# 11TH WORKING PARTY ON ECOSYSTEMS AND BYCATCH (WPEB11)

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# The Seychelles NPOA for Sharks 2007-2010 Review

#### **Abstract**

The Seychelles National Plan of Action for the Conservation and Management of Sharks 2007-2010 (NPOA) was formulated by the Seychelles Fishing Authority in 2006 to provide a national basis for the implementation of UNFAO international plan of the same name (IPOA). The NPOA was developed through a comprehensive and iterative process of stakeholder consultation and following the criteria as set out in the IPOA.

The NPOA was adopted in 2007 and set out a four-year action plan that addressed the 10 goals of the IPOA-Sharks as they related to local circumstances. The NPOA contains two missions statement for attainment within its first four year-phase and set as its ultimate vision "That Shark Stocks In The Seychelles EEZ Are Effectively Conserved And Managed So As To Enable Their Optimal Long-Term Sustainable Use."

The NPOA has so far engendered considerable progress in laying the foundations for viable conservation and sustainable use of sharks through the development of capacity and understanding amongst stakeholder. However the first NPOA has now expired and likewise the shark Management scenarios has changed significantly in the interim which prompted SFA to undertake an evaluation of the first NPOA. The review process has revealed that work undertaken so far has, to a great extent, realized the first Mission of the plan. This provides the basis for the subsequent implementation of the second Mission, in line with the legal, policy and protected area frameworks that are now being put in place, which is being reviewed in the current development of the Seychelles NPOA 2016-2019.

#### 1. Introduction

The Seychelles National Plan of Action for the Conservation and Management of Sharks 2007-2010 (NPOA) was formulated by the Seychelles Fishing Authority in 2007 to provide a national basis for the implementation of UNFAO international plan of the same name (IPOA).

The objective of the IPOA is "...to ensure the conservation and management of sharks and their long-term sustainable use." It functions on the principle that States which contribute to fishing mortality of a species or stock of shark, through targeted or non-targeted catches, should participate in their management. States should implement the IPOA by the establishment of a National Plan of Action (NPOA) and/or a regional equivalent as appropriate. The IPOA contains guidance as to the contents of an NPOA and also that of a shark assessment report (SAR).

The Seychelles NPOA was developed through a comprehensive and iterative process of stakeholder consultation and following the criteria as set out in the IPOA. The final product was sent for and endorsed by international review.

The NPOA engendered considerable progress in laying the foundations for viable conservation and sustainable use of sharks through the development of capacity and understanding amongst stakeholder. However the first NPOA was written in 2007 and has now expired. Likewise the shark Management scenarios has changed significantly in the interim:

- The Convention on Migratory Sharks (CMS) has come into existence
- The Convention on the International Trade in Endangered Species (CITES) have changed the status of various species that occur in Seychelles waters, most recently the Oceanic whitetip shark and all three species of Hammerhead, placing obligations on Seychelles to manage their stocks and trade in their products accordingly.

It is necessary therefore to review the NPOA and developed a new NPOA that build on progress made to date, put in place the appropriate mechanisms to ensure Seychelles meets its international obligations, address new issues and provides a coherent national strategic approach to shark management in Seychelles.

# 2. Background

Sharks as a top predators play a key ecological role in maintaining stable, productive marine ecosystems, but due to their slow reproductive capacity are very vulnerable to fishing pressure. Historical fishing for shark meat in Seychelles waters followed by increasing pressure from the 1980s onwards due to the rising commodity value of shark fin have seen

a dramatic decline in shark populations on the Mahe plateau and other banks with several species already having been extirpated from extensive areas.

"Sharks are prone to over-exploitation /population collapse due to their life history characteristics. Previous examples of shark stock collapse, due to targeted fisheries, have recently been supplemented by studies showing rapid decline in shark populations across large oceanic regions as a result of by-catch in multi-species fisheries" (Seychelles national Plan of action for the conservation and management sharks. Seychelles fishing Authority, Victoria, Seychelles, 2007.59p).

In an effort to respond to this situation there were numerous interactions between the Convention on the International Trade in Endangered Species (CITES), the Convention on Migratory Species (CMS) and the Food and Agricultural Organization (FAO) Committee on Fisheries (COFI). The subsequent consultations resulted in the development and adoption of the International Plan of Action for the conservation and management of sharks (IPOAsharks) in 1998. IPOA-Sharks is a voluntary mechanism and was elaborated in the context of article 2d of the FAO Code of Conduct for Responsible Fisheries.

## 3. The NPOA sharks 2007-2010

Seychelles was amongst the first 10 countries in the world to develop an NPOA sharks so as to meet its commitment under the FAO International Plan for sharks, CITES and the CMS.

The Seychelles NPOA 2007-2010 was developed through a consultative, stakeholder-driven process, including interviews of stakeholders, two national workshops and iterative stages of consultation. The NPOA was adopted in 2007 and set out a four-year action plan that addressed the 10 goals of the IPOA-Sharks as they related to local circumstances. The NPOA contains a mission statement for attainment within its first four year-phase and set as its ultimate vision "That Shark Stocks In The Seychelles EEZ Are Effectively Conserved And Managed So As To Enable Their Optimal Long-Term Sustainable Use."

The vision set out in the NPOA was to be achieved through two mission statements:

- 1). To establish the necessary capacity, systems and databases to enable the informed adaptive management of Seychelles' shark stocks
- 2) To implement an active and progressive precautionary approach to the management of targeted and non-targeted fishing effort that takes into account the transitional needs of stakeholders.

The dual missions were represented in ten strategic objectives which also covered the IPOA objectives in the context of the Seychelles contemporary shark fishery, the status and trends

of stocks through time, and elaborated a prioritized action plan of 11 work programmes as developed by the stakeholders:

- 1) Co-management of the NPOA.
- 2) Immediate Stakeholder Issues
- 3) Data gathering and Management
- 4) Research
- 5) Managing Effort in Line with a Precautionary Approach
- 6) Develop/Access markets for shark products
- 7) Optimising Use of Shark Catch.
- 8) Non-consumptive Sustainable Use.
- 9) Review and Improve Administrative, Management and Conservation Measures.
- 10) International Cooperation
- 11) Education and Awareness

# 4. The NPOA sharks 2007-2010 Review

The implementation of the NPOA was guided by the Steering Committee which in the initial year of the plan was fairly active and made progress towards the Strategic Objectives. However, from 2009 the Steering Committee met on only a few occasions and the planned NPOA Review scheduled for 2010 did not happen. Hence in an effort to try and rectify this situation and set the NPOA back on track, the Seychelles Fishing Authority (SFA) decided to undertake an evaluation of the NPOA which will be followed by the development of a new plan for 2016-2019.

### 4.1. Objective

The objectives of the evaluation are to:

- Review the progress made on achieving the Strategic Objectives of the NPOA through the implementation of activities in the 11 Work Programmes to date.
- Prepare an updated version of the NPOA for the period 2016-2019 through a process of stakeholder consultation which will include revised Strategic Objectives, Work Programmes and Activities relative to current international scenario and local conditions

#### 4.2. Work Plan

The assignment under the review process includes, but is not necessarily limited to, the following tasks:

- Review of NPOA;
- 2. Review of implementation progress;
- 3. Plan and facilitate consultative stakeholder workshops to review the implementation of the NPOA
- 4. Analysis of factors limiting the progress of implementation to date and recommendations for improvement;
- 5. Ensure relevance of the NPOA to current global conditions and international agreements;
- 6. Identify and strengthening linkages with existing or proposed programmes /activities /projects
- 7. Update the baseline knowledge on sharks
- 8. Plan and facilitate consultative stakeholder workshops to present and develop new work programmes for the NPOA (2016-2019)
- 9. Prepare draft reports for submission to Steering Committee;
- 10. Prepare the final reports of the Review and the new NPOA Sharks (2015-2019), including comments from Steering Committee and facilitate their presentation at a dedicated workshop.

# 4.3. Expected Outcome

A review of current circumstances and and a new NPOA Shark for 2016-2019 which will be developed in close consultation with relevant stakeholders will be the output of the review and will contain the following elements:

Report on the implementation of the NPOA:

- A review of the progress towards achieving the Strategic Objectives through the implementation of the Work Programmes and Actions;
- A review of the Strategic Objectives, Work Programmes and Actions in relation to the current global situation;

#### New shark NPOA 2016-2019:

- Revised Strategic Objectives, Work Programmes and Actions in relation to the current global and local situation;
- Recommendations for monitoring of implementation.

#### 5. Current status of the Review

In April 2015, the Seychelles Fishing Authority contracted the service of a shark fishery expert to review the national plan of action for the conservation and management of sharks for the 2007-2011 period and develop a new plan for 2016 - 2019. The first mission of the consultancy which was to review the progress made on achieving the Strategic Objectives of the NPOA through the implementation of activities in the 11 Work Programmes to date were to be undertaken over an eight weeks period and the timeframe for drafting of the new NPOA 2016-2019 is estimated at eleven weeks thereafter.

However there has been delays in SFA receiving the first report of the review of the NPOA which was due in mid-July 2015. Nonetheless feedback from the consultant has revealed that work undertaken so far has, to a great extent, realized the first Mission of the NPOA.

The implementation of the 11 work programmes (WP) enjoyed varied success notably the production of a new Shark Identification Guide published in August 2015 and a cartoon book co-sponsored by SMARTFISH (IOC) project to highlight the importance of shark in the marine ecosystem and the barbaric mature of shark fining. In addition a database has been designed to capture required data for morphological modeling of shark species given that sharks in Seychelles are often landed dressed and the model will used morphological measurements to identified the species. The status of implementation of the 11 work programmes is summarized in Table 1 below.

**Table 1: NPOA Work Programme Implementation Status** 

NPOA Work Programme	Status
1). Co-management of the NPOA	<ul> <li>Successfully implemented</li> <li>— with establishment and operation of multi-stakeholder Steering Committee with their mandate reviewed and updated.</li> <li>— The formation of two NGOs, The Shark Research Foundation and the Artisanal Shark Fishers Association, both of which support the implementation of the NPOA</li> </ul>
2). Immediate Stakeholder Issues.	Was largely completed — with fishers and divers agreeing on no fish zones to support the dive industry operation.
3)Data gathering and management	Largely completed with  — shark fishery assessed,  — national monitoring protocol designed  — The ongoing development of a national shark fishery database
4). Research	Partially implemented with  — key research undertaken on the fishery and key nursery areas  — satellite tagging of mature Bull and Tiger sharks on the Mahe Plateau to better understand their movements, occurrence and ecology.  — acoustic tagging and tracking of various coastal species around Mahe
5). Managing effort in line with a precautionary approach.	Not implemented.
6) Access to markets for shark products	Not implemented as it was contingent on WP 5 being properly implemented first.

7). Optimizing use of shark catch	Partial Implementation:  — The artisanal fishery practices wise use of shark products by landing the entire animal  — scope for product value addition has been explored.
8). Non-consumptive sustainable use	Partial implementation:  — A successful whale shark ecotourism industry exists in Seychelles.
9). Review and Improve Administrative, Management and Conservation Measures.	Significant progress has been made for fisheries in general:  — revision of the Fisheries Act,  — the initiation of co-management approaches,  — the ongoing development of the national Marine Spatial Planning including the conservation status of up to 30% of Seychelles EEZ.  — What remains is the explicit incorporation of areas and regulations for sharks in these new national frameworks.
10. International Cooperation.	Significant implementation:  — through Seychelles involvement in the development of the CMS Sharks MoU,  — the development and testing of the CITES NDF guidelines  — international partnerships in several shark research initiates.
11. Education and awareness	Excellent implementation  — Educational and awareness programmes at school, for fishers and general public levels by various NGO project initiatives facilitated by Government including school books and posters,  — shark ID guide  — extensive media coverage etc

#### 6. The NPOA 2016-2019

The development of the NPOA 2016-2019 stems directly from the commitments Seychelles set out in its first NPOA in line with Seychelles commitments under the FAO IPOA Sharks and obligations under the Convention on Trade in Endangered Species (CITES) and the convention on Migratory Species (CMS). The NPOA will provide a national strategic document and platform for the conservation and sustainable use of Seychelles shark stocks and maintenance of their vital role in a healthy and economically productive marine ecosystem.

The NPOA 2 will be developed through an iterative process of stakeholder consultation and approval. The same shark fishery expert conducting the review of the NPOA has been contracted to undertake the necessary background research, facilitate the process and write up the document. The administration of the project will be undertaken by SFA in consultation with the NPOA stakeholders steering committee. SFA will also make arrangement for effective media coverage of the process and its objectives.

#### 7. Conclusion

The work undertaken so far has therefore, to a great extent, realized the first Mission of the plan. This provides the basis for the subsequent implementation of the second Mission, in line with the legal, policy and protected area frameworks that are now being put in place, which is being reviewed in the current development of the Seychelles NPOA 2015-2019, along with an analysis of the problems faced in the implementation of the first plan and how they can be rectified in the next phase.

The NPOA has also been key in raising awareness and building capacity to address issues of shark research and management in Seychelles with two new NGOs formed as a result and five national NGOs involved in the implementation of shark projects.

## 8. References

Seychelles national plan of action for the conservation and management of sharks. Seychelles Fishing Authority, Victoria, Seychelles, 2007. 59 p.

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Environmental Management Plan of Seychelles, 2000 - 2010;

Seychelles Sustainable Development Strategy 2011-2020;

Seychelles Fisheries Act (& draft new Fisheries Act)

National Biodiversity Strategy and Action Plan.