

## WWF involvement in promoting Sustainability in Important Fisheries in the South West Indian Ocean (SWIO): The Case of Tuna Fisheries

By: Domingos GOVE and Edward KIMAKWA (WWF Coastal East Africa Global Initiative, Dar es Salaam, Tanzania, P.O. Box 63117. Tel: +255 22 2775348. Email: [dgove@wwfafrica.org](mailto:dgove@wwfafrica.org); [ekimakwa@wwfafrica.org](mailto:ekimakwa@wwfafrica.org))

### Introduction

#### South West Indian Ocean (SWIO) Tuna Fisheries

Commercial tuna fisheries started in the SWIO with long-liners from Japan (1950), Taiwan (1954) and Korea (1960); and later on, joined by a European Union (EU) purse-seiner fleet, mainly from Spain and France (1983), which migrated from Atlantic to the Indian Ocean.

Up until now, SWIO commercial tuna fisheries comprise mainly industrial foreign fleets, from the so-called Distant Water Fishing Nations (DWFN). These are granted, by the SWIO coastal states, access to fish in the SWIO Exclusive Economic Zones (EEZ), through Fisheries Partnership Agreements (FPA) in the cases of Seychelles, Comoros, Mozambique, Madagascar and Mauritius; and Fisheries Access Arrangements, including private licences, in all those countries plus Kenya and Tanzania. Key tuna market species include, in terms of catch importance, skipjack, yellowfin and bigeye tuna, the so-called tropical tuna.

Worldwide catches of tuna and tuna-like species achieved a new record of more than 7 million tonnes in 2012 (Food and Agriculture Organisation - FAO, 2014). Seven species and genera (including skipjack and yellowfin, the most important, and bigeye and albacore) have consistently accounted for about 90 per cent of the total tuna catch since 2000. Catches of small tunas (such as **skipjack**, frigate and bullet tunas), seerfishes (*Scomberomorus* spp.) and albacore have grown significantly. In 2012, catches of **yellowfin** exceeded their 2000 level after fluctuating, while **bigeye** had the only decreasing trend with catches down by 5%.

The Indian Ocean is the second most important worldwide tuna fishing ground after the western and central Pacific, with 20-24% of the world catch. In 2012, fifty four (54) per cent of the tropical tuna caught in the Indian Ocean was from the SWIO, corresponding to more than 850 million to 1.3 billion US\$/year; while 39% were from the North WIO (including Yemen, Oman, Iran, Pakistan, India and Sri-Lanka) (Indian Ocean Tuna Commission - IOTC, 2014)

#### Tuna Issues within the Indian Ocean

The main issues facing the tuna populations include

1. The threat of **overfishing** - although the current stocks status are considered green for all the three key species. This threat is mainly due to:
  - The increase in fishing effort, including from Illegal Unreported and Unregulated (IUU) fishing, due to the improvement of the security situation in SWIO (mostly due to a decrease of piracy in the horn of Africa)
  - Harmful subsidies for the fishing industry
  - Inefficiency in developing and enforcing adequate conservation and management measures (CMMS) – such as like harvest control rules, including reference limits for tuna resources

These may well lead to catches beyond maximum sustainable yield (MSY). IUU fishing has been responsible for annual losses of more than US\$ 1 billion in sub-Sahara Africa (Manuel Castiano,

pers. Comm.) (including US\$ 300 million in Somalia, US\$40 million in Mozambique and US\$ 37 million in Madagascar).

2. **By-catch** - mainly of sharks, dolphins, sea-turtles and juvenile fish, due to traditional long line hooks in use in SWIO and purse seiners fishing around Fish Aggregating Devices (FADs); and
3. **Inequitable benefit sharing**, between SWIO coastal states and DWFN, with low socio-economic benefits to the region, through licenses and/or fisheries access arrangements (FAAs) fees, employment and tuna-related facilities (fishing harbours, processing plants, etc) and services (ship maintenance, ship and fishing supplies, etc). This is exacerbated by the fact that small scale tuna fisheries from this region have not yet gained significant benefits from the occurrence of these resources, including the neritic tuna. This is associated with fact that very little investment has been made into improving this sub-sector.

The challenges, faced by SWIO states and the Indian Ocean Tuna Commission (IOTC), to promote sustainable tuna fisheries include difficulties in incorporating Rights-Based Management (RBM) approaches into tuna fisheries management. This is largely due to the fact that tuna is a highly migratory resource and found significantly on the high seas (outside the EEZs of any countries).

Further challenges include: weak national and SWIO institutional, policy and legal instruments; inadequate national and SWIO capacity to curb IUU fishing practices; paucity of data/information on the status of stocks, mainly from small-scale fisheries; and lack of capacity of the SWIO states to use/exploit, monitor and survey tuna in their EEZs.

### WWF Coastal East Africa Global Initiative (WWF-CEAI)

In 2010, in order to help address the issues and challenges described above, and promote the sustainability of the tuna fisheries in the Coastal East Africa region, WWF established the Coastal East Africa Global Initiative (CEAI). The initial geographical focus was on Kenya, Tanzania and Mozambique (Somalia was, and is still, in a delicate political situation), which due to the highly migratory (shared stock) nature of tuna, and to cover all its main migratory/occurrence areas, was expanded to cover the SWIO island states (Seychelles, Comoros, Madagascar and Mauritius). This was done in full coordination with WWF MWIOP (Madagascar and Western Indian Ocean Program Office), based in Madagascar, and covering all the SWIO island states.

CEAI is part of the WWF International Network, and is one of its 13 large-scale programmes. Its vision is: *“Coastal East Africa’s unique and globally significant natural resource base provides the essential goods and services that support biodiversity, as well as economic development and the livelihoods of present and future generations”*. The overall goal for the 15-year CEAI tuna strategy is that: *by 2025, a healthy and productive population of tuna supports sustainable fisheries stocks in SWIO region*. The first 5-year phase objective is that: *by the end of FY2015, SWIO States are increasingly controlling and equitably benefiting from a reformed sustainable tuna fisheries governance regime*.

### Approach followed by CEAI for addressing the Tuna Fisheries Work

From 2010 until now, WWF has followed five interconnected work streams to be able to engage and promote a common approach to tuna management, involving better participation, benefit sharing and sustainability within the SWIO region:

**1. Building a political coalition – through:**

- Building the justification for tuna management reforms and ensuring that SWIO states within IOTC are responsible and accountable;
- Campaigning and raising awareness on the ecological, social and economic benefits from improved engagement in tuna fisheries governance, by the SWIO states;
- Lobbying SWIO governments, the African Union (AU), Southwest Indian Ocean Fisheries Commission, Regional Economic Communities (Southern African Development Community), and other players to support transformation.
- Facilitating a process for SWIO states to agree on a collective approach to engage in tuna fisheries, including considering a SWIO Fisheries Accord for shared marine fish stocks (including tuna), under SWIOFC.

**2. Facilitating tuna fisheries management reform – through:**

- Facilitating country and regional level dialogue for fisheries reforms;
- Supporting coordinated efforts, effective participation and strategic inputs by SWIO states at relevant IOTC and other regional meetings.

**3. Promoting the Implementation of Rights-Based Fisheries Management (RBM) – through:**

- Developing and piloting projects showing how RBM improves livelihoods of local fishers, and strengthens fisheries management;
- Building capacity for SWIO states to better profit from their EEZ and high seas fisheries;
- Supporting SWIO states to develop regional minimum terms and conditions for fisheries access arrangements;
- Ensuring that potential allocation of fishing opportunities for tuna takes into account the development aspirations of SWIO states.

**4. Promoting sustainable management of tuna resources – through:**

- Facilitating the adoption and implementation of measures for better management of tuna resources in SWIO national waters and high seas;
- Encouraging the establishment of target and maximum reference limits and Harvest Control Rules/Strategies for tuna stocks;
- Supporting SWIO states to developing and harmonising tuna development and management plans;
- Developing tools and promoting initiatives that strengthen Monitoring, Control and Surveillance (MCS), including Port State Measures Agreement, Vessel Monitoring System (VMS)/Automatic Identification System (AIS), High Seas Inspection, co-management, etc;
- Exploring opportunities and supporting Marine Stewardship Council (MSC) certification processes in SWIO region.

**5. Encouraging funding for tuna reform**

This action consisted mainly in strengthening linkages with existing/potential donors and/or development partners to support tuna transformational initiatives in SWIO region.

## Progress to Date on WWF engagement in the SWIO Tuna Fisheries Work

Significant achievements have been obtained so far by the SWIO region, resulting from in-country and collaborative tuna work among SWIO countries, WWF and other relevant entities, SWIOFC, African Union (AU-Inter-Agency Bureau for Animal Resources; New Partnership for Africa's Development), IOTC; RECs (SADC), the World Bank, etc. These include:

- Increased engagement of SWIO countries in tuna fisheries management and development, as demonstrated by: (i) Mozambique and Maldives have since joined the Indian Ocean Tuna Commission (IOTC); (ii) SWIO countries are currently very active in the production and proposal of IOTC Conservation and Management Measures; (iii) Seychelles and Mozambique have adopted the FAO Port State Measures Agreement (PSMA), as part of national and regional level approach to strengthen Monitoring Control and Surveillance (MCS) and combat IUU – Illegal, Unreported and Unregulated fishing (mainly for tuna fisheries) in a cost-effective way; (iv) adoption of the Maputo Declaration on Regional Minimum Terms and Conditions (MTC) by Kenya, Mozambique and Tanzania; a (v) doption and Implementation of National Tuna Management and Development Strategies in Kenya, Tanzania, Mozambique and Madagascar;
- Improved performance of IOTC in strengthening Tuna Fisheries management including the adoption of pre-cautionary approach, reference points; progressing with tuna quota allocation discussions, as part of RBM process to promote fisheries sustainability, etc;
- Increased involvement of national Civil Society Organizations (CSOs) and Private Sector (PS) in tuna fisheries management, including the legal establishment of national tuna fisheries CSP/PS forums in Kenya (TUFAC) and Tanzania (TUNA); Plans are underway for similar platforms to be established in Mozambique, Madagascar, Seychelles and Mauritius.
- Reformed South West Indian Ocean Fisheries Commission (SWIOFC), including the establishment of SWIOFC Tuna Working Party on Collaboration and Cooperation on Tuna Maters, which has been fully operational since 2012. This has been functioning as the coordinating umbrella to promote and strengthen regional collaboration and cooperation for tuna fisheries management in SWIO region;
- MSC certification of Maldives Pole and Line Skipjack Tuna Fisheries. This process paved the way for other MSC processes currently under way, including the Maldives Pole and Line Yellowfin Tuna Fisheries, Maldives Hand Line Yellowfin Tuna Fisheries, and Seychelles and Mauritius Purse Seine Tuna Fisheries. Other non-tuna fisheries have shown interest in MSC certification. Lobster, Octopus and Shrimp fishery in Kenya, Tanzania and Mozambique have gone through the MSC pre-assessment and now undergoing fisheries improvements; and
- Adoption of the Policy Framework and Reform Strategy for fisheries and aquaculture in Africa, which is a framework to drive a coherent and structured engagement of all the African countries to address national and regional level sustainable fisheries management, including Minimum Terms and Conditions (MTC), etc.

## Lessons Learned

- Adequate socio-economic advocacy is important to secure countries engagement, as it contains clear incentives related to potential economic gains produced by sustainable fisheries and adequate governance. Unhappily this may also affect the level of adoption of environmental/sustainability aspects by the countries;
- Engaging with relevant regional institutions (SWIOFC, IOTC) is key to secure national/countries involvement in regional processes;
- Regional processes requires long-term commitment to allow the countries to build internal capacity to adequately engage in trans-national issues; to build trust and identify common goals among different countries (this is critical for the SWIO with very limited regional cooperation

and large socio-cultural, language, historic and economic fragmentation); to build confidence for them to adequately defend their common interests; and to create regional capacity within the existing regional entities (Regional Economic Communities – RECs; Regional Fisheries Body – RFB; Regional Fisheries Management Organisations - RFMO);

- Proliferation of Regional Economic Communities (namely Common Market for Eastern and Southern Africa - COMESA, East Africa Community - EAC, Indian Ocean Commission - IOC and Southern Africa Development Community - SADC) engaging the same countries requires significant investment in harmonising their common work and addressing conflicting interest among them, to secure adequate engagement of the countries. In this regard, the role of Africa Union, although at its initial stages, as far as fisheries aspects is concerned, is extremely important;
- Empowering CSO/PS does not ensure automatic civil society engagement in an offshore fishery, like the tuna, which is not within their comfort zone;
- Comprehensive approach to fisheries requires that one looks to the entire distribution range of the targeted fisheries (for tuna fisheries this is the SWIO tuna migration area, and even the entire Indian Ocean), including the different sub-sectors involved in its exploitation (artisanal, semi-industrial and industrial), if to be successful. In case of involving artisanal fisheries, complex socio-economic aspects should be adequately addressed;

#### Recommendations

Promote the implementation of the SWIO tuna fisheries work, under the recently approved Policy Framework and Reform Strategy (PFRS) for African Fisheries and Aquaculture to provide the linkages and consistency among pan-African work, regional and national level work. This would also involve the engagement of RECs, and RFMOs and the political (at the highest level) commitment of national governments.

Promote harmonisation of the different existing fisheries related regional initiatives, to be more costs-effective and avoid duplication (SADC, IOC, EAC, etc).

Improve the coordination of tuna work in the SWIO and the NWIO and other coastal states within the Indian Ocean to have a consistent approach within the IOTC. This would reduce fragmentation and promote unification of Indian Ocean coastal states around common issues and challenges and draw on the different experiences to quickly address them.

Engage with funding agencies and development partners to embrace a common approach towards funding of SWIO sustainable fisheries management.

Promotion of locally based tuna fisheries industry, including development and strengthening artisanal tuna fisheries is key for engaging and maintaining the involvement of SWIO coastal states in sustainable tuna fisheries.

#### Bibliography

- ❖ FAO. 2014. The State of World Fisheries and Aquaculture: Opportunities and challenges. 221pp;
- ❖ Kwame Mfodwo and Colin Barnes. 2011. Economic Evaluation of the Tuna Resources in the Western Indian Ocean;
- ❖ WWF Coastal East Africa Initiative Strategic Plan, 2011-2015.