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# **COMMITTEE ON FISHERIES**

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# REPORT ON FOLLOW-UP ACTIONS ON SEA TURTLES

#### **SUMMARY**

Recognizing that some fisheries may cause serious impacts on declining sea turtle populations, actions are being taken at the regional and national levels worldwide, where necessary, in order to reduce such impacts. FAO has also taken steps in this direction and COFI called for immediate implementation by Members and RFMOs of the FAO guidelines to reduce negative impacts of fisheries on sea turtles. Following up on this initiative, and based on a questionnaire distributed to RFBs and other relevant IGOs, this report summarizes progress made during the past biennium, based on the replies received.

Overall and as it could have been expected, the replies indicate that formal commitment to and actual implementation of the FAO guidelines is not yet a standard in the fisheries commissions for which turtles bycatch may be an issue. However, some progress is being made by some regional organizations and by individual countries.

This document also provides highlights of activities carried out by FAO during the past biennium relevant to reducing sea turtle mortality in fishing operations.

#### **BACKGROUND**

1. During its 26th Session, the Committee on Fisheries called for the immediate implementation by Members and RFMOs of the Guidelines to Reduce Sea Turtle Mortality in Fishing Operations contained in Appendix E of the report of the FAO Technical Consultation on Sea Turtles Conservation and Fisheries (Bangkok, 29 November–2 December 2004) (para 98 of the Report of the Twenty-sixth Session of the Committee on Fisheries Rome, 7–11 March 2005, thereafter called the 'FAO guidelines'). Members and RFMOs were also invited 'to report to FAO six months prior to the 27th Session of COFI concerning their experiences in implementing the guidelines so as to permit an evaluation of their usefulness and relevance'.

2. Based on this recommendation, and in order to facilitate the suggested reporting, FAO developed a questionnaire that was sent to relevant RFBs (see Appendix) in order to receive information on progress at the national and regional levels. The present document is a summary of the responses received. Some highlights on activities initiated by FAO under the trust-fund project GCP/INT/919/JPN 'Interactions between Sea Turtles and Fisheries within an Ecosystem Approach to Fisheries Management' will also be provided.

#### PROGRESS MADE IN IMPLEMENTING THE FAO GUIDELINES

- 3. Of the 28 RFBs and IGOs contacted, three (IATTC, ICCAT and SWIOFC) replied to the questionnaire, three (IPHC, NASCO and NEAFC) replied that the sea turtle bycatch was not an issue for the fisheries covered by the respective organizations while others provided some information on progress made, without specifically using the questionnaire, in some cases indicating that it was largely not relevant to them. These are listed below:
  - GFCM referred to the report of the 8<sup>th</sup> session of the Scientific Advisory Committee (SAC), where it was noted that the GFCM Sub-Committee on Marine Environment and Ecosystems (SCMEE) had not yet provided recommendations for sea turtle bycatch issues. However, a few countries had already taken steps to protect sea turtles. For example, Malta was making efforts to rehabilitate turtles caught in longlines and Tunisia had developed a national plan of action to protect turtle nests. At the same meeting the EC delegate had informed GFCM of a meeting of the Scientific Technical and Economic Committee for Fisheries (STECF) on the issue<sup>1</sup>.
  - NAFO referred to a 'Resolution to Reduce Sea Turtle Mortality in NAFO Fishing Operations', proposed by the United States of America and Japan, and adopted in connection with its 28<sup>th</sup> Annual Meeting (September 2006). The resolution recognizes the importance that RFMOs can play in implementing the FAO guidelines, recognizes that the NAFO convention area includes critical foraging habitats for the leatherback turtle and invites contracting parties to provide information on data collection and observer training efforts relating to sea turtle interactions in the NAFO-managed fisheries. Cooperation at the regional, subregional and global levels is encouraged with the aim of sharing information and experiences in developing appropriate mitigation measures.
  - OLDEPESCA reported that the Organization has signed a memorandum of understanding with the Inter-American Convention for the Protection and Conservation of Sea Turtles, seeking to cooperate on sea turtle conservation and management.
  - SEAFO notified a resolution to 'Reduce Sea Turtle Mortality in SEAFO Fishing Operations' adopted in October 2006.

<sup>&</sup>lt;sup>1</sup> A report on 'Drifting longline fisheries and their turtle bycatches: biological and ecological issues, overview of the problems and mitigation approaches' is available at: <a href="http://stecf.jrc.cec.eu.int/meetings/turtles/TurtleReport\_20060505.doc">http://stecf.jrc.cec.eu.int/meetings/turtles/TurtleReport\_20060505.doc</a>. The report provides an overview of these issues for the EU longline fleets operating in the Mediterranean, the Atlantic, and other distant waters.

4. Below is a summary of the replies provided by the three commissions (IATTC, ICCAT and SWIOFC) that have comprehensively replied following the proposed reporting structure.

#### General issues

- (1) Have the "Guidelines to Reduce Sea Turtle Mortality in Fishing Operations" been formally presented to members of the given RFB for their consideration?
- 5. Only IATTC replied that steps had been taken to follow up on the recommendations endorsed by the 26th Session of COFI that called for the immediate implementation by members and regional fisheries management organizations of the FAO guidelines. The IATTC, which had already implemented various initiatives in relation to sea turtles, had extensively analysed the FAO guidelines to find out whether there were elements not yet implemented.
- 6. Although not formally presented, the guidelines have received support in ICCAT through a resolution on circle hooks (2005).
- 7. In SWIOFC the guidelines have not been formally presented to its members.
  - (2) Has agreement been reached by the RFB members as regards reporting to the  $27^{th}$  Session of COFI? And, if so,(see following question)
- 8. Reporting to FAO has not been discussed in any of the commissions. SWIOFC informed that member countries had not been seeking any agreement in this respect but that they would report individually as part of the Code of Conduct.
  - (3) Has the RFB taken any action to incorporate or adopt these guidelines within its jurisdiction? If yes (see following question)
- 9. A number of resolutions on sea turtles have already been implemented by the IATTC and members are bound to the Commission's decisions. A few elements were identified in the FAO guidelines that are not currently in the IATTC bycatch resolutions and consideration may be given to take further steps to fully comply with the FAO guidelines.
- 10. In ICCAT two resolutions have been taken in relation to sea turtles, but the guidelines have not yet been incorporated as a whole in the Commission. It was noted, however, that some of the contracting parties have adopted some or all of the Guidelines.
- 11. No action has been reported by SWIOFC in this respect.
  - (4) Describe how implementation or compliance is reported or monitored, and whether any reviews or analyses are available to determine effectiveness.
- 12. The IATTC Compliance Working Group meets annually to analyse and monitor implementation of agreed measures. The SWIOFC is in the process of determining the manner by which it will monitor implementation by its members of the decisions taken by the Commission.

#### More specific implementation issues

#### 1. Fishing operations

- A. Coastal trawling
- 13. Of the three Commissions that replied, this section was only relevant to SWIOFC. Here, three of four countries that have shallow water shrimp fisheries have legislated Turtle Excluder Devices (TEDs) as mandatory. One country (Madagascar) has a high proportion of its industrial shrimp trawlers with operational TEDs while compliance in the other countries seems to be less

satisfactory. Procedures implemented for appropriate handling, e.g. resuscitation or prompt release of incidentally caught sea turtles are not in place. Several members reported on data collection programmes on sea turtle capture and mortality in this fishery.

- B. Purse seine
- 14. Only IATTC and SWIOFC replied to this section.
- 15. According to the data available, almost all of the sea turtles caught in purse seines are either released or escape, mostly unarmed. There are however no measures to avoid encirclement and capture. Also as regards Fish Aggregating Devices (FADs), procedures are in place to release entangled sea turtles but no procedure has been developed to eliminate FADs that are not in use. Research programmes to modify FADs to reduce or eliminate entanglement have been encouraged by the Commission and are in use in some Member States.
- 16. One member of SWIOFC (South Africa) reported that sea turtle bycatch in purse seines was insignificant and that FADs were not allowed within the country's jurisdiction.

## C. Longline

- 17. IATTC reported that several members had undertaken research to look into the appropriate combination of hook design, type of bait, depth, gear specifications, etc., as well as on the impact of various mitigation measures on target and bycatch species. Furthermore, all large longline vessels are required to have on board equipment for handling of incidentally caught sea turtles. ICCAT referred to a resolution on circle hooks that calls for research to be undertaken on hooks.
- 18. One member of SWIOFC (South Africa) reported that research on circle hooks is to start soon and that 10 percent of vessels have de-hooking equipment and crews are trained in their use. Furthermore, data on catch and mortality of sea turtles has been available since 2000.

# D. Other fisheries

- 19. This section was only relevant to SWIOFC. One member (South Africa) reported on data collection of sea turtle entanglement in shark protection nets. Furthermore, shark gillnetting had been banned mainly because of sea turtle bycatch.
- E. Measures as appropriate for all fishing practices
- 20. In this section the question was asked whether any measures were applied to reduce interactions between sea turtles and fishing operations, such as spatial and temporal control of fishing, effort management control, or programmes for net retention and recycling.
- 21. IATTC reported that studies are underway to determine areas of high density of interactions, that effort management controls of the purse seine vessels are practiced and that disposal of plastic trash at sea is prohibited. SWIOFC indicated that several workshops were planned in the region to raise awareness among researchers, management and the industry. Furthermore, effort control measures have been recommended for consideration by the Scientific Committee. One member (South Africa) reported that turtle nesting takes place within a Marine Protected Area (MPA) and that any commercial fishing is prohibited within the entire coastline to 3 nm offshore.

#### 2. Research, monitoring and sharing of information

22. Data on sea turtle interaction with fishing gear are collected within the IATTC for the purse seine fisheries. Onboard observer programmes for large purse seine vessels has been in place for a number of years. Various research programmes are carried out by individual members and the results are available publicly on the web site. A form has been developed by IATTC, in

consultation with relevant fisheries agencies, with the purpose of standardizing data collection throughout the region. No initiative has been taken as regards research on survival of released turtles, on socio-economic aspects and on the use of traditional knowledge.

- 23. ICCAT has developed resolutions that call for research on interactions and mitigation measures. The research results are shared between contracting parties through the scientific standing committee.
- 24. Within SWIOFC, one member (Madagascar) reported that observers are present in 30 percent of the shrimp trawlers and on all longline vessels operating within the country's EEZ. Another member (South Africa) reported that longliners, purse seiners and prawn trawlers had 10 to 20 percent observer coverage. In the region, research programmes are occasional and information is often collected on an ad-hoc manner. Exchange of information on this issue or any attempt to standardize collection of data has not yet taken place. The Seychelles reported that an observer programme started on Spanish and French purse seiners to collect information on bycatch, including on turtles.

## 3. Ensuring policy consistency

- 25. In this section, efforts being made to ensure consistency in management and conservation policy at the national and regional levels were to be reported.
- 26. None of the commissions that have replied to the questionnaire had taken any initiative in this respect. Probably this is a good indicator for the situation in the other RFBs.
- 27. Within SWIOFC several countries are members of the IOSEA MoU (Indian Ocean South-East Asian Marine Turtle Memorandum of Understanding) and a sub-regional technical and scientific committee is being established to ensure consistency and synergy between programmes in the region. Furthermore, many countries have national turtle committees that coordinate activities and inform governments on the status of sea turtles.

# 4. Education and training

- 28. IATTC referred to the regional programme to reduce sea turtle mortality that resulted in the distribution throughout the region of posters, brochures and pamphlets describing the problem, and guiding how to handle hooked or entangled turtles. Furthermore, seminars for fishing communities started in 2003. As part of this programme, local scientists were trained by IATTC staff on how to carry out these workshops, resulting in over 3 000 fishers participating in these activities. IATCC has not been engaged in promoting awareness in the general public but has engaged the academic community, fisheries management staff, fishing industry and fishermen.
- 29. In the SWIOFC area turtle information material directed to the public is available in several of the Member States, but not specifically directed to the fishers. IOSEA has declared 2006 the Year of the Turtle and a number of initiatives have been started in education and awareness programmes. National NGOs carry out substantial awareness raising activities. In South Africa, NGOs are engaged in campaigning, developing training material, etc., with the support of the industry and the Government.
- 30. In Madagascar, every second year workshops on the management of shrimp fisheries are held and specifically include the issue of interactions of this fishery with sea turtles and of excluder devices. In this country, several NGOs collaborate with the Ministry of Environment on awareness campaigns as well as with the technical departments as regards fisheries.
- 31. In the Seychelles there is a wide promotion of awareness directed to the general public and to school children in particular, through brochures, booklets, and videos, facilitated by the Education, Information and Communication Section of the Ministry of Environment and Natural Resources.

32. In 2005 and 2006 regional workshops were organized by FAO to assess the relative importance of fishery related sea turtle mortality in fishing operations in the SWIO region and to review management measures to reduce such impacts. Two workshops on bycatch reduction in trawl fisheries were held in 2003 and 2005, as part of the GEF-funded project "Reduction of environmental impact from tropical shrimp trawling". These workshops were attended by scientists and fisheries managers.

33. A regional bycatch workshop was organized by NGOs in Mayotte in 2006.

## 5. Capacity building

- 34. In this section RFBs were to report on initiatives being taken towards providing support to developing countries in implementing the guidelines, on cooperation in research and data collection or other initiatives such as establishing a voluntary support fund.
- 35. IATTC provides support to all developing coastal members of the commission of the Eastern Pacific Ocean. In coordination with other organizations, a programme has been launched for training observers, programme coordinators, database specialists and analysts. As regards technology transfer, fishers in the region are part of a programme to test a number of instruments and technologies to reduce sea turtle bycatch, developed in the USA, Japan and New Zealand. A voluntary turtle fund has been established.
- 36. No such initiatives were reported by ICCAT.
- 37. In the SWIOFC area, while a number of conservation activities were reported, particularly by the Seychelles, no activity is specifically directed to fishers or managers.
- 38. The workshops organized by FAO (referred to under section 4 Education and Training.) can be considered as a relevant activity also in this context.

## 6. Socio-economic and cultural considerations

- 39. This section was to provide information on socio-economic and cultural aspects related to implementing sea turtle conservation and management measures.
- 40. This section was not considered as relevant to the IATTC.
- 41. In the SWIOFC area, the IOSEA MoU is drafting criteria to establish sites of importance for sea turtle conservation, which include economic, cultural and education value of these sites. Various studies have been conducted in the Seychelles, including an assessment of the socio-economic importance of marine and coastal resources (including turtles) to local communities.

## 7. Reporting

42. As this section deals with individual Members' reporting on progress in implementing the guidelines as part of the biennial reporting to FAO on the Code of Conduct, it was considered as non applicable at RFB level.

# 8. Consideration of other aspects of sea turtle conservation and management

- 43. While IATTC noted that data collected during fishing operations contributed to increase understanding on migrations and habitat use, this Commission cooperates with the Inter-American Sea Turtle Convention (IAC) on relevant sea turtle conservation issues.
- 44. In the SWIOFC region, some collaboration exists among some of its members on sharing genetic information on sea turtles, tag return information and sharing tagging data. An annual report on sea turtle conservation status and threats is a requirement under the IOSEA MoU.

## GENERAL CONSIDERATIONS BASED ON THE QUESTIONNAIRE

45. RFBs play a key role in implementing sustainable fisheries practices, by building an important bridge between high level policy commitments and Member States, within their specific mandates. RFBs further the application of management practices consistent with agreed international policy instruments, favour collaboration and sharing of data, information and experiences among Members. Formal consideration of the FAO guidelines by RFBs would be desirable, particularly given the migratory nature of sea turtles and the need to address this type of conservation issues in a holistic manner and at the regional level.

- 46. IATTC seems to have made very good progress in dealing with the issue of sea turtle interactions with fisheries and is not too far from a full implementation of the FAO guidelines. This situation seems however to represent more an exception than the rule and in most RFBs the guidelines have hardly been considered. It should be noted, however, that good progress is being made by many member countries and that this report is only based on the replies to the questionnaire received.
- 47. It is strongly recommended that relevant RFBs formally consider and adopt the FAO guidelines or that they develop and adopt guidelines based on the FAO ones.

#### SEA TURTLE-FISHERIES INTERACTIONS ACTIVITIES CARRIED OUT BY FAO

48. FAO conducts activities in this area thanks to the trust-fund project GCP/INT/919/JPN 'Interactions between Sea Turtles and Fisheries within an Ecosystem Approach to Fisheries Management' and below some highlights are presented of the activities carried out during the past biennium.

#### Case studies

- 49. Two regional case studies have been undertaken, one in the South West Indian Ocean and one in Southeast Asia. Two regional workshops were held in the South West Indian Ocean. These included training, data collection on various sources of sea turtle mortality and initial modelling. Two additional workshops are planned in the region, one to address sea turtle bycatch in trawl fisheries (to be held in Madagascar) and another in longline fisheries (contacts are being made with the IOTC).
- 50. As regards Southeast Asia, a first regional workshop will be held in late March 2007, in collaboration with SEAFDEC, with similar objectives as the one in the South West Indian Ocean.
- 51. Additional case studies, including the Atlantic and another one in the Indian Ocean, are under planning.

# Model development

52. Although good models already exist to help assessing the relative importance of various sources of mortality on different stages of the life cycle of sea turtles, their application was found to be problematic because they require detailed and complex data, collected over a number of years. This type of data is not easy to get in most countries, particularly in developing countries. For this reason, alternative models are developed that can also be applied in data poor situations.

#### Development of guidelines

Material is being collected to produce various guidelines to reduce sea turtle bycatch in fishing operations. These include one document, mainly aimed at fisheries managers, that provides an overview of the issues across different fisheries and a range of possible management measures and considerations to reduce negative impacts on sea turtles. Other documents target specific fisheries. Draft guidelines to reduce bycatch in longline fisheries have already been prepared in collaboration with SPC and is presently being finalized.

## **Appendix**

# List of Regional Fisheries Bodies (RFBs) and Inter-Governmental Organizations (IGOs) that received the FAO questionnaire

#### **FAO RFBs**

APFIC (FAORAP) Asia-Pacific Fishery Commission

CECAF (FAORAF) Fishery Committee for the Eastern Central Atlantic
GFCM \* General Fisheries Commission for the Mediterranean

IOTC \* Indian Ocean Tuna Commission

SWIOFC (FAOSAFR) South West Indian Ocean Fisheries Commission WECAFC (FAOSLAC) Western Central Atlantic Fishery Commission

#### **OTHER RFBs and IGOs**

BOBP-IGO

Bay of Bengal Programme- Inter-Governmental Organisation

CCAMLR \*

Convention on the Conservation of Antarctic Marine Living

Resources

CCSBT \* Commission for the Conservation of Southern Bluefin Tuna COFREMAR Joint Technical Commission for the Argentina/Uruguay

Maritime Front

COREP Regional Fisheries Committee for the Gulf of Guinea

CPPS Permanent Commission for the South Pacific

FFA Forum Fisheries Agency

IATTC \* Inter-American Tropical Tuna Commission

ICCAT \* International Commission for the Conservation of Atlantic Tunas

IPHC \* International Pacific Halibut Commission

OLDEPESCA Organización Latinoamericana de Desarrollo Pesquero

NAFO \* Northwest Atlantic Fisheries Organization

NASCO \* North Atlantic Salmon Conservation Organization
NPAFC \* North Pacific Anadromous Fish Commission
NEAFC \* North East Atlantic Fisheries Commission

PSC \* Pacific Salmon Commission
RECOFI (FAORNE) Regional Commission for Fisheries

SPC Regional Commission for Fisheries
Secretariat of the Pacific Community

SEAFDEC Southeast Asian Fisheries Development Center SEAFO \* South East Atlantic Fisheries Organisation SRCF Sub-Regional Commission on Fisheries

WCPFC Western and Central Pacific Fisheries Commission

<sup>\*</sup> indicates Regional Fishery Management Organizations (RFMOs)