REGIONAL PROGRAM & NETWORKING FOR COASTAL RESOURCE MANAGEMENT

Project for Promotion of Grace of Seas in Coastal Villages, Phase 2

14 – 17 October 2014

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PRESENTATION OVERVIEW

- Size of the Pacific Fisheries
- Importance of the Coastal Fisheries
- Status of the Coastal Fisheries
- Key Challenges
- Who are we
- Our Membership
- Our Role & Vision
- Our programmes
- What we do - FAME
- Where we want to go

Size of the Pacific Fisheries

- The fishery is not just big - it is **huge** - and vitally important to the PICTs
- Total EEZ area - 30 million square kilometers
- Sustains the largest stocks of albacore, bigeye, skipjack and yellowfin tuna
- 70 coral genera
- 4,000 fish and invertebrate species;
- 30 mangrove species; and,
- Range of reptiles and marine mammals; and sea birds.
- Pacific fisheries grouped into categories:
  - Coastal Fisheries
  - Oceanic Fisheries

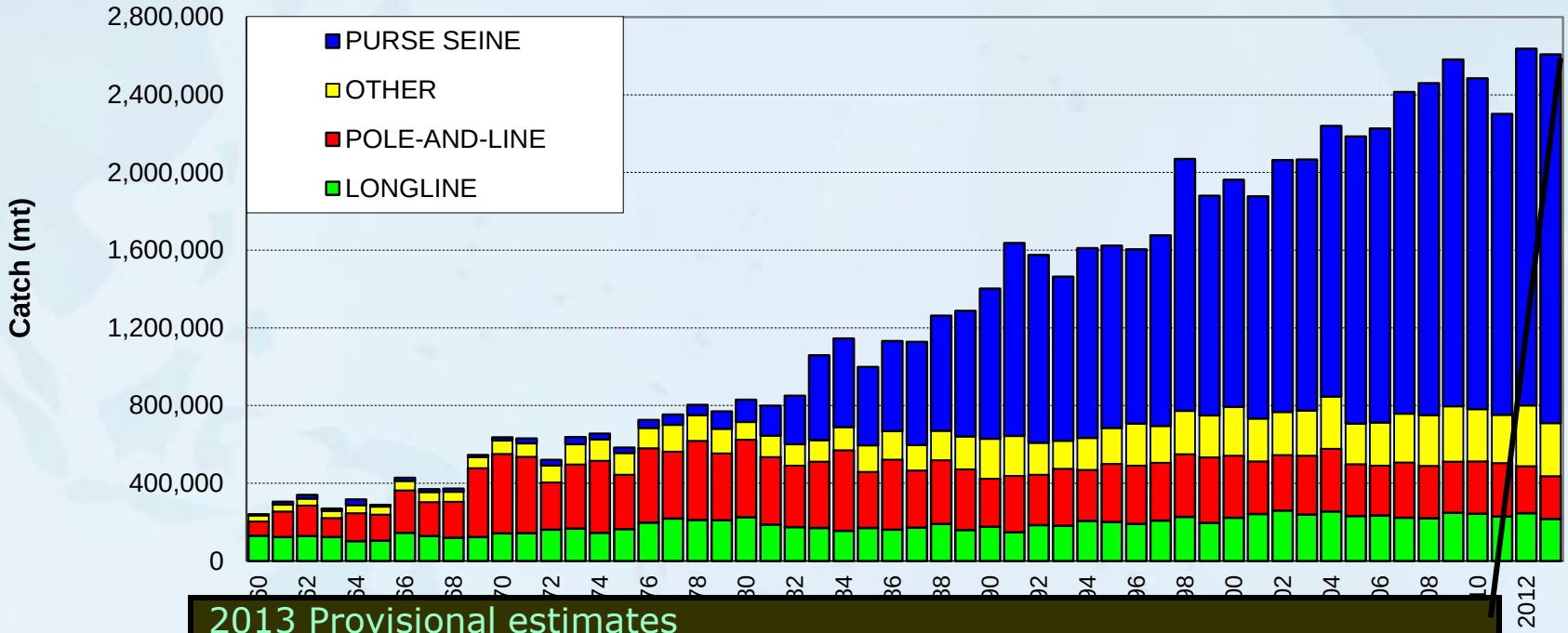
IMPORTANCE OF THE PACIFIC FISHERIES

OCEANIC FISHERIES RESOURCES

Economic Development

- Pacific oceanic fisheries provides 60% of global tuna supply. Half of that is from PICTs EEZs;
- Landed value of over USD6 billion;
- Over USD3 billion from fish taken in PICTs EEZs;

How much Tuna is caught?



2013 Provisional estimates

- Total Catch – 2,621,511 mt (second highest on record...)
  - Purse seine – 1,898,090 mt (72% ; record...)
  - Longline – 230,073 mt (9% ; lowest since 1999)

Just how much is that?

Nose to tail – the skipjack alone would go around the world more than TEN times

Employment

- 16,000 direct jobs in harvesting and processing.

Exports

That could fill TEN stadiums with tuna cans EACH year

IMPORTANCE OF THE PACIFIC FISHERIES

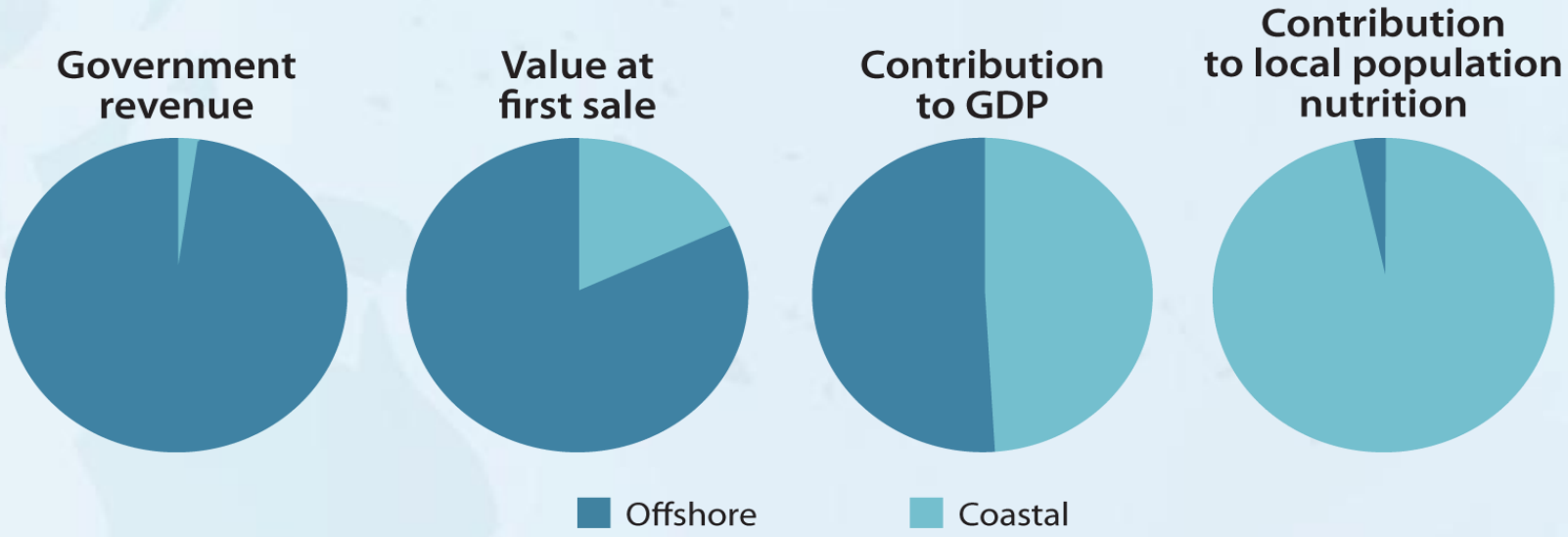
COASTAL FISHERIES RESOURCES

Represents almost the only opportunity

- **Represents almost the only opportunity for many small PICTs**

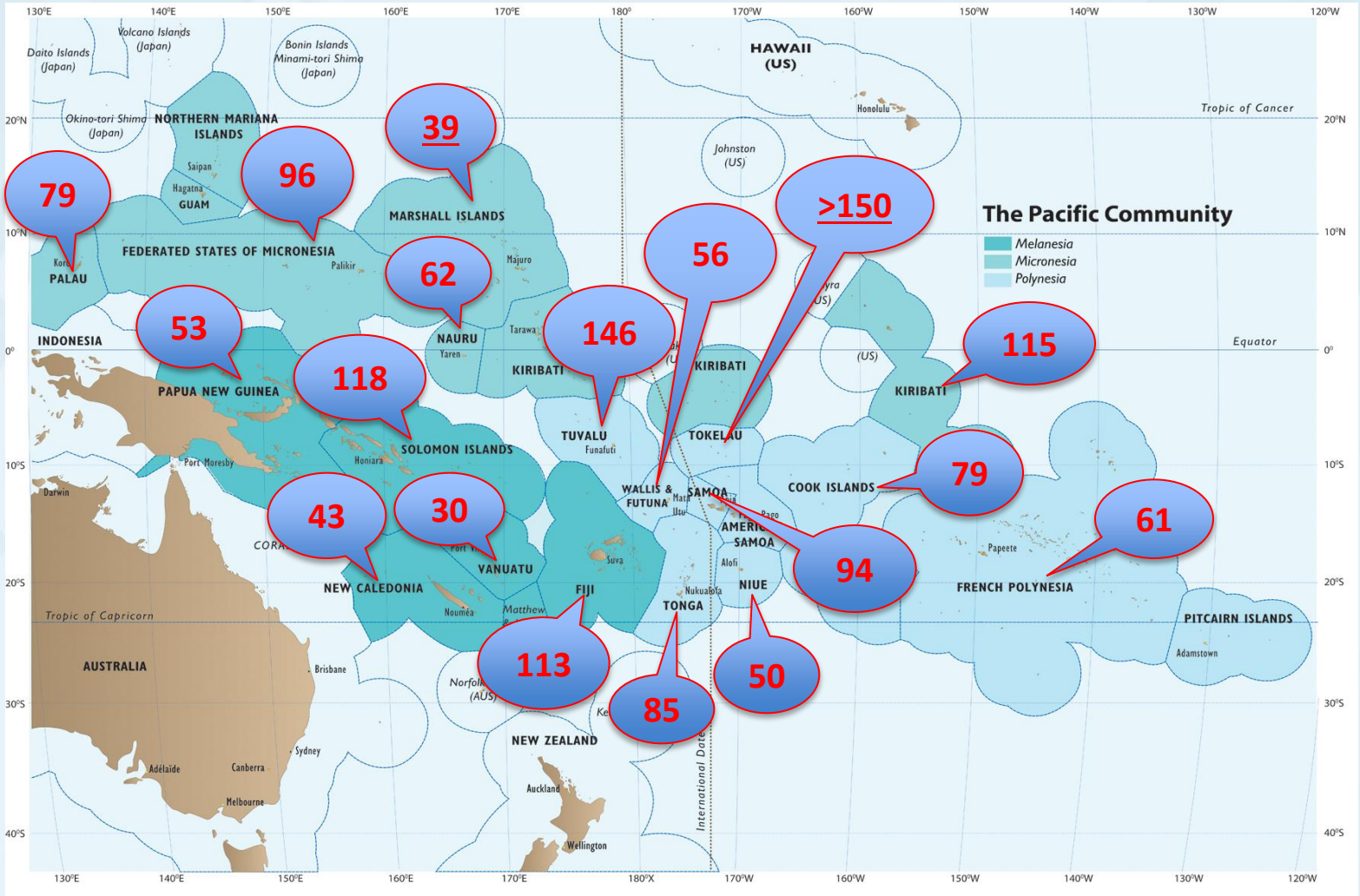
Food Security

- Heavy dependence on coastal fisheries for nutrition and food security.
- Coastal fisheries provides 50% - 90% of protein intake for coastal communities.



Food Security –
How much Coastal Fish do we eat?

Fish consumption in coastal communities (kg/person/year)



Food Security

- Average annual consumption
  - Melanesia, 30 – 118 kg/person;
  - Micronesia, 62 – 115 kg/person;
  - Polynesia, 50 – 150 kg/person

Importance to Livelihoods

- Provides around 50% of coastal households with 1st or 2nd source of income.

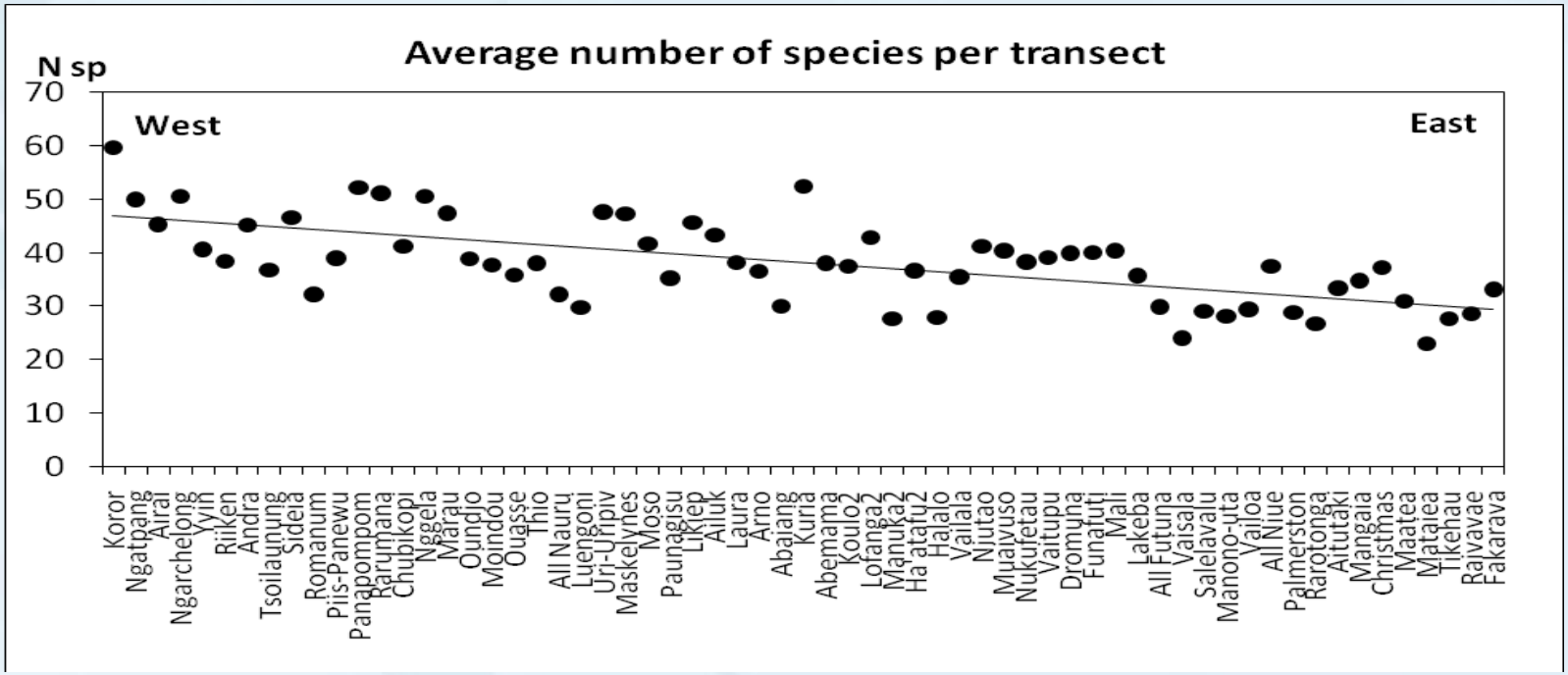
Importance to Economic Growth

- Estimated catch volume is ~155,000 MT with an estimated value of **USD320-500 million**

STATUS OF THE COASTAL FISHERIES

Status of finfish fishery

- Average standing biomass of food fish finfish across Pacific islands region is 100 grams of fish per square meter (PROCFish)
- Biomass is highest near the equator and decreases with distance to the north or south
- Number of food fish finfish species decreases from west to east



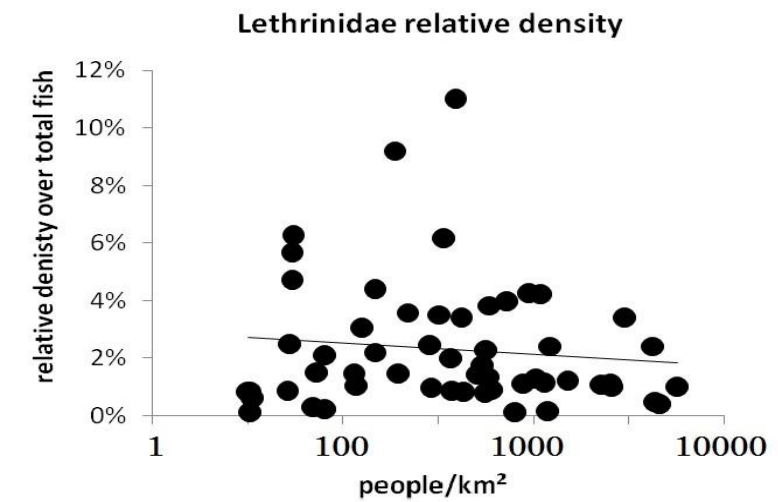
Status of finfish fishery

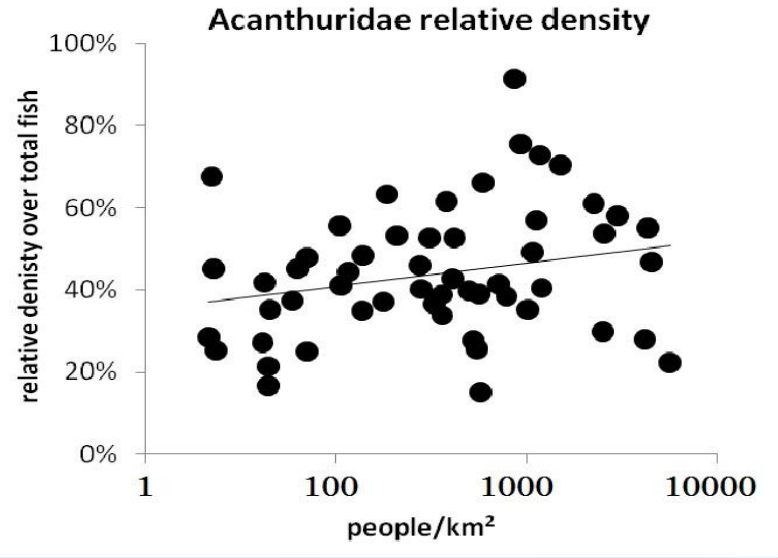
- Poor/lack of data for finfish resources across the region.
- Fully exploited or in over fished state.
- Production will not expand in future.
- Production will decline and the situation will become worse in the future.

Status of finfish fishery

- Emperors (Lethrinidae) decrease with increased fishing pressure

- Herbivore finfish, such as surgeonfish increase with fishing pressure with a decrease in predators.



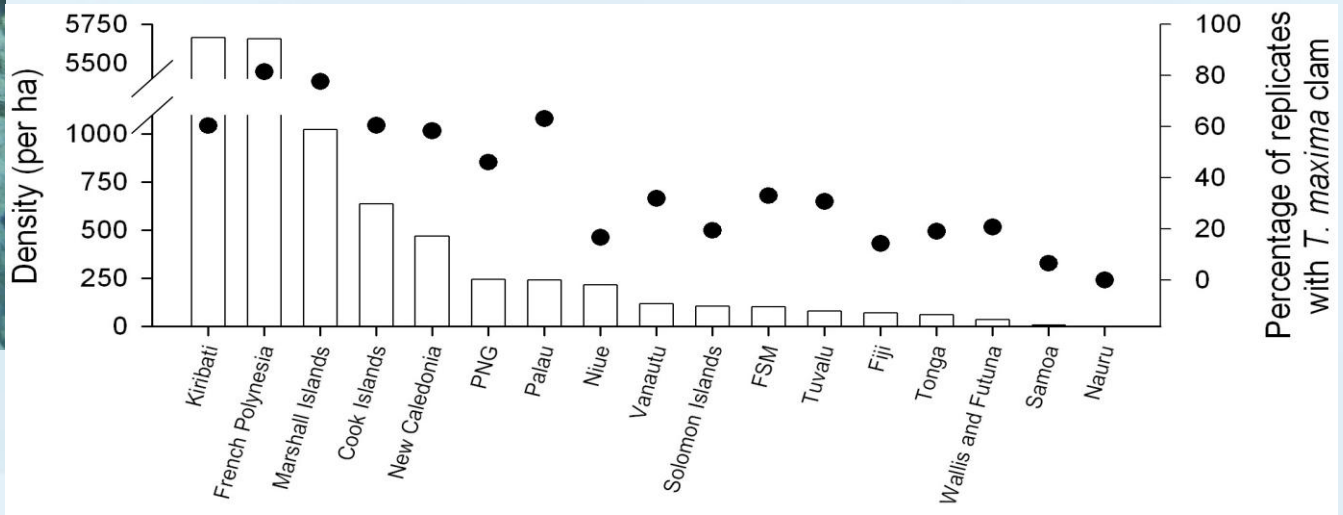


Status of Invertebrates

- Export fisheries in the pacific have a history dating back to before European settlement
- Primarily based on sea cucumber, trochus and pearl oysters
- More recently export of live rock, live molluscs, crustaceans and corals for the ornamental trade
- Have potential to provide income to remote village economies.

Status of Invertebrates

- Coastal fishery invertebrates have been heavily fished over the years.
- Declines in the sustainability is wide spread throughout the region.
- Very little data is available for crabs, lobsters, sea urchins, and octopuses.
- Like finfish, clam species decrease from west to east



Status of Aquarium fishery

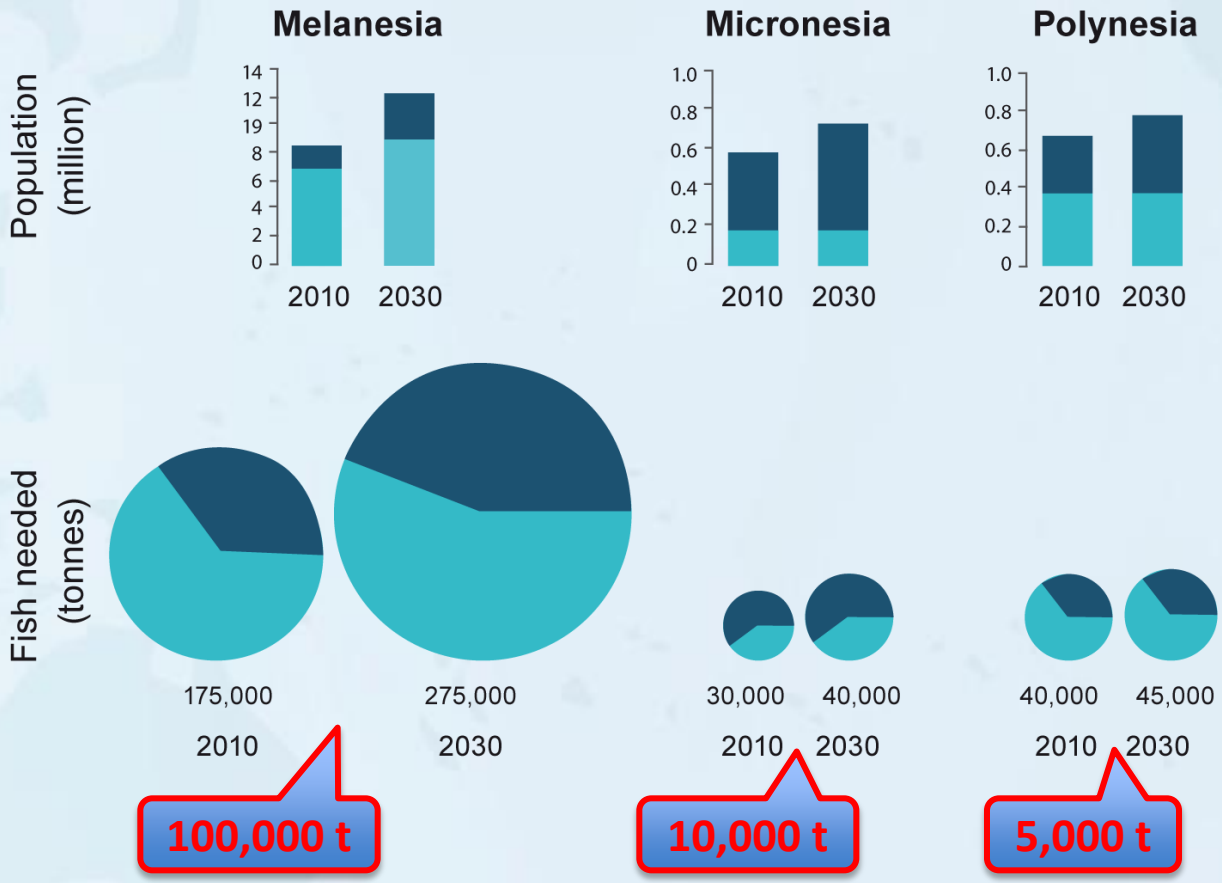
- 12 countries in the region are exporting fish, invertebrates, corals for the aquarium trade.
- Very little reliable data on the numbers and species of fish being exported.
- There is data for corals and clams:
  - Main coral families traded as live pieces ,
  - For clams, *Tridacna maxima* and *derosa* are main species exported

KEY CHALLENGES

Population pressure

- As populations grow, pressure on coastal fishery resources continues to increase.
- Coastal fishery resources are over-exploited close to areas where the concentrated population creates the greatest demand for fish
- Alternative supply of fish protein will be needed in many PICs in the coming decades

Population pressure



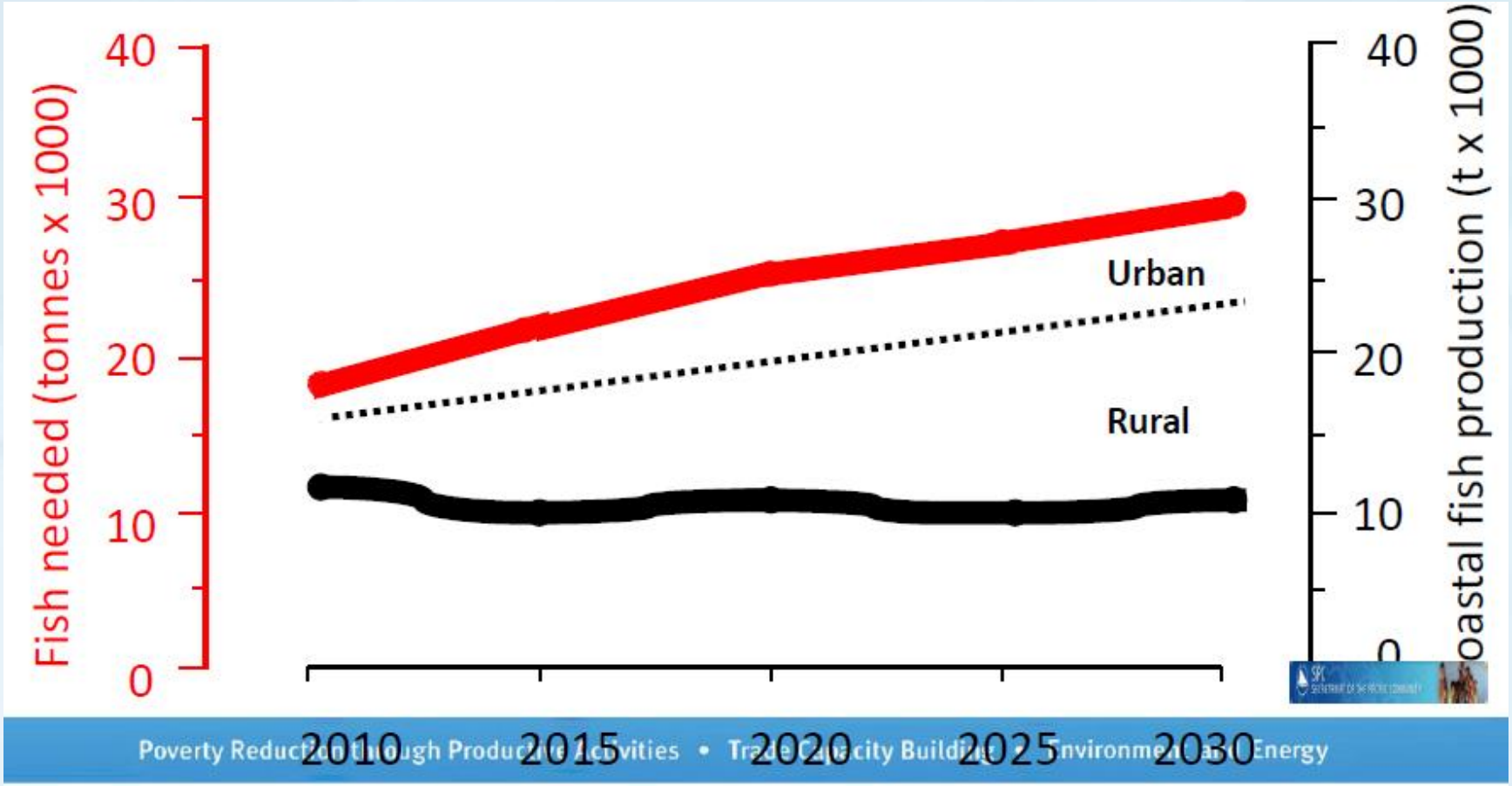
Population Pressure – fish need

Assume a whole snapper:
25-30 cm or around 250g
Plate size fish

Future fish need

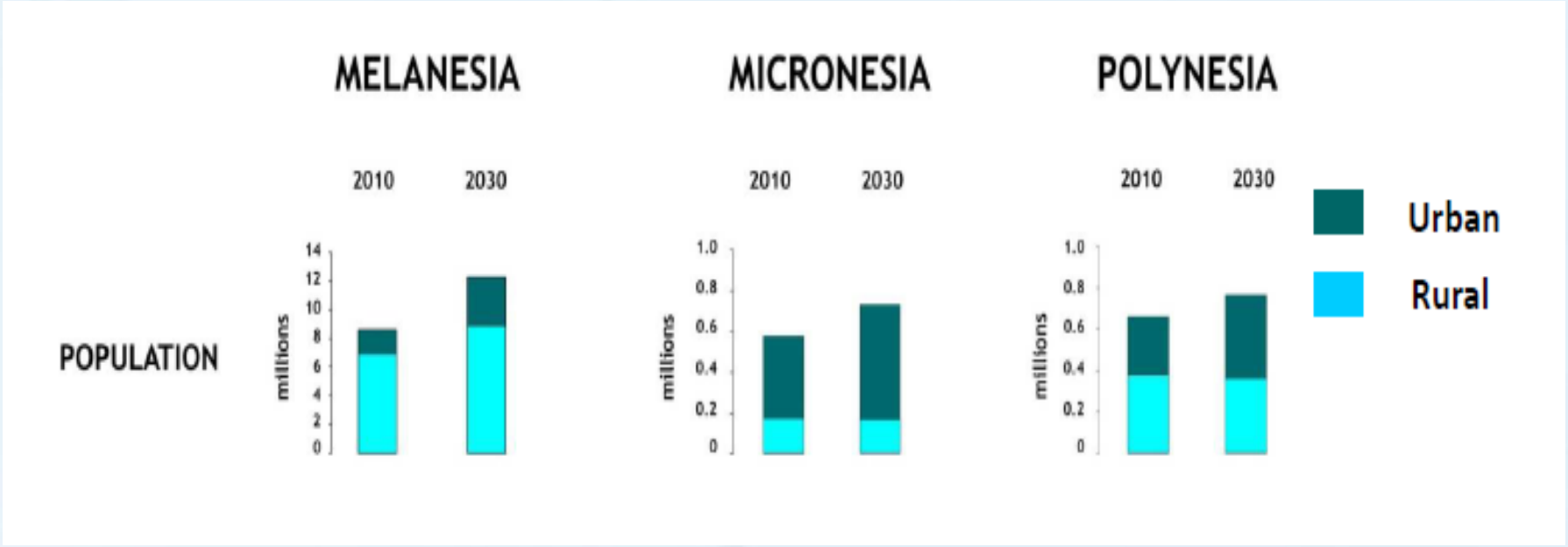
- Melanesia - 400,000,000 pieces
- Micronesia - 40,000,000 pieces
- Polynesia - 20,000,000 pieces

Population Pressure – fish gap



Urbanization

- Reduced access to productive land
- Loss of traditional knowledge for producing food
- Weaker family support systems
- Poverty through unemployment



Urbanization

- Coastal fishery resources are over-exploited, close to urban areas where population creates the greatest demand for fish

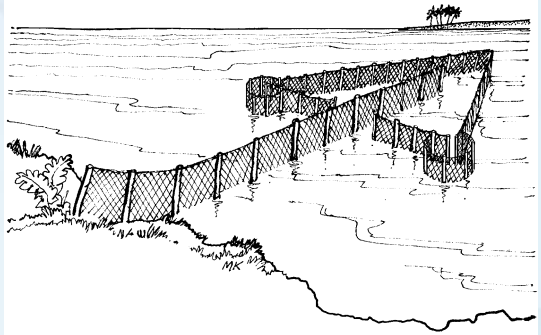
Increase population in urban areas

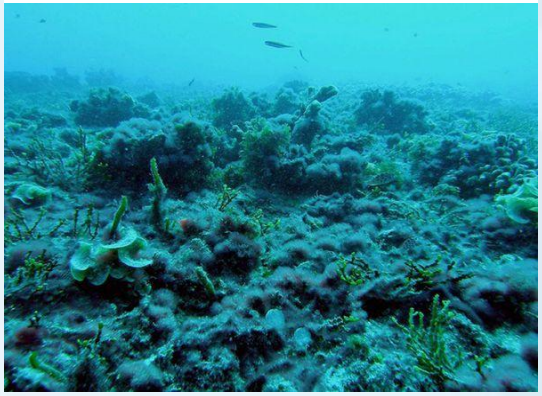
More people do not have access to catch sufficient fish for consumption

More coastal fish shipped in from less populous areas

Exporting urban-type fisheries problems to rural areas

Habitat Degradation

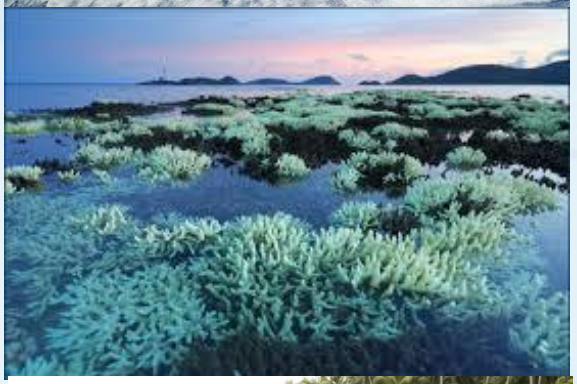




- Increasingly degraded or threatened, as a result of coastal development, destructive fishing practices, inadequate watershed management (agriculture and logging), sewage and other forms of pollution from cities, ships and industry, solid waste disposal and mining of coastal aggregates, among others
- Production decline due to habitat destruction
- Many species are highly dependent on habitat.

NO HABITAT → NO FISH!!

Climate Change



- Frequency of tropical cyclones
- Rising sea surface temperatures and more acidic oceans impacting on:
  - coral reefs,
  - coastal habitats,
  - growth and survival coastal fishery resources and food webs
- Changes in rainfall or sea level impacts migration patterns of fish affecting production levels

SPC – WHO ARE WE

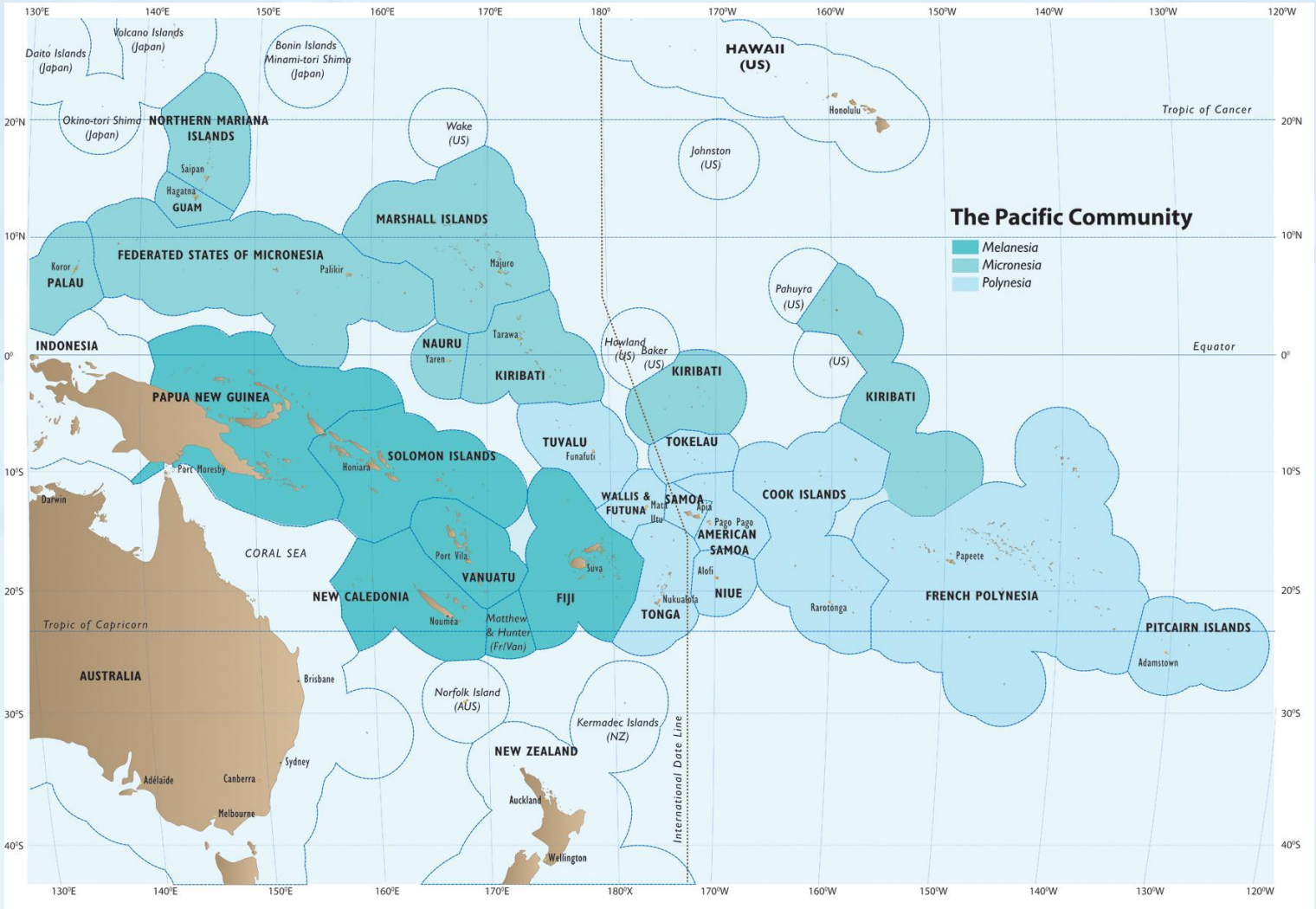
- SPC – Secretariat of the Pacific Community, formally called South Pacific Commission,

- Regional intergovernmental organisation established in 1947 by the six governments that administered territories in the Pacific: **Australia, France, New Zealand, the Netherlands, the United Kingdom and the United States of America**.

- Established to restore stability to a region which had experienced the turbulence of Second World War with the objective to assist their dependent territories and to benefit the People of the Pacific.

SPC – OUR MEMBERSHIP

- **26 members - 22 Pacific Island Countries and Territories and 4 metropolitan countries**



SPC – Our Role & Vision

- Total membership EEZ - **30 million** square kilometres - sixty times larger than their total land area, which is estimated to be **0.5 million** square kilometres, and inhabited by over 9 million people;

- The SPC's role is - ***to provide technical assistance to the Pacific Island Countries in the areas of land resources, public health, social sector, economic development and fisheries including aquaculture and marine ecosystems***.

- The SPC's vision for the region is - ***a secure and prosperous Pacific Community whose people are educated and healthy and manage their resources in a sustainable way***.

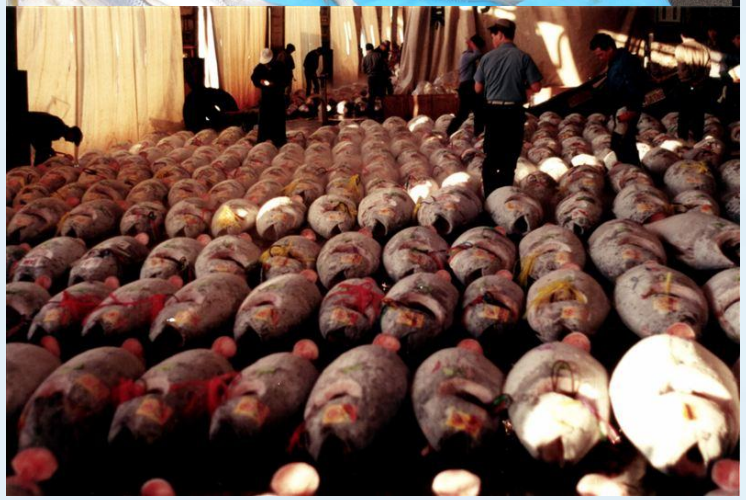
SPC – Our Programmes

- Seven Divisions

- One of the seven divisions is – Fisheries, Aquaculture, and Marine Ecosystems (**FAME**)

FAME Division – What We Do

- **Two Programmes**
  - Coastal Fisheries Programme (CFP)
  - Oceanic Fisheries Programme (OFP)

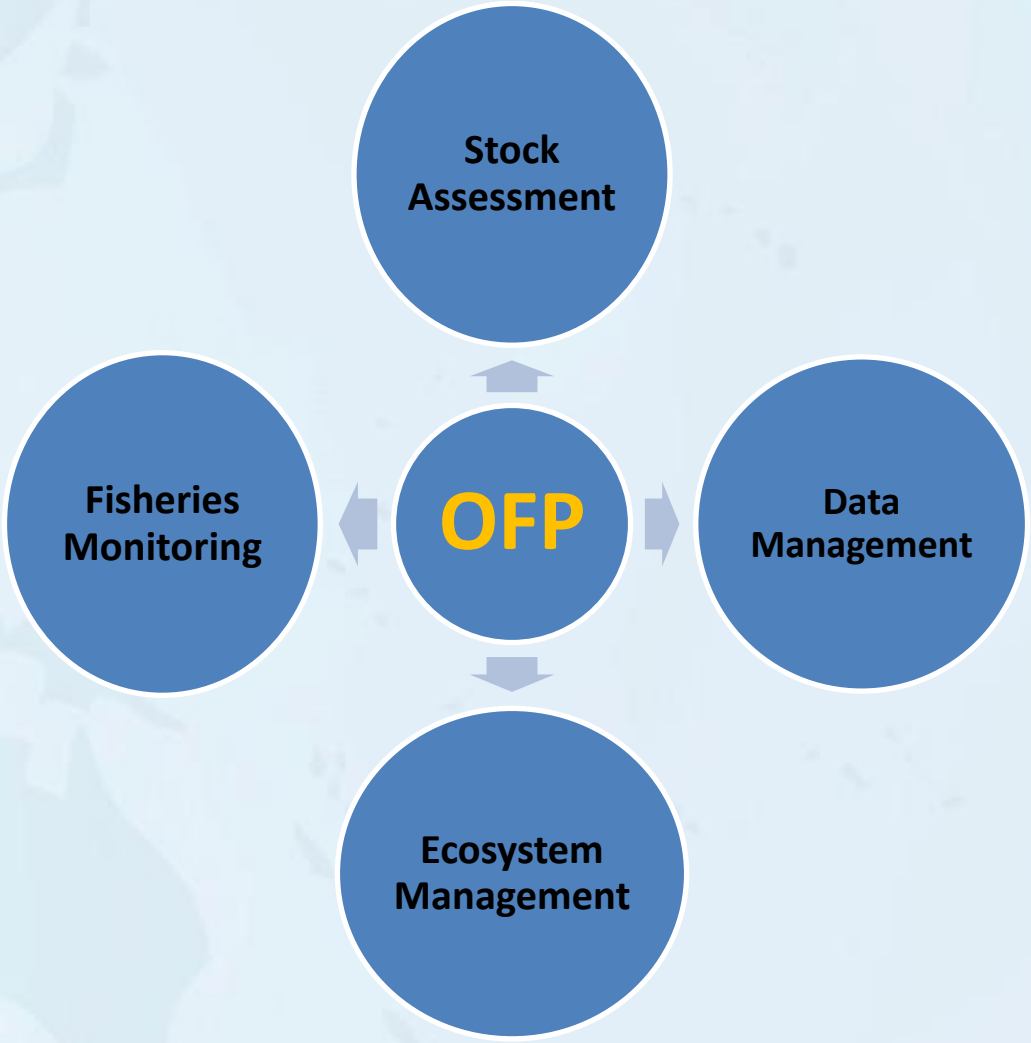


FAME Division – Our Role

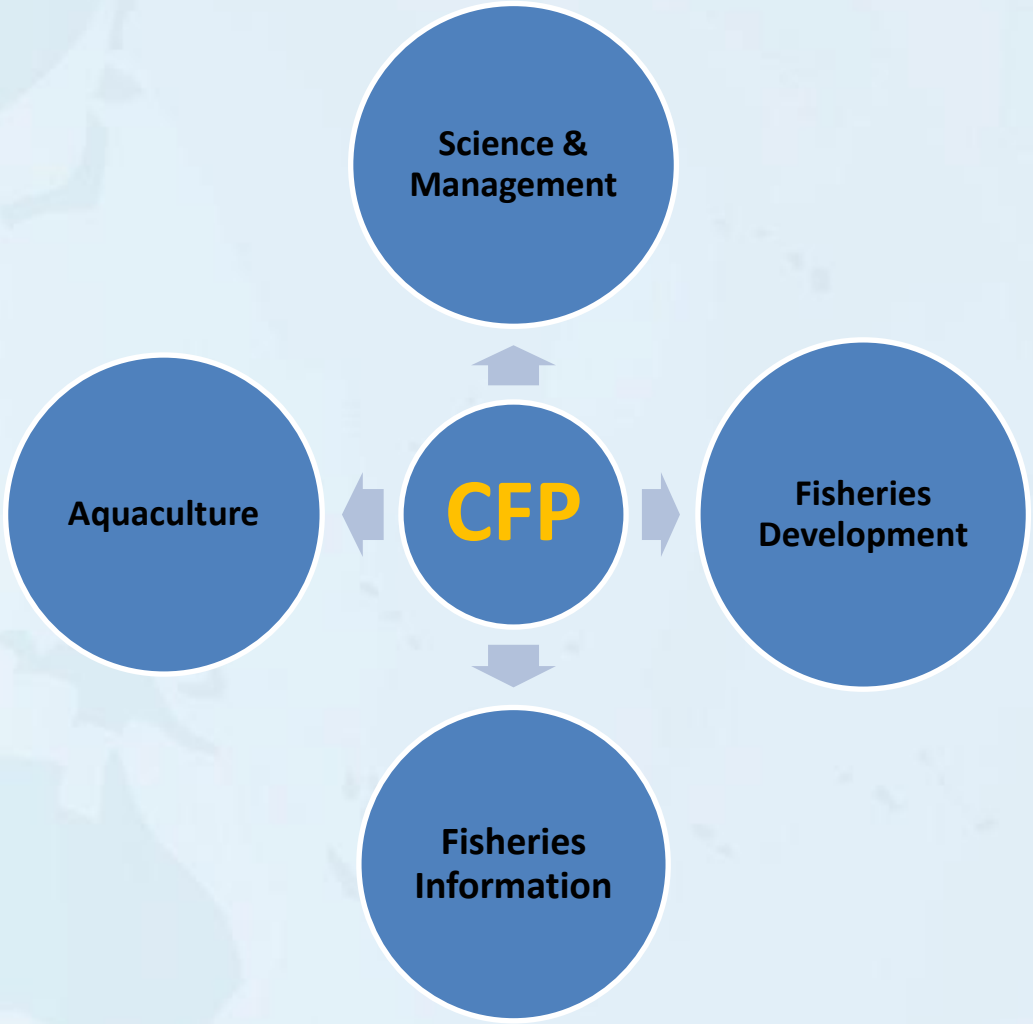
 Role –

– *Ensure that the fisheries resources of the Pacific Islands region are sustainably managed for economic growth, food security and environmental conservation*

SPC – Oceanic Fisheries



SPC – Coastal Fisheries

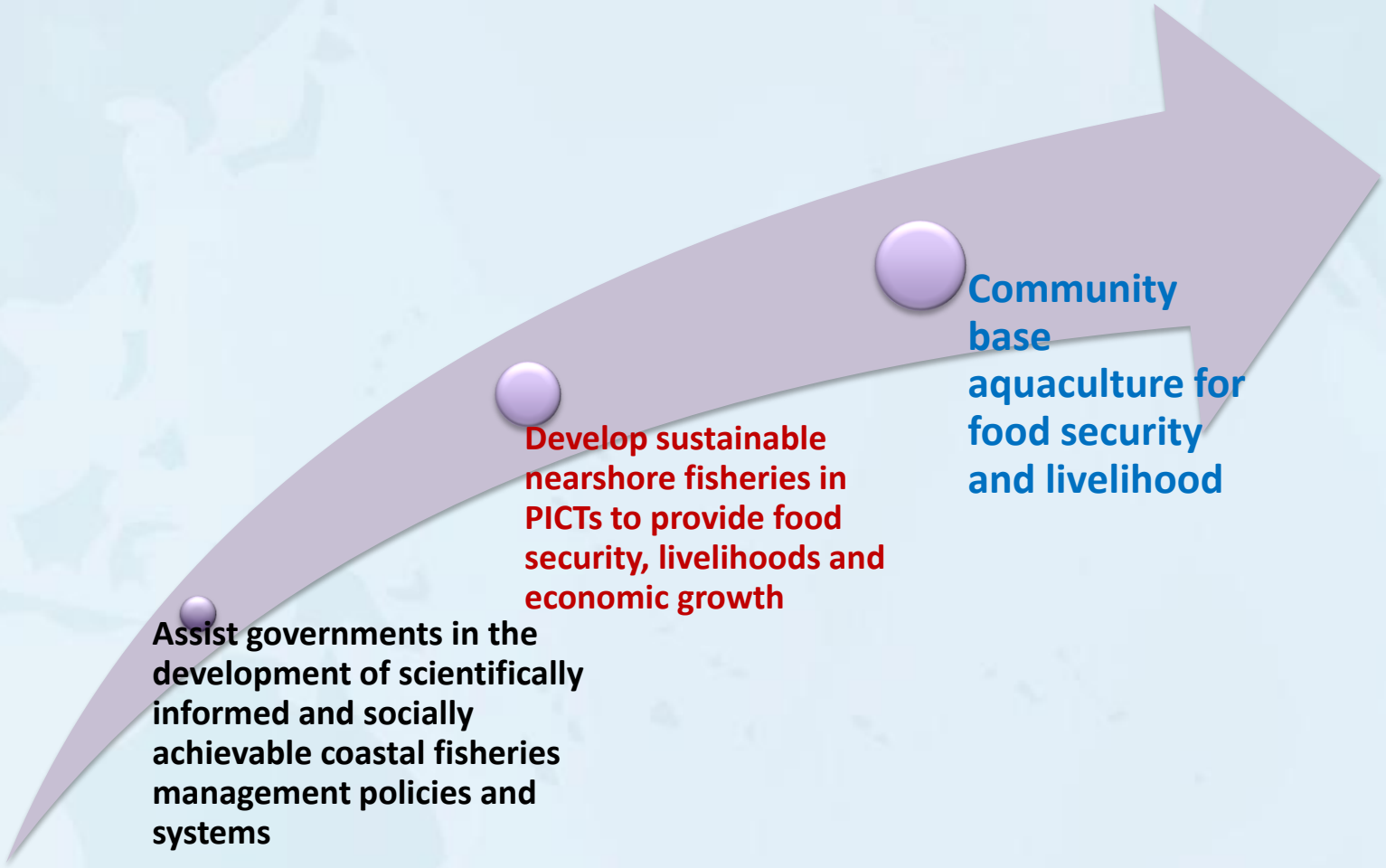


Coastal Fisheries Programme

- Goal (FAME Strategic Plan 2013 – 2016)

"Coastal fisheries, nearshore fisheries and aquaculture in PICTs are managed and developed sustainably"

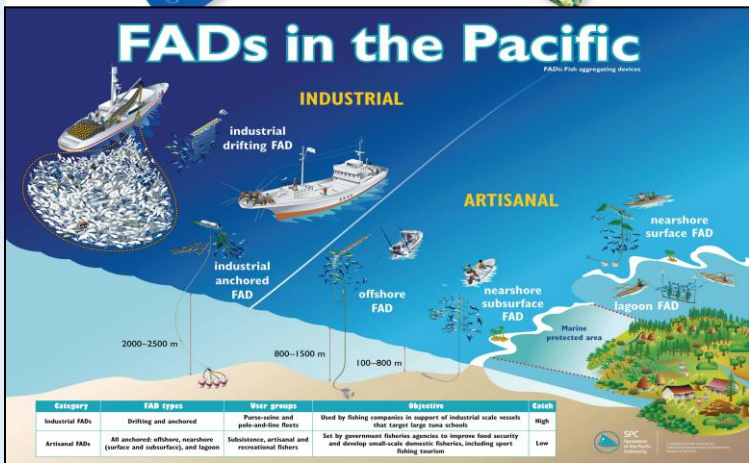
Where We want to Go..



CFP - Science & Management

- **Key result** (what we did or contributed to)
  - Resource assessment surveys and habitat surveys/biological sampling

- **Why it is/was important**
  - Management plans, regulations, mitigation measures, and community-based management approaches.
- **Evidence of what difference this initiative made to the Pacific**
  - Empowerment of coastal communities
  - Capacity building - involvement of women
  - Creation of alternatives & climate adaptations
  - Information/awareness material production & dissemination



CFP – Near-shore Fisheries Development

- Fishing technology including FADs, sport fishing, fisheries diversification
- Seafood export facilitation
- Fishermen's associations
- Fisheries economics

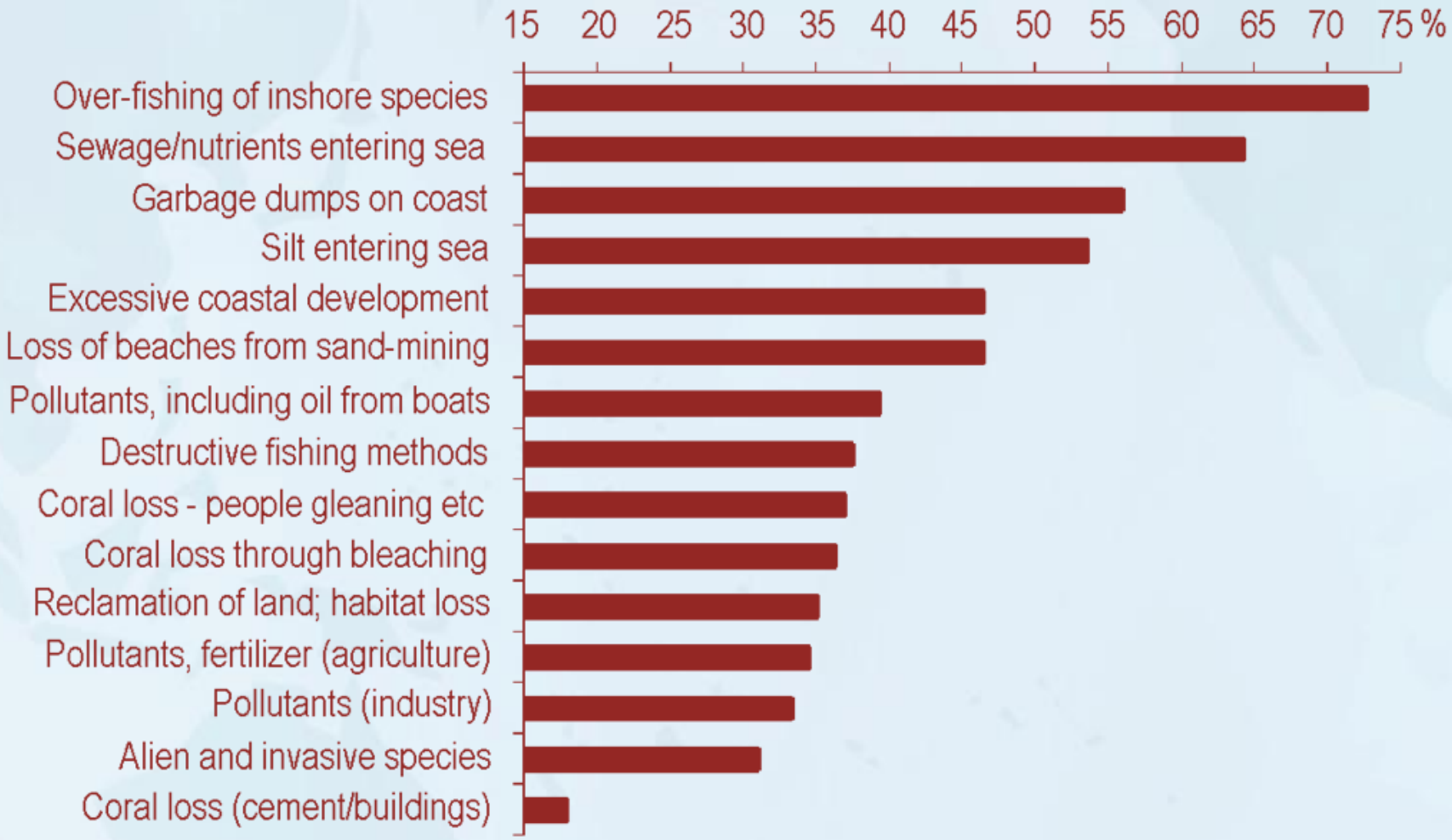
Aquaculture

- Seaweed farming
- Tilapia and milkfish
- Freshwater prawns
- Aqua-ponics
- Crabs
- Sea cucumbers
- Aquatic biosecurity

Community Ecosystems Approach Fisheries Management

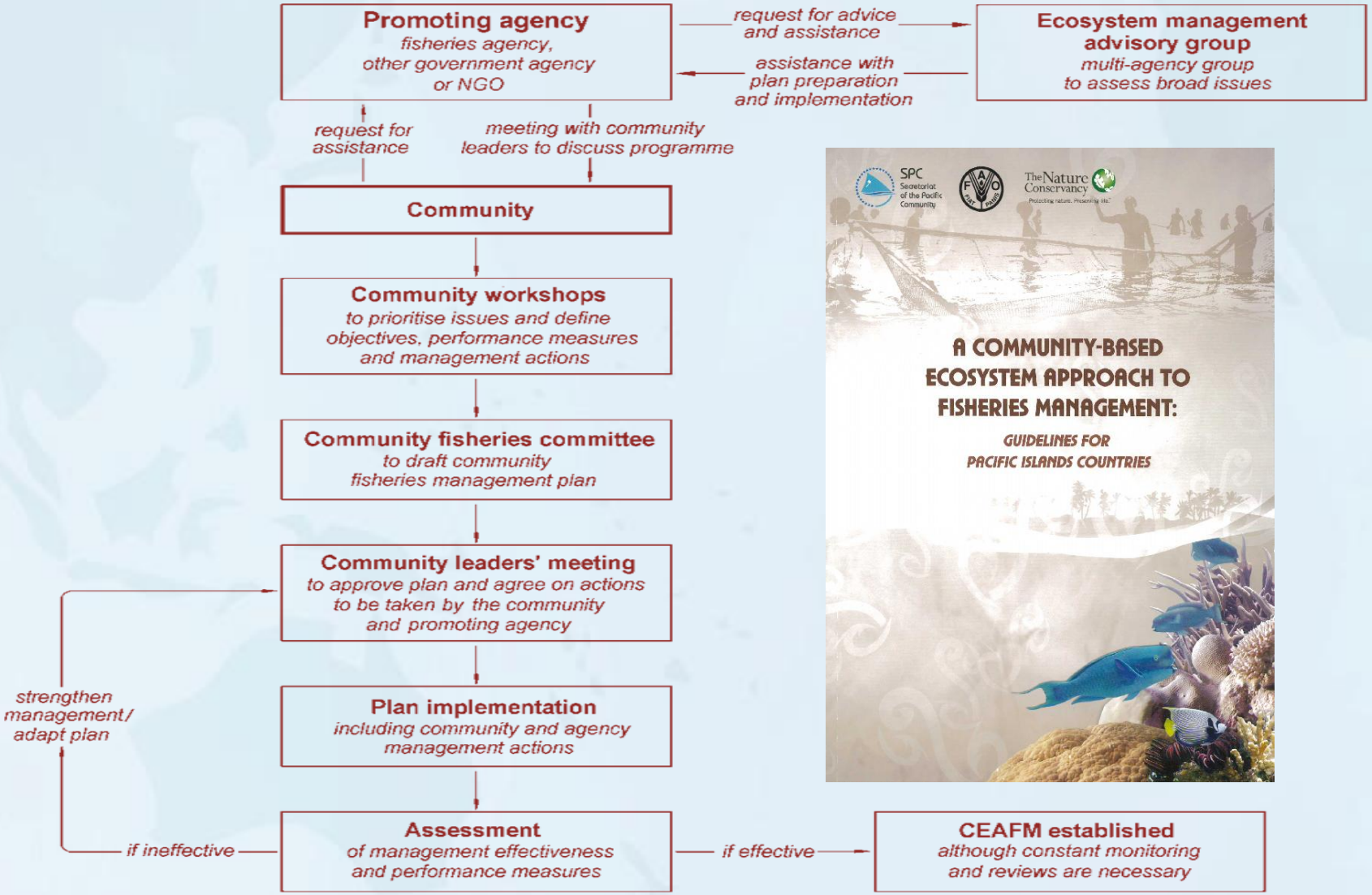
- SPC – promoted coastal fisheries management system (**CEAFM**)
- Represents a combination of three different perspectives
  - Fisheries management
  - Ecosystem management
  - Community based management

Why CEAFM ?



It is pointless to address the problem of depleted fish stocks by reducing fishing effort, restricting catches and imposing size limits if the key threats to their recovery are degraded ecosystems.

CEAFM - Outline



Regional Networking

- Build on regional strength and enhance coastal fisheries management:
  - Member Countries
  - Regional Institutions
  - MSG
  - LMMA & other national and regional NGOs
  - Donor Agencies
  - Youth
  - Gender
  - Women groups

MERCI

Thank you

Tangio tumas