

# Regional Seminar on Community based Coastal Resource Management

Project for Promotion of Grace of Sea in Coastal villages – Phase 2

> 13 - 16 October 2014 Melanesian Hotel, Port Vila Vanuatu



# Current Status of Coastal Fisheries Resource Management in Samoa

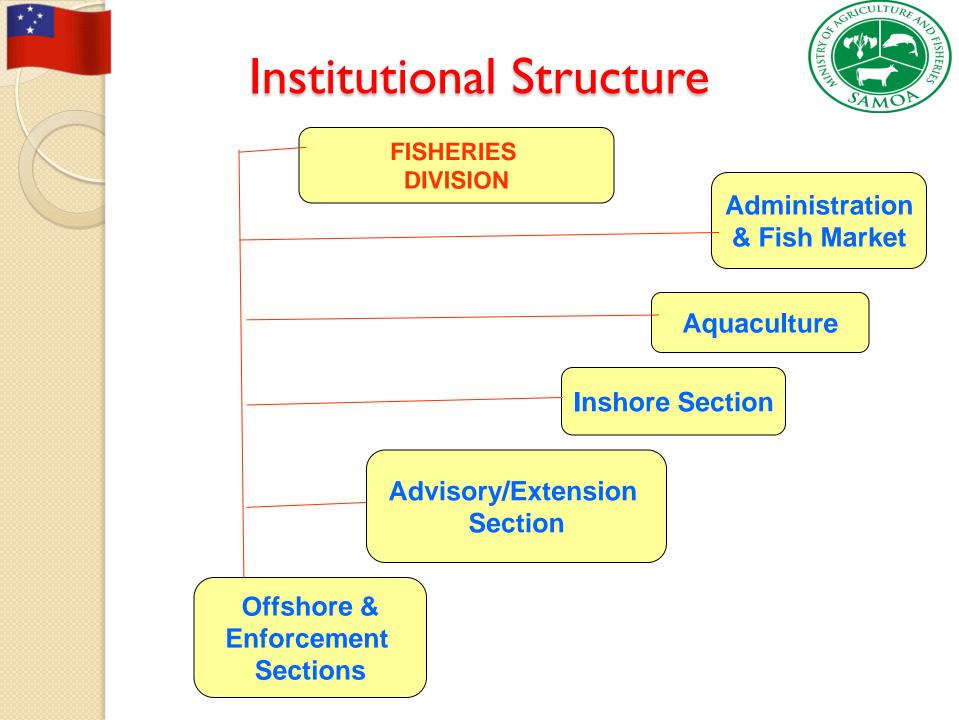
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# Outline

# Strategies/Plans Fisheries Policies Fisheries Management

- Subsistence/Coastal Fisheries
- Community Fisheries
- Aquaculture
- Outcomes
- Challenges









- Agriculture Sector Plan 2011-2015
  - Vision: Agriculture for food and income security
  - Theme: "farming and fishing first"

- Overall Goal/Objective: To revitalise the agriculture sector to increase its relative contribution to the national GDP from its current level of 10% to 20% by 2015



# Fisheries Strategic Objectives



- Enhancing the capability of Samoa in meeting its need for adequate supply of fisheries as to sustain food security
- Promote long-term sustainability of fishery resources by strengthening the legal framework, management capability and leadership capacity of Fisheries Division and stakeholders.
- Maximizing economic benefit for Samoans through viable developments in partnership with fishers, donors, lending institutions and Government.
- Sound scientifically and technologically based information and decisions thus strengthening the management and development of fisheries sector.
- Improve the ability and resources of the Fisheries Division to provide service of the highest quality as to ensure stakeholder satisfaction.



## **Our Regulations**

# AUCULTURE THE FISHERIES

#### Legislations:

- Fisheries Act 1988,
- Local Fisheries Regulations 1995
- Fisheries (Transshipment Regulations 2003)
- Fishing (Scuba Fishing) Regulations 2003
- Fisheries (Ban of Driftnet Fishing Act) 1999
- Fisheries (Fees & Forms) Regulations 2000
- Fisheries (Vessel Monitoring System Regulations 1999)
- Mandated under the Fisheries Act 1988 with scopes as:

- To promote the conservation, management and development of the fisheries of Samoa;

- To promote the exploitation of the living resources of fishery waters;
- To promote marine scientific research;
- To promote the protection and preservation of the marine
- environment.



# Our Management Plans

- Tuna Management and Development Plan (TFMDP)
- Coastal Fisheries Management & Development Plan (CFMDP)
- Aquaculture Management & Development Plan (AMDP)
- Village Fisheries Management Plan (VFMP)
  - Fisheries Bylaws
- Sea Cucumber M&D Plan (draft)
- Trochus M&D Plan (draft)

# **Coastal Fisheries**



- Most important as most of the population (75%) reside on coastal areas and depend on fisheries for daily protein - subsistence (consumption) and artisanal (earning income for some fishing families)
- 2000: Total seafood consumption was est. 9971 tonnes with value of over \$62million / year in which \$45 million was caught by village fishers
- 2006: Average per capita consumption per year = 59.4 Kg, (163g/ day) with total consumption per year = 10,508mt
- 2012: socio-economic survey estimated a total of 9,066.32 tons of fish and 7,804.42 tons for invertebrates
- With a growing population and pressures for speedy development, uncontrolled harvesting of fish and wildlife resources, natural disasters and impacts of climate change, these areas are under threat.

# Our major concern



#### Overfishing

- Population growth (increasing demand for fresh seafood)
- Destructive fishing methods
  - explosives
  - poisons
- Use of introduced, effective and non-selective techniques (wire fish fences, gill nets)
- Loss of inshore nursery habitat (mangroves and marshes has been reduced by reclamations, logging and drainage, cyclones and climate change)
- Inadequate use of fisheries management tools and regulations
  - ineffective unless they have the support of the community



# Our Immediate Action



- Deliver the results to the communities and the Government and encourage them to feel responsible
- The Community Based Fisheries Management Programme (CBFMP) was established in 1995
- This programme empowers community villages to manage their own inshore resources through establishment of Village fisheries management plans, bylaws and marine reserve areas

#### COMMUNITY BASED FISHERIES MANAGEMENT PROGRAMME (CBFMP)



Establish Villages Fish Reserves

- establish Management Plans for each village

<u>Process:</u> I) First formal Meeting with Village council



First meeting: Sasina







 gather information to formulate village fisheries management plan

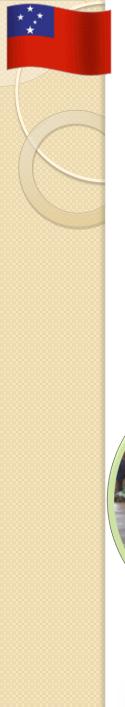


Women's Group – Matautu, Falealili



Chief's Group – Sataua, Savaii





#### CBFMP.....



iii) Village Advisory Committee Meetingiv) Final formal Meeting with Village council(approve Management plan)

- FD draft Management Plan & present to the Fono
- FD/MAF draft by-laws for each village



Fisheries Advisory Committee Tafagamanu, Lefaga



#### Final meeting: Sasaai

# Step 4: Final Meeting/Fono with Village Council





Discuss the Management Plan Village Council approve the Management Plan



FMAC oversee the conducting of their undertakings in the M.Plan



# Main undertakings in the Management Plans



- Establish a Fish Reserve Area
- Ban destructive fishing methods (dynamites, poisons, chemicals)
- Ban Small Mesh Size Fishing Nets
- Ban disposal of Rubbish in the sea & coastal areas
- Ban coral smashing fishing
- Ban fishing or activities within the fisheries reserve
- Ban fishing of small sized fish and shellfish
- Ban scuba gears
- Collect and destroy crown of thorns star fish
- Climate change Adaptation and reef resilience



#### Monitoring activities



- Fisheries resources and habitat assessment to determine
  - establish of fish reserve areas
  - substrate coverage (live coral, bleached, abiotics, algae, seaweed)
  - biodiversity importance (aggregate spawning sites)
  - fish biomass and density
  - market and road site surveys for domestic landings







### **Monitoring activities**



- Stock enhancement
  - restocking and translocation of suitable species (giant clams and Trochus
- Coral reef rehabilitation
  - coral replanting
  - formation of fish houses



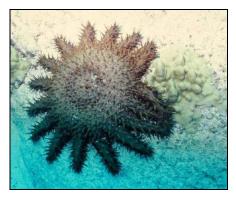
- Sea cucumber status assessment
  - current status of existing stock



#### **Monitoring activities**



- Fish Poisoning assessment (Ciguatera)
  - collecting algae samples from selected sites
  - Microscopic analysis to determine the presence of the toxic dinoflaggellates, *Gambierdiscus toxicus*
- Crown of thorns starfish assessment
  - tsunami impacted areas
  - clean up campaigns





#### **Development** activities



- Promote Aquaculture to village communities, churches and individual farmers
  - Tilapia farming
  - Sea grape culture
  - Giant clam cycle
  - Trochus/aliao
  - Aquaponic system
  - Integrated farming



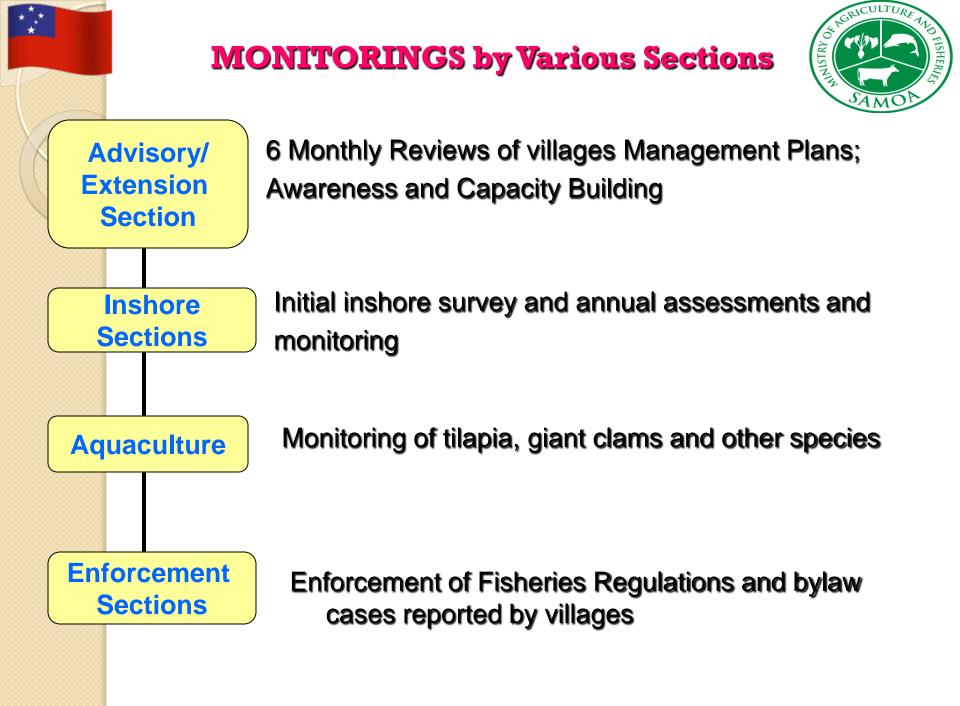


#### **Development** activities



- Promote diversification of fishing technology
  - Coastal Fish Aggregating Devices (FADS)
  - Integrated fish cum vegetable farming
  - Alternative livelihood and adaptations to local communities







# **Current Status**



- 100 villages with Management Plans
- 71 fish reserves
- 32 sites planted with corals
- 78 village bylaws
- 28 sites stocked with trochus/aliao
- 6 sea grape farms/limu fuafua
- 34 tilapia farms (individual/communities)
- 22 giant clam farms
- 6 districts with coastal FADs







- Staff turnover
- Resources (funding/tools)
- Regulations (enforcement)



## Outcomes



- Strong engagement of communities in fisheries activities (i.e. Monitoring – fish reserves/removal of COTs, site assessements of tilapia/seagrape)
- FD and Communities to work together in seeking for donors to carry out fisheries activities
- Encourage co-management in enforcing regulations and village bylaws.



# Supporting partners

- JICA Follow up projects
- NOAA Two Samoas Reef resilience
- SPREP Two Samoas Reef Resilience
- SPC Climate Change Adaptation
- GIZ Climate Change Adaptation
- UNDP GEF SGP village small grant project, etc,
- ACIAR community-based tilapia aquaculture and Seaweed diversification