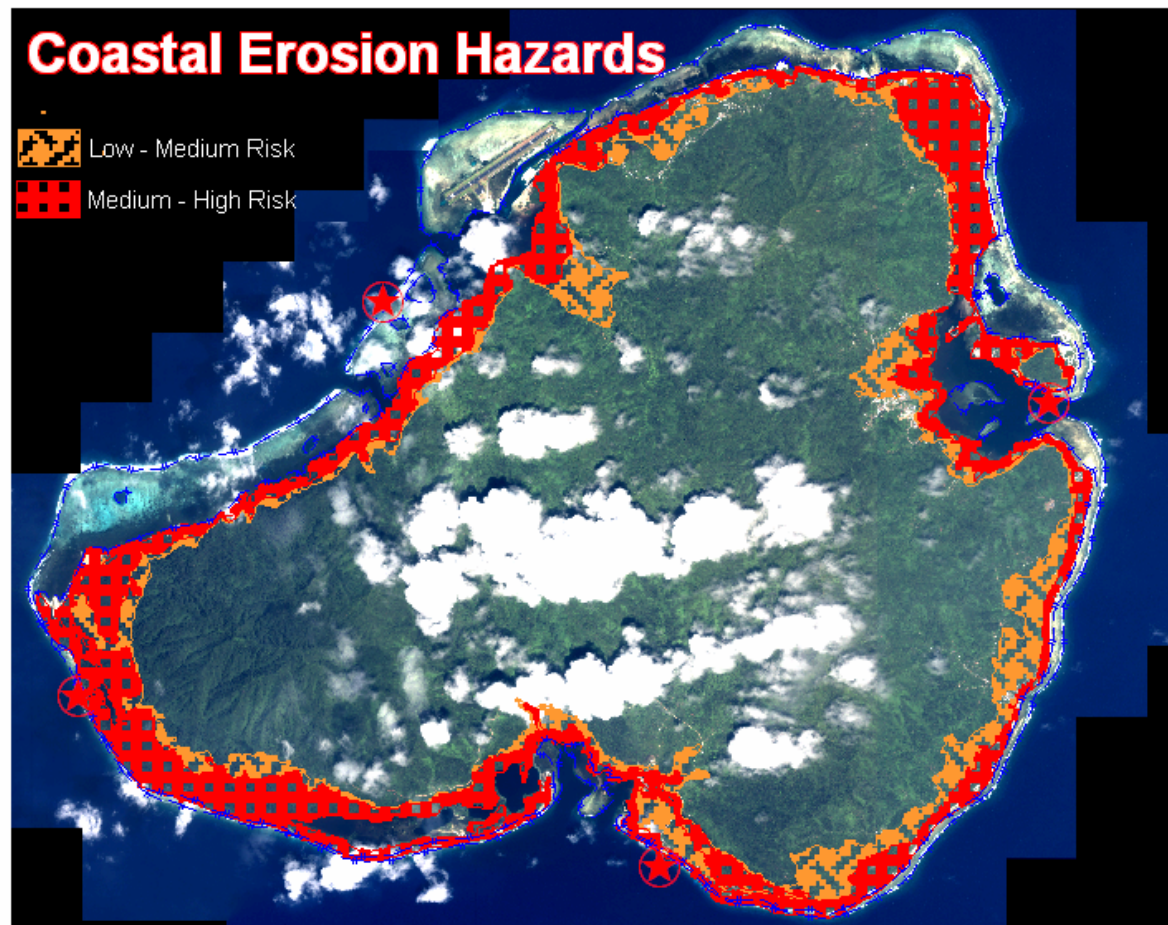
- High, steep, rugged mountains covered with dense tropical vegetation characterize the island's interior. Several mountain peaks rise to 2,000 feet above sea level. Much of the shoreline is fringed with beautiful, dense mangrove forests.

- Climatic Conditions:

- The climate is characterized by high humidity and temperatures that average 80 degrees Fahrenheit year round. Annual rainfall averages over 200 inches per year near the coast and up to 240 inches per year in the upland.

## Kosrae State, PACC FSM Pilot Site

75% of Kosrae is experiencing coastal erosion. As virtually most of the infrastructures, commercial enterprises & residential properties are located within the coastal zone.



## **Linking PACC to National Sustainable Development Strategies:**

**FSM has already mainstreamed climate change into its policies and strategic plan. e.g. FSM (SDP) Strategic Development Plan includes the IDP already climate proofed**

## **Other Soft adaptation efforts**

**Micronesian Challenge, Protect Area Network**

**2<sup>nd</sup> National Communication, UNFCCC elaborate V&A component**

**SLM/NAP, UNCCD – V&A Component**

**Recent Study UH, USES- Climate Change in FSM- Food and Water Security, Climate Risk Management, Adaptation Strategy**

**US Forest Service Projects (Mangrove rehabilitations projects)**

**Integrated Water Resource Management (IWRM) assisted by SOPAC  
Pohnpei & Chuuk pilot sites**



Cont..

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Integrated Water Resource Management (IWRM) assisted by SOPAC  
Pohnpei & Chuuk pilot sites

Venezuela grants for SLM related projects

Turkey grants for MC activities

Japanese Cool Earth Partnership assistance &

PALM 5 Meeting in Japan last month

Renewable Energy projects (EU, Japan, US, others)

## **INSTITUTIONAL ARRANGEMENTS**

**All climate change programmes, projects and activities are coordinated by the National Office of Emergency Environment & Emergency Management (OEEM). The OEEM will also provides oversight and guidance on the implementation of activities relating to climate change.**

**Under the PACC-FSM project, the OEEM will continue to coordinate climate change activities relating to PACC. However, given that PACC is focused on implementation of adaptation activities in the State of Kosrae, the implementing agency for PACC FSM will be Kosrae Island Resource Management Authority (KIRMA). KIRMA will also serve as secretariat to report to National FSM SD Council & OEEM on issues relating to the implementation of PACC-FSM.**

**KIRMA will host the staff(s) that will provide the day-to-day operation of the PACC. These staffs will be part of the PACC Project Management Unit (PMU) who will be directly responsible to the Executive Director of KIRMA.**

**At the national level, PACC-FSM will be implemented by various stakeholders within their respective mandates while scientific, technical and policy oversight will be provided by the OEEM and FSM Climate Change Country Team.**

## **SOME COMMITTEMENTS TO BE USED AS PARALLEL CO-FINANCING**

- **US COMPACT FUNDS**
- **JAPAN OVERSEAS DEVELOPMENT GRANT(ODA)**
- **KOSRAE STATE GOVT. (OFFICE SPACE)**
- **OTHER MULTILATERAL ASSISTANCE**



▪ **Adaptation project for salt water, FSM outer islands**

▪ **Cement taro beds are a successful adaptation to salinization. Soil (right) within the beds is built by composting methods on a regular schedule twice per week. Rainwater alone provides sufficient moisture. Residents report that building these beds in soil pits prevents overheating of plants near the cement walls.**





▪ Houk Island, Chuuk; *pop.500* Wells previously used for drinking water have turned brackish (left) and are now only used for washing. A formerly fresh water lake has turned brackish (middle). The brackish water has spread into adjoining soil and wetlands damaging and destroying food crops including taro, banana, breadfruit, and others. Breadfruit trees (right), decades old and hundreds of feet high, are losing their leaves. Salt in the soil does not wash out in the rains because it absorbs rainwater, which then evaporates, leaving the salt.

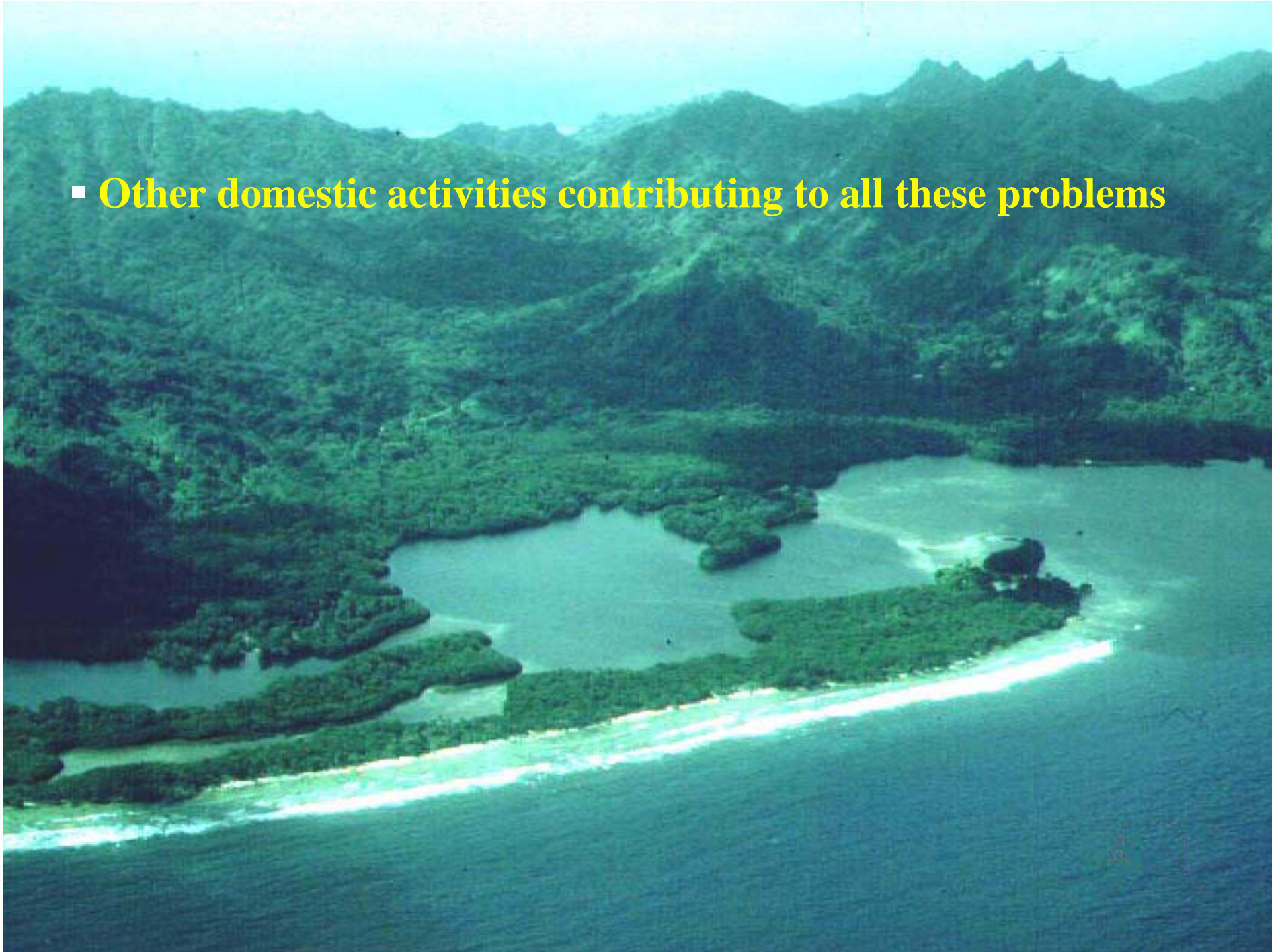


# Challenges linked to Climate Change:

- Our homes and families
- Our communities
- Our livelihoods and lifestyles (Diseases)
- Our economy
- Our welfare and well-being
- Altered currents/storm patterns etc....



- **Other domestic activities contributing to all these problems**



## Land Based Activities

- Earth moving/upland dredging
- Upland clearing
- Road Development



4 Meter Spatial Resolution

- Infrastructure
- Airport on the reef flat



- Mangrove filling



- Sand mining
- (shoreline)



- Fire woods



- Inland mining



# CHALLENGES

- Scattered islands
- Four highly autonomous states
- Coordination
- Technical expertise
- Information access/availability



THANK YOU...

