

# Sustainable fish stocks and shared responsibilities for an ecosystem approach in the South West Indian Ocean: SWIOFP unites nine countries



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## Introduction

The South West Indian Ocean (SWIO), incorporates the Agulhas Current Large Marine Ecosystem (LME) and the Somali Coastal Current LME. Both these LME's are home to many endemic and threatened marine species, some of which are under increasing pressure from growing artisanal and industrial fisheries and environmental change.

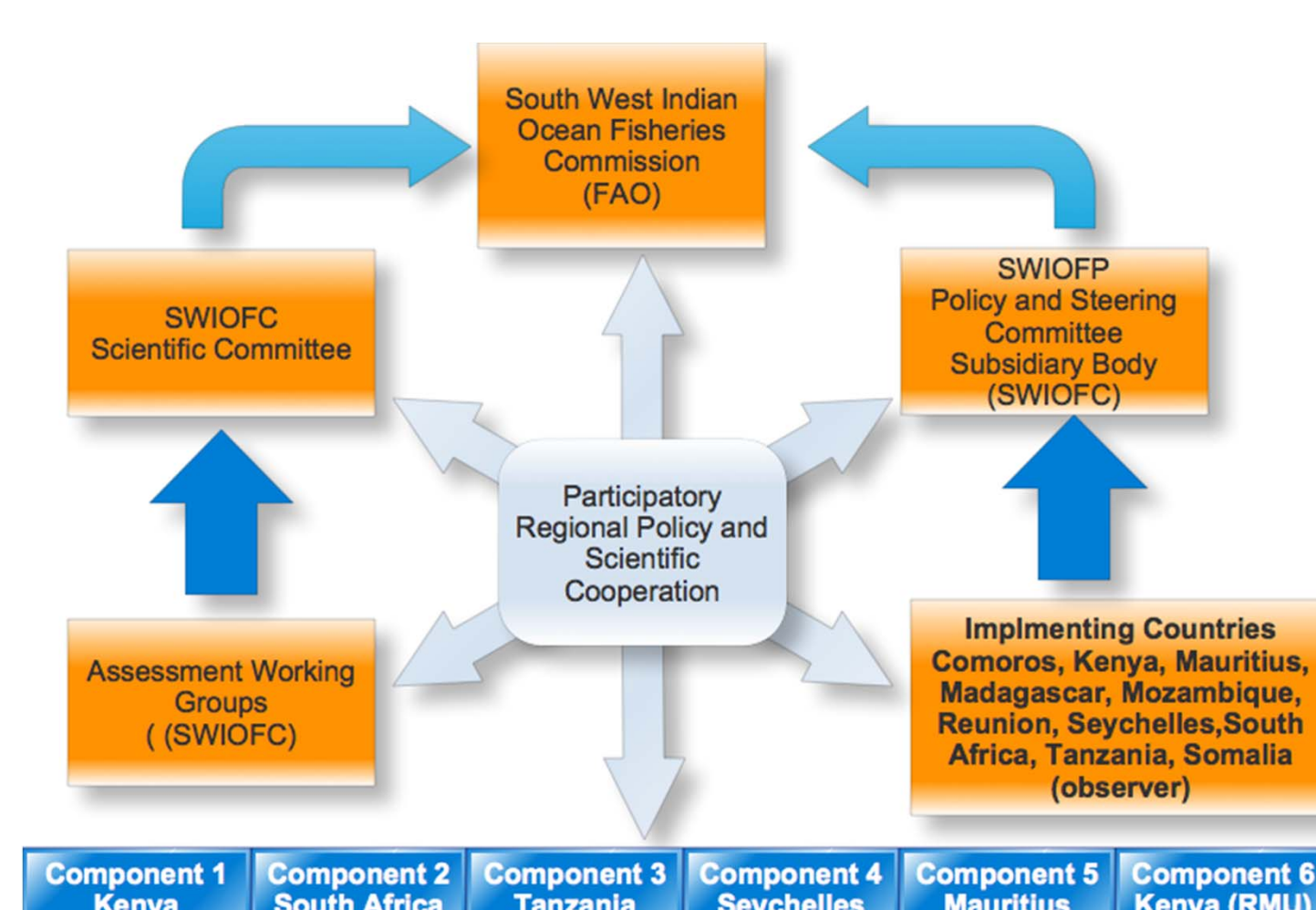
The South West Indian Ocean Fisheries Project (SWIOFP) is in its final year and has 9 member countries: Comoros, Kenya, Mauritius, Madagascar, Seychelles, South Africa, Tanzania, France and Mozambique. The SWIOFP assists its members to:

- gather information about fish stocks and fisheries;
- build capacity in marine science and resource management;
- mainstream biodiversity conservation in fisheries policies; and
- support a regional framework for managing shared marine resources.

The project focuses on offshore resources, where there is scope for future development and expansion of fisheries. The project supports a move towards an ecosystem approach to fisheries (EAF)

## Approach

The SWIOFP is a model of participatory regional scientific cooperation. It comprises 6 operational components led by scientists nominated from member countries. The project is steered by a subsidiary body of the South West Indian Ocean Fisheries Commission (SWIOFC). Scientific issues are debated in working groups and reported back to the SWIOFC scientific commission. Fisheries data are collected during research surveys and by fisheries observers placed on commercial vessels. These cover all member countries and priority crustacean, demersal and pelagic fish resources. Specialist studies, such as retrospective analyses of historical fisheries data, biodiversity and catch assessments supplement the information.



Regional Structure for Policy and Scientific Cooperation

## Results so far

- Over 600 days of sea-going research surveys in 9 SWIOFP member countries
- Over 30 individual surveys for demersal fishes, shallow and deep water crustaceans, and small and large pelagic fishes



- Deployment of 17 FADs anchored at depths of 50–1000m to improve access of fishers to pelagic fishes
- Training on fishing techniques at FADs
- 40 Fisheries observers trained and deployed
- Socio-economic assessments carried out

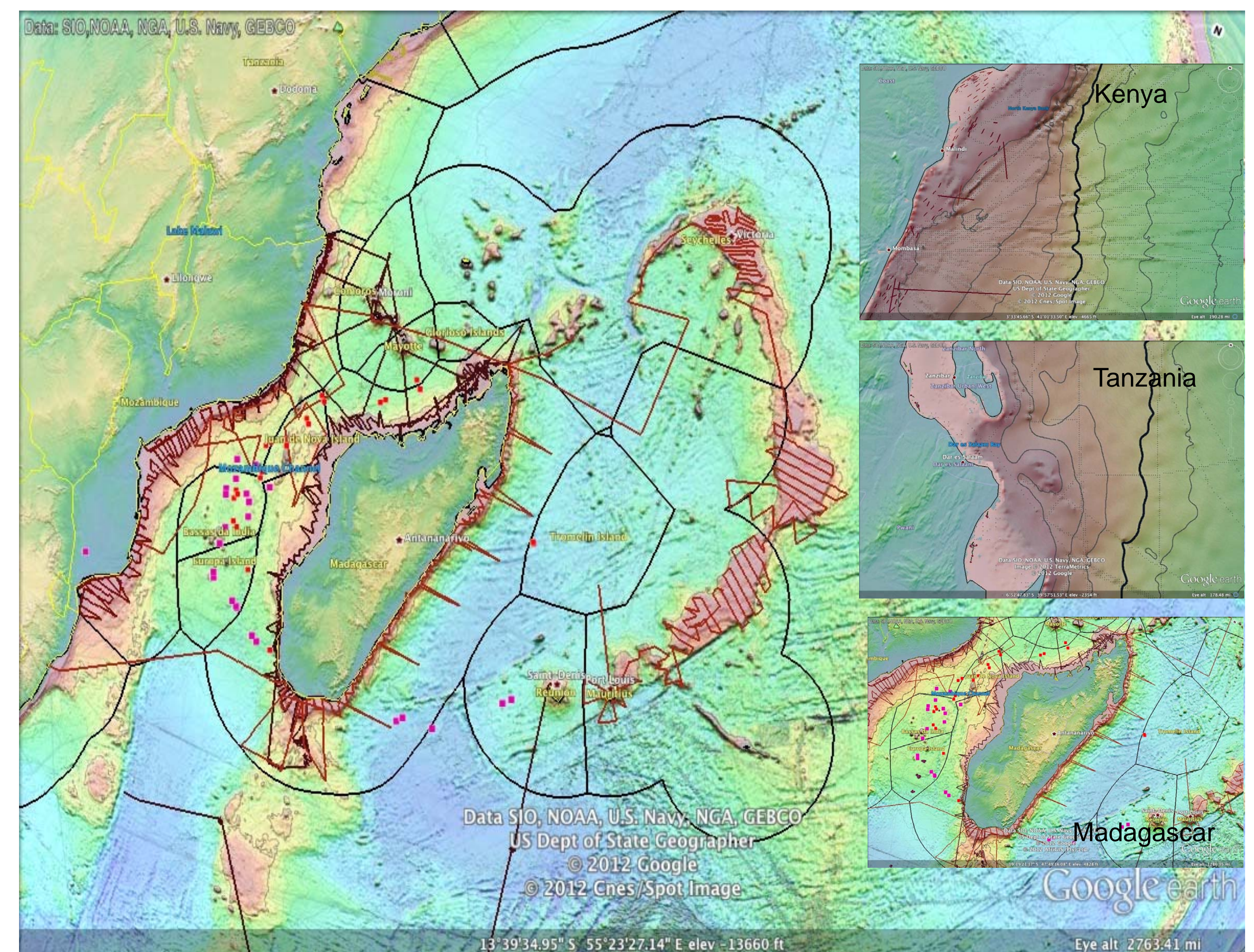


### Deployment of FADs, Mozambique

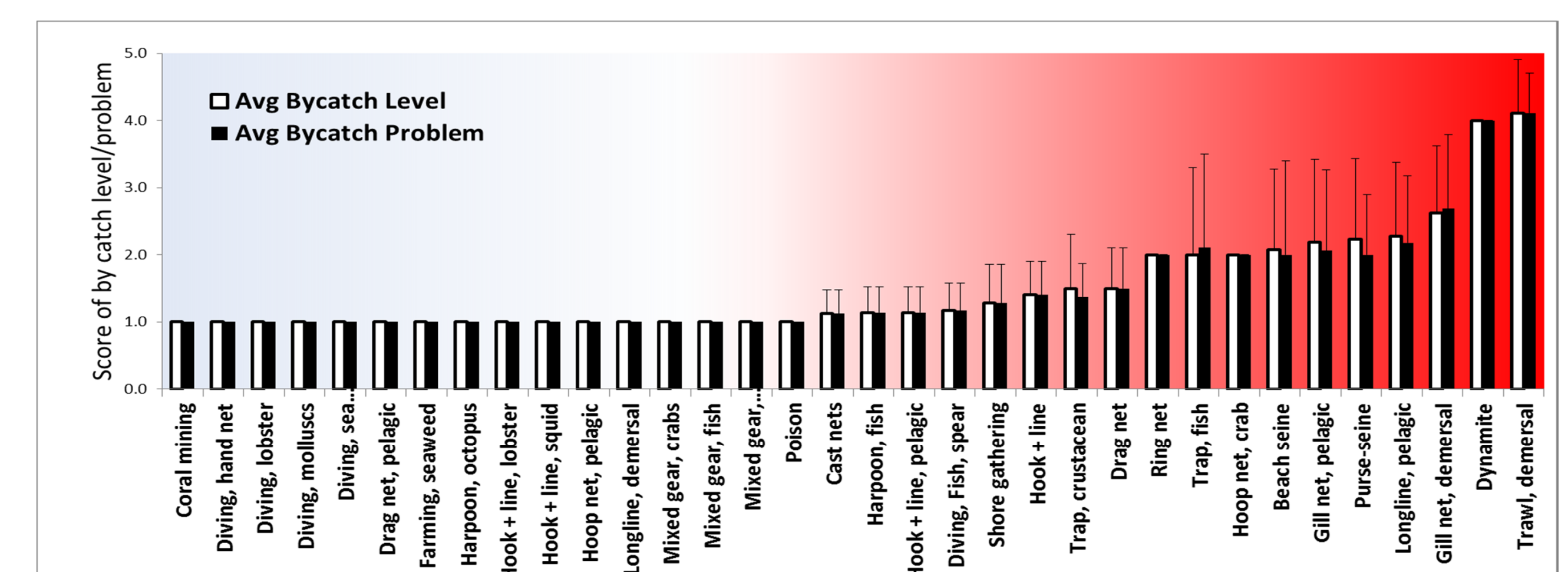
- Biodiversity mainstreamed in fisheries management
- Rapid Bycatch Assessment (RBA) revealed that gillnets have high impact on marine mammals (e.g. dugongs) and sea turtles
- Analysis of 250 Western Indian Ocean fisheries (see [www.wiofish.org](http://www.wiofish.org)), grouped by fishery type, revealed a close relationship between level of bycatch and harvesting type.



Bycatches of Dugongs and Sharks



Map of SWIOFP Research surveys and EEZ's of SWIO countries (Google Map)



Average (+ 1 STD) fisheries bycatch scores for aggregated harvesting types based on assessments provided by participants from 8 SWIOFP countries (van der Elst, 2012).

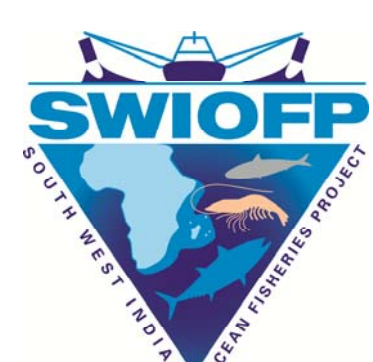
- Ecosystem Approach to Fisheries (EAF) - 8 of the 9 SWIOFP countries have convened national EAF task groups comprising all stakeholders. Task groups prepared baseline reports on specific fisheries, carried out ecological risk assessments, and drafted management plans that identify and address high risk issues.

Country	Fishery	Baseline Report	ERA	Management Plan
Kenya	Small and Medium Pelagic	Yes	Yes	Final Draft
Comoros	Demersal Fisheries	Yes	Yes	In preparation
Mozambique	Sofala Bank Shrimps/Demersal Line Fishery	Yes	Yes	Yes ( Final Draft)
Tanzania	Artisanal Pelagic Fishery	Yes	Yes	Final Draft
Seychelles	Demersal	Yes	Yes	Draft
South Africa	Tuna Fishery	Yes	Yes	Draft
Mauritius	Bank Fisheries (Nazareth, Saya de Malha)	Yes	Yes	Draft
Madagascar	Demersal Fisheries	Yes	Yes	In preparation
Reunion	N/A	N/A	N/A	N/A

Progress of EAF Fisheries Management Plans

## Long-term implications

- Stronger network of scientists and sharing of information among SWIOFP countries
- A marked improvement in fisheries information and databases
- Increased scientific capacity in a developing region (21 MSc students)
- Established Assessment Working Groups through the SWIOFC to enhance resource assessments



For more Information: [www.swiofp.net](http://www.swiofp.net) \* [www.wiofish.org](http://www.wiofish.org) \* or contact [rpayet@swiofp.net](mailto:rpayet@swiofp.net) or [jgroeneveld@ori.org.za](mailto:jgroeneveld@ori.org.za)

