

INTERNATIONAL PLAN OF ACTION FOR THE CONSERVATION AND MANAGEMENT OF SHARKS



Introduction

1. For centuries artisanal fishermen have conducted fishing for sharks sustainably in coastal waters, and some still do. However, during recent decades modern technology in combination with access to distant markets have caused an increase in effort and yield of shark catches, as well as an expansion of the areas fished.
2. There is concern over the increase of shark catches and the consequences which this has for the populations of some shark species in several areas of the world's oceans. This is because sharks often have a close stock-recruitment relationship, long recovery times in response to over-fishing (low biological productivity because of late sexual maturity; few off-spring, albeit with low natural mortality) and complex spatial structures (size/sex segregation and seasonal migration).
3. The current state of knowledge of sharks and the practices employed in shark fisheries cause problems in the conservation and management of sharks due to lack of available catch, effort, landings and trade data, as well as limited information on the biological parameters of many species and their identification. In order to improve knowledge on the state of shark stocks and facilitate the collection of the necessary information, adequate funds are required for research and management.
4. The prevailing view is that it is necessary to better manage directed shark catches and certain multispecies fisheries in which sharks constitute a significant bycatch. In some cases the need for management may be urgent.
5. A few countries have specific management plans for their shark catches and their plans include control of access, technical measures including strategies for reduction of shark bycatches and support for full use of sharks. However, given the wide-ranging distribution of sharks, including on the high seas, and the long migration of many species, it is increasingly important to have international cooperation and coordination of shark management plans. At the present time there are few international management mechanisms effectively addressing the capture of sharks.
6. The Inter-American Tropical Tuna Commission, the International Council for the Exploration of the Sea, the International Commission for the Conservation of Atlantic Tunas, the Northwest Atlantic Fisheries Organization, the Sub-regional Fisheries Commission of West African States, the Latin American Organization for Fishery Development, the Indian Ocean Tuna Commission, the Commission for the Conservation of Southern Bluefin Tuna and the Oceanic Fisheries Programme of the Pacific Community have initiated efforts encouraging member countries to collect information about sharks, and in some cases developed regional databases for the purpose of stock assessment.
7. Noting the increased concern about the expanding catches of sharks and their potential negative impacts on shark populations, a proposal was made at the Twenty-second Session of the FAO Committee on Fisheries (COFI) in March 1997 that FAO organize an expert consultation, using extra-budgetary funds, to develop Guidelines leading to a Plan of Action to be submitted at the next Session of the Committee aimed at improved conservation and management of sharks.
8. This International Plan of Action for Conservation and Management of Sharks (IPOA-SHARKS) has been developed through the meeting of the Technical Working Group on the

Conservation and Management of Sharks in Tokyo from 23 to 27 April 1998⁴ and the Consultation on Management of Fishing Capacity, Shark Fisheries and Incidental Catch of Seabirds in Longline Fisheries held in Rome from 26 to 30 October 1998 and its preparatory meeting held in Rome from 22 to 24 July 1998⁵.

9. The IPOA-SHARKS consists of the nature and scope, principles, objective and procedures for implementation (including attachments) specified in this document. Nature and Scope
10. The IPOA-SHARKS is voluntary. It has been elaborated within the framework of the Code of Conduct for Responsible Fisheries as envisaged by Article 2 (d). The provisions of Article 3 of the Code of Conduct apply to the interpretation and application of this document and its relationship with other international instruments. All concerned States⁶ are encouraged to implement it.
11. For the purposes of this document, the term "shark" is taken to include all species of sharks, skates, rays and chimaeras (Class *Chondrichthyes*), and the term "shark catch" is taken to include directed, bycatch, commercial, recreational and other forms of taking sharks.
12. The IPOA-SHARKS encompasses both target and non-target catches.

Guiding principles

13. *Participation*. States that contribute to fishing mortality on a species or stock should participate in its management.
14. *Sustaining stocks*. Management and conservation strategies should aim to keep total fishing mortality for each stock within sustainable levels by applying the precautionary approach.
15. *Nutritional and socio-economic considerations*. Management and conservation objectives and strategies should recognize that in some low-income food-deficit regions and/or countries, shark catches are a traditional and important source of food, employment and/or income. Such catches should be managed on a sustainable basis to provide a continued source of food, employment and income to local communities.

Objective

16. The objective of the IPOA-SHARKS is to ensure the conservation and management of sharks and their long-term sustainable use.

Implementation

17. The IPOA-SHARKS applies to States in the waters of which sharks are caught by their own or foreign vessels and to States the vessels of which catch sharks on the high seas.
18. States should adopt a national plan of action for conservation and management of shark stocks (*Shark-plan*) if their vessels conduct directed fisheries for sharks or if their vessels regularly catch sharks in non-directed fisheries. Suggested contents of the *Shark-plan* are found in Appendix A. When developing a *Shark-plan*, experience of subregional and regional fisheries management organizations should be taken into account, as appropriate.
19. Each State is responsible for developing, implementing and monitoring its *Shark-plan*.
20. States should strive to have a *Shark-plan* by the COFI Session in 2001.

21. States should carry out a regular assessment of the status of shark stocks subject to fishing so as to determine if there is a need for development of a shark plan. This assessment should be guided by article 6.13 of the Code of Conduct for Responsible Fisheries. The assessment should be reported as a part of each relevant State's *Shark-plan*. Suggested contents of a shark assessment report are found in Appendix B. The assessment would necessitate consistent collection of data, including *inter alia* commercial data and data leading to improved species identification and, ultimately, the establishment of abundance indices. Data collected by States should, where appropriate, be made available to, and discussed within the framework of, relevant subregional and regional fisheries organizations and FAO. International collaboration on data collection and data sharing systems for stock assessments is particularly important in relation to transboundary, straddling, highly migratory and high seas shark stocks.

22. The *Shark-plan* should aim to:

Ensure that shark catches from directed and non-directed fisheries are sustainable;

Assess threats to shark populations, determine and protect critical habitats and implement harvesting strategies consistent with the principles of biological sustainability and rational long-term economic use;

Identify and provide special attention, in particular to vulnerable or threatened shark stocks;

Improve and develop frameworks for establishing and co-ordinating effective consultation involving all stakeholders in research, management and educational initiatives within and between States;

Minimize unutilized incidental catches of sharks;

Contribute to the protection of biodiversity and ecosystem structure and function;

Minimize waste and discards from shark catches in accordance with article 7.2.2.(g) of the Code of Conduct for Responsible Fisheries (for example, requiring the retention of sharks from which fins are removed);

Encourage full use of dead sharks;

Facilitate improved species-specific catch and landings data and monitoring of shark catches;

Facilitate the identification and reporting of species-specific biological and trade data.

23. States which implement the *Shark-plan* should regularly, at least every four years, assess its implementation for the purpose of identifying cost-effective strategies for increasing its effectiveness.

24. States which determine that a *Shark-plan* is not necessary should review that decision on a regular basis taking into account changes in their fisheries, but as a minimum, data on catches, landings and trade should be collected.

25. States, within the framework of their respective competencies and consistent with international law, should strive to cooperate through regional and subregional fisheries organizations or arrangements, and other forms of cooperation, with a view to ensuring the sustainability of shark stocks, including, where appropriate, the development of subregional or regional shark plans.

26. Where transboundary, straddling, highly migratory and high seas stocks of sharks are exploited by two or more States, the States concerned should strive to ensure effective conservation and management of the stocks.
27. States should strive to collaborate through FAO and through international arrangements in research, training and the production of information and educational material.
28. States should report on the progress of the assessment, development and implementation of their *Shark-plans* as part of their biennial reporting to FAO on the Code of Conduct for Responsible Fisheries.

Role of FAO

29. FAO will, as and to the extent directed by its Conference, and as part of its Regular Programme activities, support States in the implementation of the IPOA-SHARKS, including the preparation of *Shark-plans*.
30. FAO will, as and to the extent directed by its Conference, support development and implementation of *Shark-plans* through specific, in-country technical assistance projects with Regular Programme funds and by use of extra-budgetary funds made available to the Organization for this purpose. FAO will provide a list of experts and a mechanism of technical assistance to countries in connection with development of *Shark-plans*.
31. FAO will, through COFI, report biennially on the state of progress in the implementation of the IPOA-SHARKS.

Appendix A

SUGGESTED CONTENTS OF A *SHARK-PLAN*

I. BACKGROUND

When managing fisheries for sharks, it is important to consider that the state of knowledge of sharks and the practices employed in shark catches may cause problems in the conservation and management of sharks, in particular:

Taxonomic problems

Inadequate available data on catches, effort and landings for sharks

Difficulties in identifying species after landing

Insufficient biological and environmental data

Lack of funds for research and management of sharks

Little coordination on the collection of information on transboundary, straddling, highly migratory and high seas stocks of sharks

Difficulty in achieving shark management goals in multispecies fisheries in which sharks are caught.

II. CONTENT OF THE SHARK-PLAN

The Technical Guidelines on the Conservation and Management of Sharks, under development by FAO, provide detailed technical guidance, both on the development and the implementation of the *Shark-plan*. Guidance will be provided on:

Monitoring

Data collection and analysis

Research

Building of human capacity

Implementation of management measures

The *Shark-plan* should contain:

A. Description of the prevailing state of:

Shark stocks, populations;

Associated fisheries; and,

Management framework and its enforcement.

B. The objective of the *Shark-plan*.

C. Strategies for achieving objectives. The following are illustrative examples of what could be included:

Ascertain control over access of fishing vessels to shark stocks

Decrease fishing effort in any shark where catch is unsustainable

Improve the utilization of sharks caught

Improve data collection and monitoring of shark fisheries

Train all concerned in identification of shark species

Facilitate and encourage research on little known shark species

Obtain utilization and trade data on shark species

Appendix B

SUGGESTED CONTENTS OF A SHARK ASSESSMENT REPORT

A shark assessment report should *inter alia* contain the following information:

Past and present trends for:

Effort: directed and non-directed fisheries; all types of fisheries;

Yield: physical and economic

Status of stocks

Existing management measures:

Control of access to fishing grounds

Technical measures (including by-catch reduction measures, the existence of sanctuaries and closed seasons)

Others

Monitoring, control and surveillance

Effectiveness of management measures

Possible modifications of management measures.