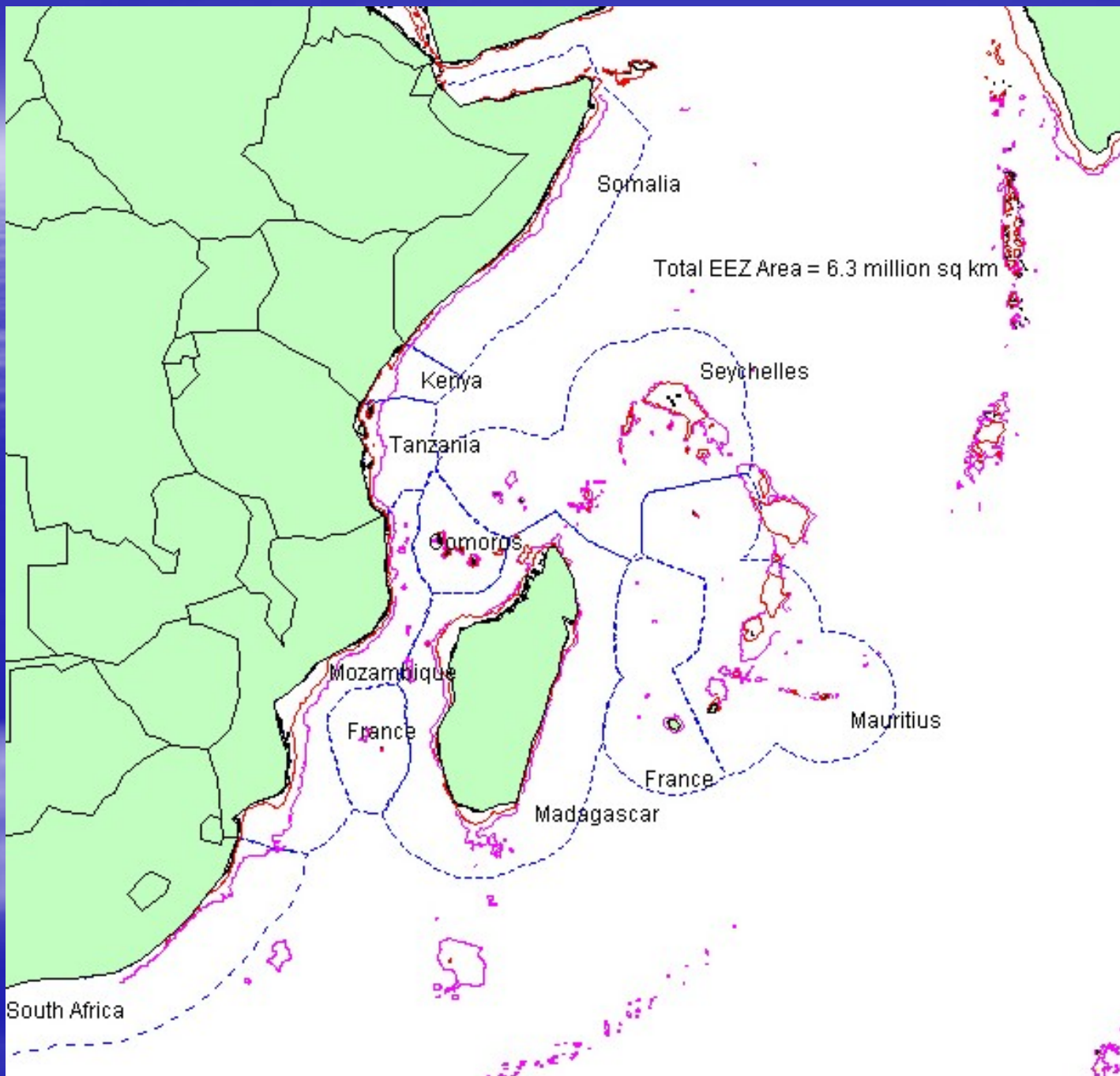


The Importance of Fisheries Resources on the East Coast of Africa

The protection of resources in the region through joint initiatives

Martin Purves & Marcel Kroese





Coastal States

Somalia

Kenya

Tanzania

Mozambique

South Africa

SIDS

Comoros

Seychelles

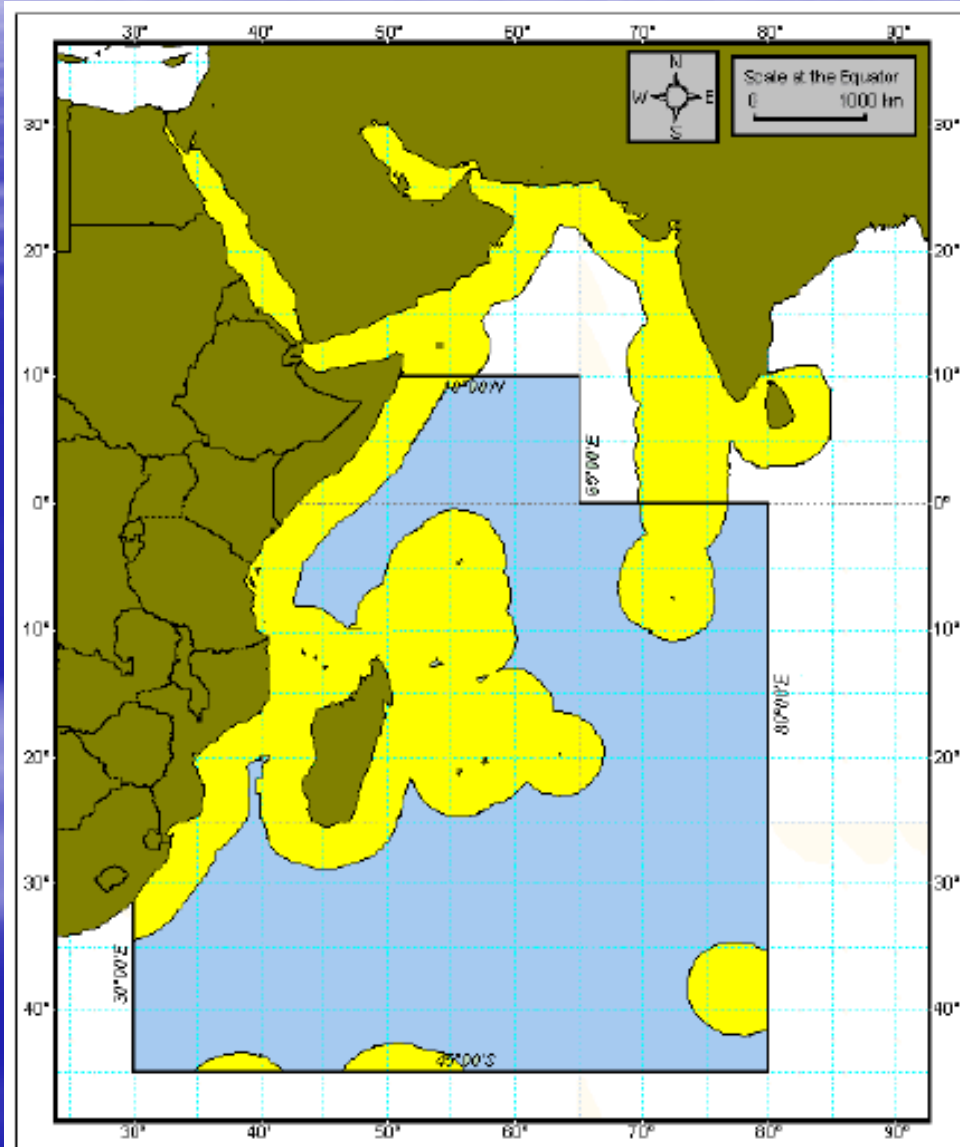
Mauritius

Madagascar

Mayotte &

Reunion

South West Indian Ocean Fisheries Commisision (SWIOFC)



- Established November 2004 by FAO
- 1st meeting April 2005 in Nairobi, Kenya
- Advisory body promoting sustainable development and utilisation of coastal fishery resources off the shores of East Africa & several island states
- Also responsible for management & regional cooperation on fisheries policy

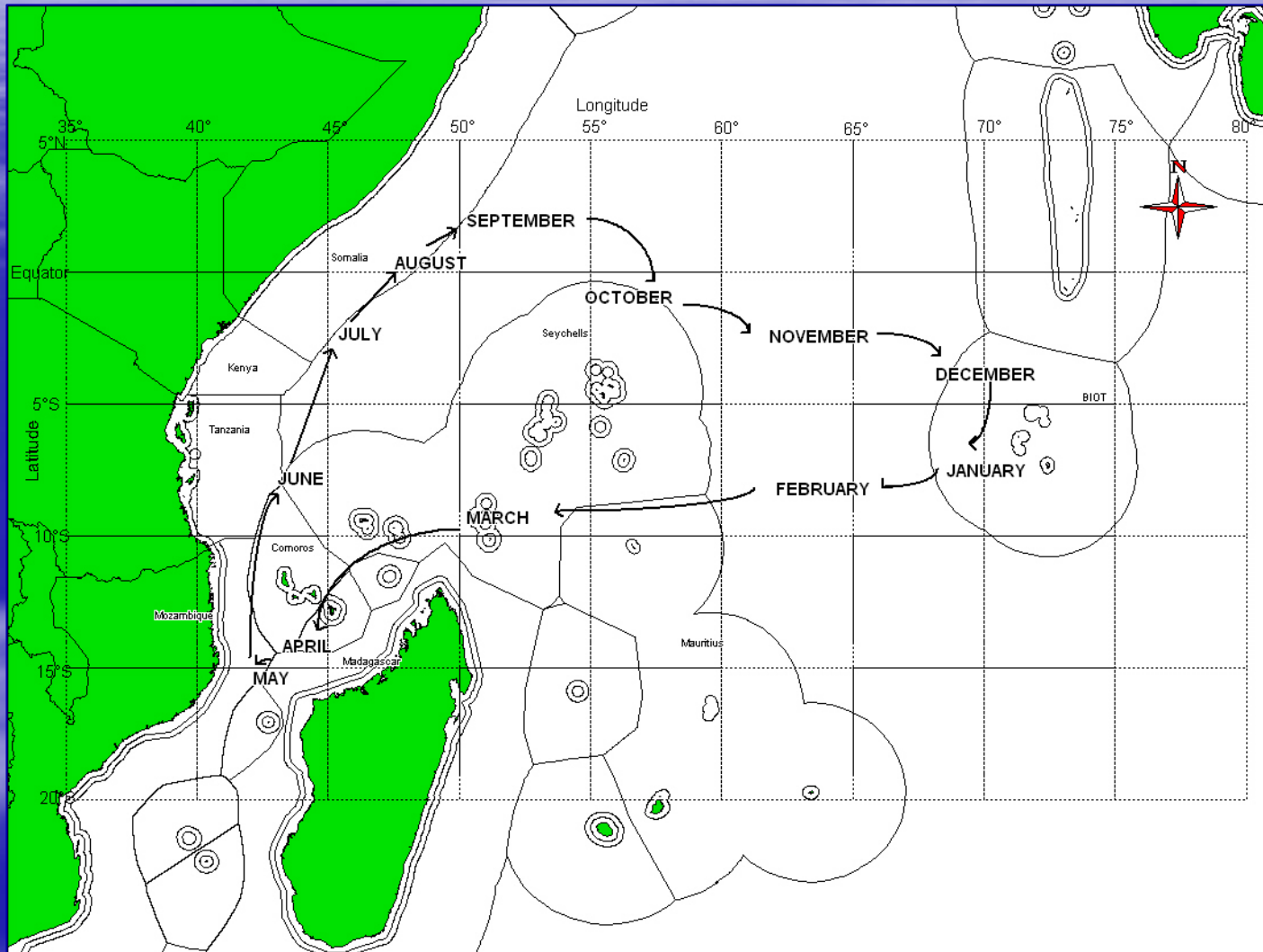
Overview of Fisheries

- West Indian Ocean – 75% of fishery resources are currently being fished at their maximum biological productivity. Other 25% are over-exploited and require better management
- Catches in region increased by >10% in last decade
- Fish resources of the coastal waters of the southwestern Indian Ocean constitute a major source of animal protein for many near-shore communities
- Exports of fishery products represent a vital source of exchangeable earnings
- Majority of fishing boats are foreign - Spain, Taiwan, Japan, France & Uruguay

- SWIOFC's mandate focuses on coastal fishing, a parallel agreement on regional cooperation on high-seas fishing of non-tuna resources is being negotiated
- Tuna resources are managed by the Indian Ocean Tuna Commission (IOTC), based in Seychelles

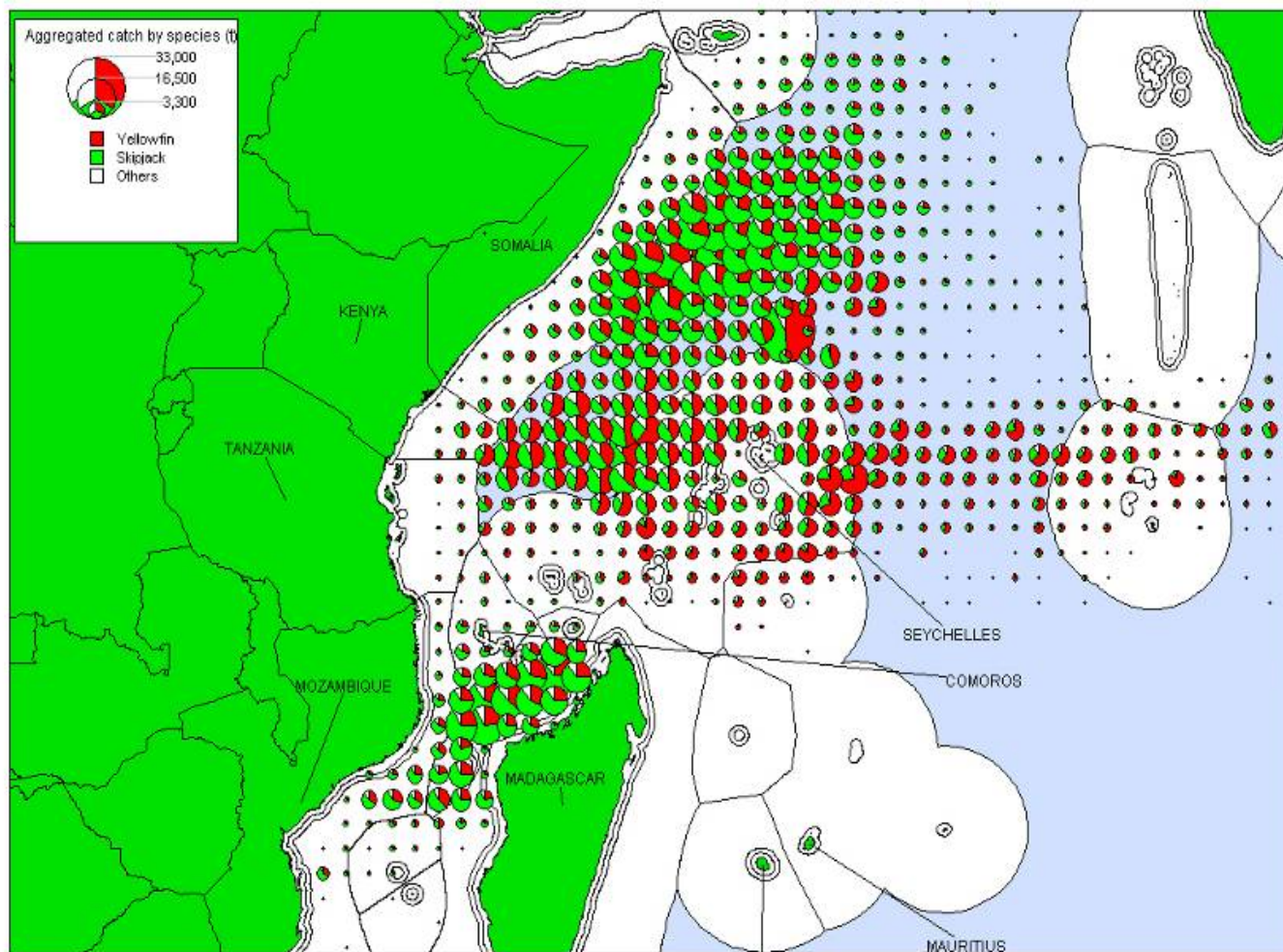


Highly Migratory Fish Stocks: Tuna in the Western Indian Ocean



Source: G. Parkes, IUU Fishing, May 2007

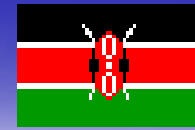
Tuna in the Western Indian Ocean



Total aggregate catch of yellowfin and skipjack tunas (1° squares) by purse seine vessels in the Indian Ocean during 1983–2001 showing catches inside and outside EEZs (Source: IOTC purse seine catch and effort data).

Source: G. Parkes, IUU Fishing, May 2007

Kenya



- Fishery sector contributes 3 - 5% of GDP
- Freshwater fish 96% of total production
- Principal fishery in Lake Victoria - Nile perch, tilapia, & sardine
- Marine fisheries sector lands only ~7,000 t of fish in 2004 (about 4% of the total fish landed)
- Potential is estimated at 150,000 t
- EEZ is also located within the richest tuna belt in the Indian Ocean

Kenya

- Limited artisanal activity and distant water fishing nations (DWFNs)
- Artisanal fisheries sector of great importance to the country's economy in coastal region, supporting the livelihood of many coastal communities
- 90% of fleet are small, non-motorized boats such as outriggers & dhows using gill & seine nets, traps, hand & bottom lines



Kenya

- DWFN fleet (mostly tuna) - purse seiners and longliners, fishing under access fee arrangements with the Government - no obligations to land or transship catches in the country
- Limits the country's benefits from its EEZ fishery & denies Kenya development aspects associated with transshipment, landings for processing or by-catch trade



Kenya

- Co-management based approach to ensure that industry are involved in fisheries management and decision-making process in fisheries
- MCS: - VMS expand to all fishing vessels
 - Area restrictions – marine reserves tool in fish restoration; foreign vessels not in territorial waters
 - boarding & inspections of fishing vessels
 - record catches & by-catches (logbooks)
- Under reporting in shrimp fishery as high as 50%
- IUU catches estimated at 20% of total catches

Tanzania



- Fishery sector contributes 1.5 - 3% of GDP
- Coast has a narrow, sharply falling shelf – fishing activity is generally concentrated inshore and around the islands of Zanzibar, Pemba & Mafia.
- Outrigger canoes & small dhows catch great diversity of species, e.g. snapper, kingfish, shark, rays, shrimps, lobsters, sardines
- Small fleet of trawlers (shrimps) & purse seiners (sardines) fish in territorial waters



Tanzania

- 70-100 foreign vessels licensed every year to catch tuna, sharks & billfish
- Under current licensing system, difficult to know how much tuna being caught - could be worth as much as 200 million US\$
- During peak fishing season, up to 10,000 t of tuna caught in Tanzania's EEZ weekly
- No catch limiting & not full VMS coverage
- Negotiations with EU currently to license 39 tuna seiners and 31 surface longliners



Tanzania

- 2007 - Deep Sea Fishing Authority (Amendment) Act, 2007 passed
- Control fish licensing procedures, protect the environment and raise revenue collection to 20 million US\$ a year by 2011
- Previously only 2.8 million US\$ collected from the fisheries sector



Inspection of
shrimp trawler
by Tanzanian
inspectors in
Aug 2003

Tanzania

- In 2002 SADC EU-MCS Programme; 12 foreign tuna boats were licensed to fish off Tanzania
- Sudden increase to 84 when foreign fishing fleets realised that regularly patrols of EEZ instigated
- MCS programme - EU-registered purse seine fleet start reporting catches to fisheries authorities
- IUU catches estimated to be 15% of total catches

Inspection on board a
foreign flagged tuna
longliner



Mozambique



- Fishery sector contributes 2 - 5% of GDP
- Important source of animal protein & employment (direct employment for ~90 000 people)
- Total marine products estimated at 100,000 to 120,000 t per year
- Fish consumption is estimated at 7.5 kg per capita



Mozambique

- Sector characterised by economic diversity
- 3 Main types of fisheries: industrial fisheries, semi-industrial & artisanal
- Industrial fleet: dominated by State joint-venture companies; Major products tuna & shrimp
- Semi-industrial fleet: mostly national ownership
Catches shrimp, demersal fish
- Artisanal: widespread along nearshore coastline
Fish & prawns use beach seines, handlines, gillnets
- Most fishing 15-20nm off coast
- Only tuna fishery further offshore

Mozambique

- Officially 75% of all fisheries are managed, but in practice, only a small proportion has effective management
- Related to limited resources (human and financial) and the extensive Mozambique coastline
- Country has necessary legal instruments, but not ability to implement and enforce
- Significant increase over last 10 years in MCS



Mozambique

- Implementation of a national program of MCS, in some cases with South Africa collaboration
- Nation-wide implementation of VMS (2004)
- Co-management regimes for artisanal fisheries
- Intention to sign the UN Fish Stocks Agreement and to implement other FAO initiatives;
- Not a member of IOTC
- Under reporting in shrimp fishery as high as 75%
- IUU catches estimated as 15% of total catch

South Africa

- Fishery sector contributes 1% of GDP
- West Coast a lot more productive than East Coast, but higher species diversity in east
- Significant changes - issuing of long-term rights in 2005 for 10 –15 years
- Transformation of sector - more representative
- Relatively small sector within national economy



South Africa

- Industrial fisheries started in the late 1890s, and effort escalated rapidly thereafter
- By 1960s, catches in several fisheries had exceeded sustainable yields and were in sharp declines
- Initiatives to improve the scientific basis for management of the major fisheries



South Africa

- Main offshore fisheries:
 - Hake: bottom-trawl & demersal longline
 - Small pelagics: purse-seine
 - Tuna & swordfish: pelagic longline
 - Horse mackerel: mid-water trawl
- East Coast fisheries:
 - Tuna longline
 - Prawn trawl in Kwazulu-Natal



Image from ICSF

South Africa

- MCS Capabilities:

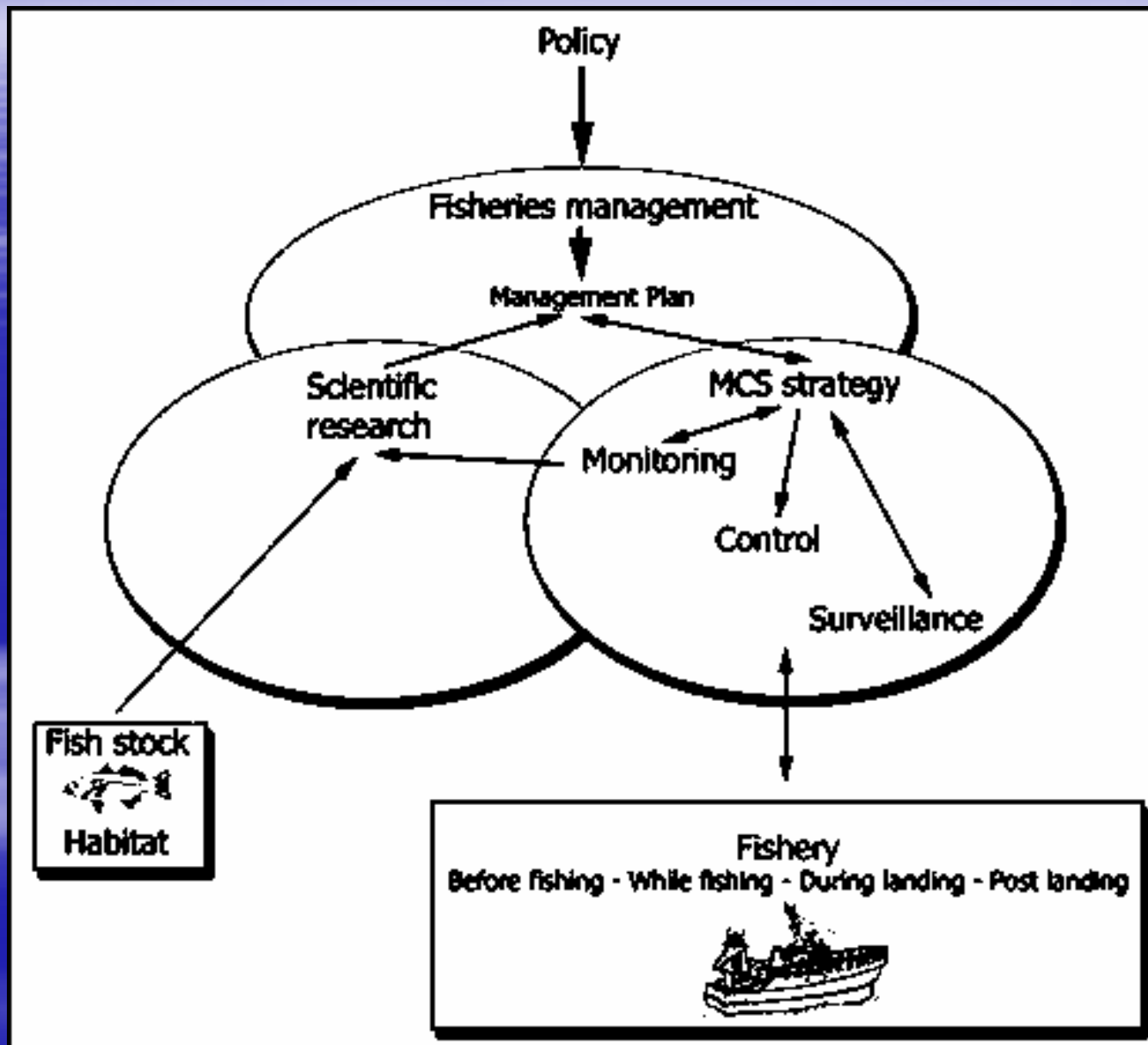
4 new environmental protection vessels (EPVs)

Joint patrols with Namibia on West Coast
with Mozambique, Tanzania on East Coast

Established observer & port monitor scheme



Main links between MCS & Fisheries Management (FAO)



Characteristics of IUU Fishing



- World-wide problem, affecting domestic waters & high seas & all types of fisheries
- Harmful to fish stocks and undermines the efficiency of national & international measures adopted to ensure sustainability of fish stocks

- Distorts competition and jeopardises the economic survival of those who fish in compliance with law
- Social costs - affects livelihoods of fishing communities, particularly in developing countries
- Many of the crew on IUU fishing vessels are from poor and underdeveloped parts of the world and often poor working conditions (social & safety)



- Excess fisheries capacity in developed countries can lead to a spillover of capacity into IUU fishing activities
- IUU fishing is dynamic and multi-faceted problem
- No single strategy is sufficient to eliminate or reduce IUU fishing
- Concerted and multi-pronged approach is required nationally, regionally and internationally, and by type of fishery.



Left
Lugal Pesca
(Jan04)

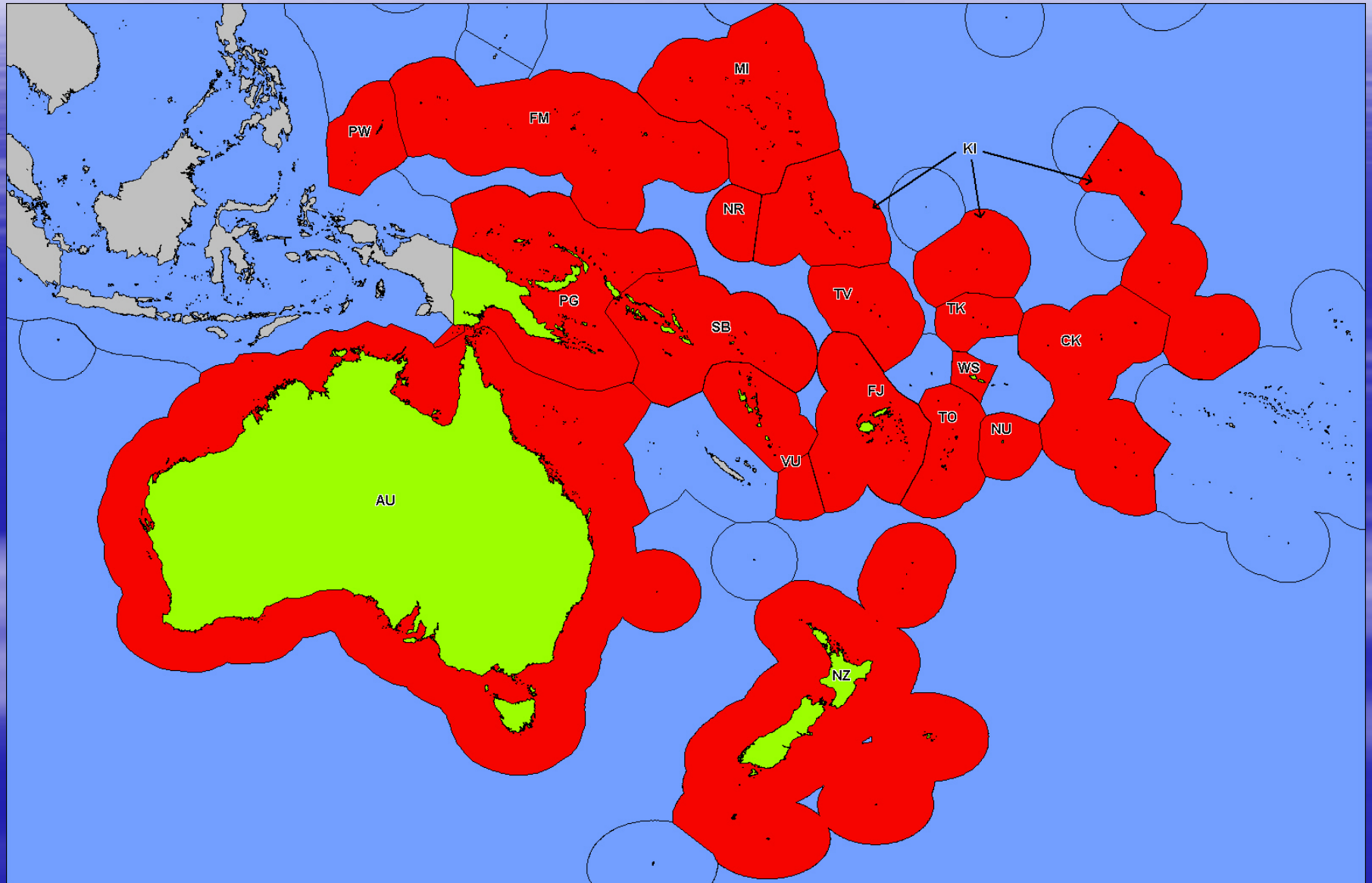


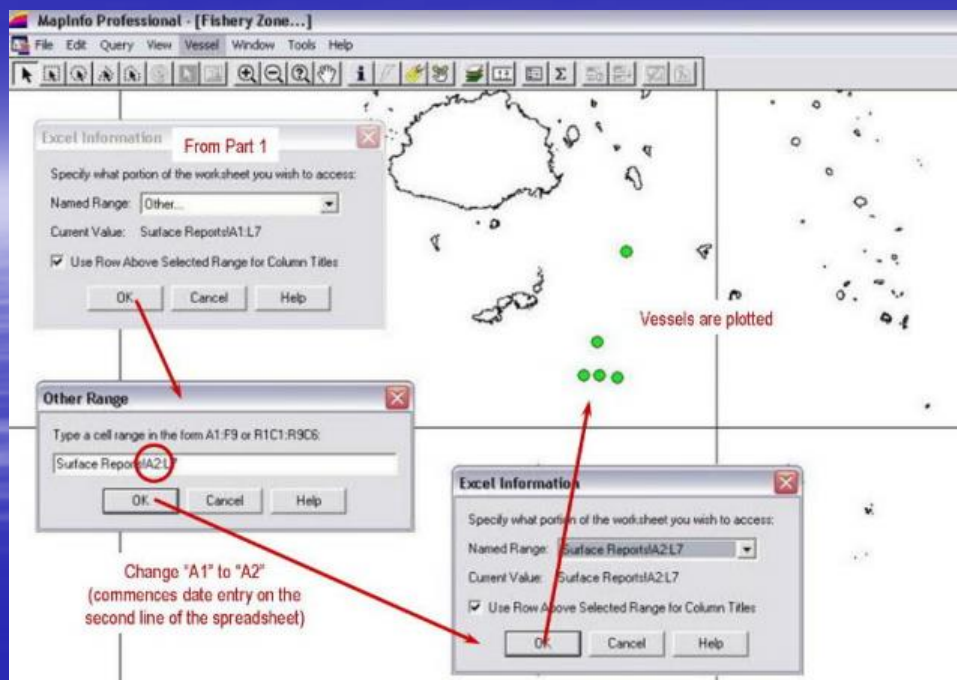
Right
Sargo
(Nov06)

Regional Cooperation

- IUU IPOA (FAO)
- SADC Fisheries Protocol
- SWIOFC
- IOTC
- SADC
- SADC MCS Programme

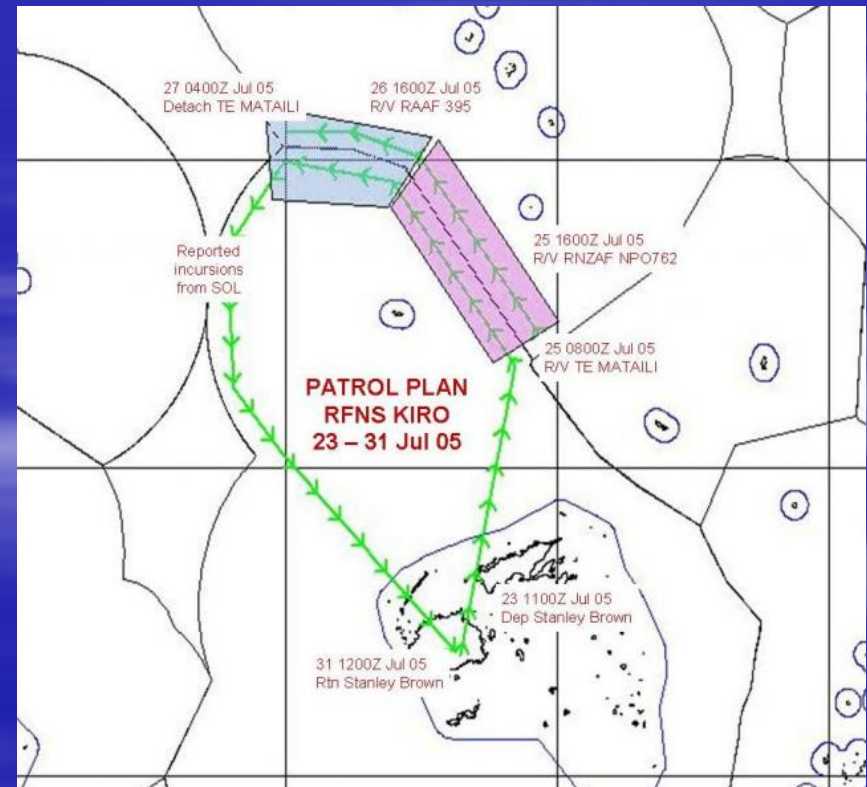
Small Island Developing States of the Pacific





- With VMS software - “Electronic Operations room”, fleet & operational commanders can remotely remain aware of the operational situation
- Amend patrol plans accordingly

- VMS is a principal tool for fisheries monitoring and surveillance
- Regional integration needed



Large , highly technical vessel are not required to intercept and inspect fishing boats



Why Fisheries?

- Employment
- Food security
- Services
- Taxes
- Renewable!

What can be done?

- Regional Strategy – what is it ?
 - Aim to reduce IUU fishing
 - Harmonisation
 - Cost effectiveness
- Regional Joint Ops centre
- Regional patrol vessels

How ?

- Regular Regional meetings
- Regional Monitoring and Surveillance meetings & workshops
- Joint patrols (bi & multi-lateral)
- Data sharing
- Legal frameworks



Who pays for it?

- Fishing licenses
- Donor agencies
- Service Providers



Is it worth it?

- IUU estimated at 15% of landed fish
- Growth in the regional fishing vessel register
- Growth in joint ventures
- Stock stability
- Increased investment

Why does it work at FFA?

- Outsourced implementing agency
- Minimal Government interference
- Clear objectives
- Expertise and Professionalism
- Discuss > Consult > Decision > Implement within 6 months – Mandate from Annual Ministerial meeting.

Role of the Navy

- Support MCS
- Cooperation Fisheries agencies
- Intelligence gathering
- Integrate regional vessel register
- Interrogate fishing vessels
- Additional training on UNCLOS
- Familiar with fisheries

Recommendation

- Find like-minded neighbours
- Find a common goal
- Use an Implementing Agency
- Start small
- Grow strong