



RESOLUTION 12/04 – ON MARINE TURTLES

Reporting of progress of implementation of the FAO Guideline to Reduce Sea Turtle Mortality in Fishing Operation and on the implementation of resolution 12/04 on marine turtles **(Paragraph 5)**

Progress of implementation of the measures of the resolution 12/04	Action undertaken
<ul style="list-style-type: none"> Collect (through logbooks and observer programs) and provide to the Scientific Committee all data on their vessels interactions with marine turtles, Furnish information to the Scientific Committee on successful mitigation measures and other impacts on marine turtles (such as the deterioration of nesting sites & swallowing of marine debris). 	<p>There is system to report information on interaction with the shark through the logbook reporting. This information is reported as the bycatch information reported with the fisheries statistical data.</p>
<ul style="list-style-type: none"> Require fishermen to bring aboard, if practicable, any captured hard shelled turtle that is comatose or inactive as soon as possible and foster its recovery, including aiding in its resuscitation, before safely returning it to the water. Ensure that fishermen are aware of and use proper mitigation and handling techniques and keep on board all necessary equipment for the release of turtles 	<p>Catching and harming of turtle is prohibited in the Maldives and fishers are required to release any incidental catch immediately under the license condition.</p> <p>This information is relayed to fisher folks through outreach programs and a turtle guide is distributed to fishing vessels to inform the fishers on the best practice.</p> <p>Turtle bycatch has never been recorded in the baitboat or handline fishery and therefore has been assessed as low risk for management purposes.</p>
<ul style="list-style-type: none"> For gillnet vessels Require vessel to record all incidents involving marine turtles in the logbooks and report incidents to authorities of the CPC 	<p>Not applicable as gill netting is prohibited in the Maldives by law.</p>
<ul style="list-style-type: none"> For longline vessels (a) Ensure that longline vessels carry line cutters & de-hookers to facilitate the handling and release of marine turtles caught or entangled Ensure that operators of such vessels are required to carry & use dip-nets (b) Encourage use of whole finfish bait; (c) Require vessel to record all incidents involving marine turtles in the logbooks and report incidents to authorities of the CPC. 	<p>The requirements to carry and use of de-hookers, line cutters dip nets and the process of proper release of turtles and other marine mammals that could be caught in Longline fishery is clearly specified in the Tuna Fisheries Management Plan and subsequent regulation. The Management plan also stipulates other bycatch mitigation measures and also encourages fishing vessels to use wholefish bait to minimise turtle bycatch. Longline log books also allow the reporting of turtle bycatch or interactions to the IOTC standard and are reported to the IOTC on an annual basis.</p> <p>Maldives do not have longline vessels at 2022</p>
<ul style="list-style-type: none"> For purse seine vessels: (a) Ensure that vessels: (i) Avoid encirclement of marine turtles, if a marine turtle is encircled/ entangled, take measures to safely release the turtle. (ii) Release all marine turtles observed entangled in fish aggregating devices (FADs) or fishing gear. (iii) If a marine turtle is entangled in the net, stop net roll as soon as the turtle comes out of the water; disentangle the turtle without injuring it before resuming the net roll; and assist the recovery of the turtle before returning it to the water. (iv) Carry and employ dip nets to handle turtles. (b) Encourage vessel to adopt FAD designs which reduce the incidence of entanglement of turtles; (c) Require vessel to record incidents involving marine turtles in the logbooks and report incidents to authorities of the CPC 	<p>Not applicable as purse seining is prohibited in the Maldives by law.</p>
<ul style="list-style-type: none"> CPCs to undertake research trials of circle hooks, use of whole finfish for bait, alternative FAD designs, alternative handling techniques, gillnet design and fishing practices and other mitigation methods which may improve the mitigation of adverse effects on turtles 	<p>Anchored FADs use in the Maldives are non-entangling with only a set of float-buoys with horizontal attachment of netting underneath</p>



• CPCs continue to undertake research and development to improve the mitigation of adverse affects on marine turtles & provide research outcomes to the Scientific Committee.	No research on turtle is being conducted in the year 2022
• Collaborate with the IOSEA and take into account the IOSEA MoU	IOSEA MOU Signatory since April 2010

Progress of implementation of the Guidelines to Reduce Sea Turtle Mortality in Fishing Operations	Actions undertaken
Legal framework	
1. Fishing operations / A. Appropriate handling and release. In order to reduce injury and improve chances of survival: (i) Requirements for appropriate handling, including resuscitation or prompt release of all bycaught or incidentally caught (hooked or entangled) sea turtles. (ii) Retention and use of necessary equipment for appropriate release of bycaught or incidentally caught sea turtles.	<p>Unlawful take and harm to turtles and their eggs is prohibited by law. Any incidental catch of turtles are required to be promptly released ensuring minimal harm to the animal.</p> <p>Report of turtle catch in by HABB gear is nil for the year 2022.</p> <p>Under the tuna management plan, it is required to carry de-hookers, line cutters and dipnets on board longline fishing vessels. The risk of turtle bycatch in the baitboat and handline tuna fishery has been assessed as extremely low by Maldives Marine Research Institute and thus there are no specific requirements to carry such equipment in the baitboat and handline fishery.</p>
1. Fishing operations / B. Coastal trawl (i) In coastal shrimp trawl fisheries, promote the use of turtle excluder devices (TEDs) or other measures that are comparable in effectiveness in reducing sea turtle bycatch or incidental catch and mortality. (ii) In other coastal trawl fisheries, collect data to identify sea turtle interactions and conduct where needed research on possible measures to reduce sea turtle bycatch or incidental catch and mortality. (iii) Implementation of successful methodologies developed as a result of B(ii).	Not applicable as the use of trawl net is prohibited in the Maldives.
1. Fishing operations / C. Purse seine (i) Avoid encirclement of sea turtles to the extent practical. (ii) If encircled or entangled, take all possible measures to safely release sea turtles. (iii) For fish aggregating devices (FADs) that may entangle sea turtles, take necessary measures to monitor FADs and release entangled sea turtles, and recover these FADs when not in use. (iv) Conduct research and development of modified FADs to reduce and eliminate entanglement. (v) Implementation of successful methodologies developed as a result of C(iv).	Not applicable as the use of purse seine net is prohibited in the Maldives.
1. Fishing operations / D. Longline (i) Development and implementation of appropriate combinations of hook design, type of bait, depth, gear specifications and fishing practices in order to minimize bycatch or incidental catch and mortality of sea turtles. (ii) Research should include consideration of the impact of various mitigation measures on sea turtles, target species and other bycaught or incidentally caught species, such as sharks and seabirds. (iii) Retention and use of necessary equipment for appropriate release of bycaught and incidentally caught sea turtles, including de-hooking, line cutting tools and scoop nets.	Not applicable as there was no licensed LL fishing vessel in the year 2022.
1. Fishing operations / E. Other fisheries (i) Assessment and monitoring of sea turtle bycatch or incidental catch and mortality in relevant fishing operations. (ii) Research and development of necessary measures for reducing bycatch or incidental catch or to control mortality in other fisheries with a priority on reducing bycatch or incidental catch in gillnet fisheries. (iii) In other setnet fisheries, collect data to identify sea turtle interactions and conduct when needed research on possible measures to reduce sea turtle bycatch or incidental catch and mortality. (iv) Implementation of successful methodologies developed as a result of E (ii) and (iii).	Reporting of logbook is mandatory for all licensed fishing vessels and under logbook reporting any interaction of turtle has to be reported. This information is also assessed as fisheries statistical information on bycatch and interactions of ETP species are generated through the fisheries information system.
1. Fishing operations / F. Other measures as appropriate for all fishing practices (i) Spatial and temporal control of fishing, especially in locations and during periods of high concentration of sea turtles. (ii) Effort management control especially if this is required for the conservation and management of target species or group of target species. (iii) Development and implementation, to the extent possible, of net retention and recycling schemes to minimize the disposal of fishing gear and marine debris at sea, and to facilitate its retrieval where possible.	Use of any form of net in fishing of tuna and tuna like species are banned by law in the Maldives.



<p>2. Research, monitoring and sharing of information / A. Collection of information and data, and research</p> <p>(i) Collection of data and information on sea turtle interactions in all fisheries, directly or through relevant RFBs, regional sea turtle arrangements or other mechanisms.</p> <p>(ii) Development of observer programmes in the fisheries that may have impacts on sea turtles where such programs are economically and practically feasible. In some cases financial and technical support might be required.</p> <p>(iii) Joint research with other states and/or the FAO and relevant RFBs.</p> <p>(iv) Research on survival possibilities of released sea turtles and on areas and periods with high incidental catches.</p> <p>(v) Research on socio-economic impacts of sea turtle conservation and management measures on fishers and fisheries industries and ways to improve communication.</p> <p>(vi) Use of traditional knowledge of fishing communities about sea turtle conservation and management.</p>	<p>Under logbook reporting and through observer trips any interaction of turtle has to be reported. This information is also assessed as fisheries statistical information on bycatch and interactions of ETP species are generated through the fisheries information system. These information are shared as Maldives annual fisheries statistical data are reported to IOTC.</p> <p>There is no research conducted on the specific points mentioned in the points (iv), (v), (vi) (v)</p>
<p>2. Research, monitoring and sharing of information / B. Information exchange</p> <p>(i) Sharing and dissemination of data and research results, directly or through relevant RFBs, regional sea turtle arrangements or other mechanisms.</p> <p>(ii) Cooperation to standardize data collection and research methodology, such as fishing gear and effort terminology, database development, estimation of sea turtle interaction rates, and time and area classification.</p>	<p>Information on the turtle bycatch and interactions are reported to FRBs.</p> <p>There is an established data reporting and recording mechanism developed including a mobile application for reporting of mandatory logbook information and which is linked to fisheries information system.</p>
<p>2. Research, monitoring and sharing of information / C. Review of the effectiveness of measures</p> <p>(i) Continuous assessment of the effectiveness of measures taken in accordance with these guidelines.</p> <p>(ii) Review of the implementation and improvement of measures stipulated above.</p>	<p>Through outreach programs and workshops information on mandatory reporting of catch, incidental catch and interactions are shared with the fishermen.</p> <p>Under the national compliance monitoring program fishing vessels and other fisheries related activities are monitored randomly through spot checks and level of compliance is recorded.</p>
<p>3. Ensuring policy consistency</p> <p>A. Maintaining consistency in management and conservation policy at national level, among relevant government agencies, including through inter-agency consultations, as well as at regional level.</p> <p>B. Maintaining consistency and seeking harmonization of sea turtle management and conservation-related legislation at national, sub-regional and regional level.</p>	<p>National fisheries management plans are developed with short, medium and long term strategies to develop fisheries sustainably taking account international norms such as ecosystem approach, precautionary principles and participatory approach.</p> <p>Maldives is also party to CITES convention and is implemented through domestic legislations.</p>
<p>4. Education and training</p> <p>A. Preparation and distribution of information materials such as brochures, manuals, pamphlets and laminated instruction cards.</p> <p>B. Organization of seminars for fishers and fisheries industries on:</p> <ul style="list-style-type: none"> – Nature of the sea turtle-fishery interaction problem – Need to take mitigation measures – Sea turtles species identification – Appropriate handling and treatment of bycaught or incidentally caught sea turtles – Equipment to facilitate rapid and safe release – Impacts of their operations on sea turtles – Degree to which the measures that are requested or required to adopt will contribute to the conservation, management and recovery of sea turtle population. – Impacts of mitigation measures on profitability and success of fishing operations – Appropriate disposal of used fishing gear <p>C. Promotion of awareness of the general public of sea turtle conservation and management issues, by government as well as other organizations</p>	<p>Through outreach programs and workshops information on mandatory reporting of catch, incidental catch and interactions are shared with the fishermen.</p> <p>Information on handline and treatment of incidental catch is distributed through tuna fishery logbook.</p>
<p>5. Capacity building</p> <p>A. Financial and technical support for implementation of these guidelines in developing countries.</p> <p>B. Cooperation in research activities such as on status of sea turtle incidental catch in coastal and high seas fisheries and research at foraging, mating and nesting areas.</p> <p>C. Establishment of a voluntary support fund.</p> <p>D. Facilitation of technology transfer.</p>	<p>Non</p>
<p>6. Socio-economic and cultural considerations</p> <p>A. Taking into account :</p>	<p>Maldives never had a turtle fishery even within traditional small scale and artisanal fisheries. Turtle is also protected species in the Maldives by law since 1995. Hence, given special preference to conserve the</p>



<p>(i) socio-economic aspects in implementing sea turtle conservation and management measures.</p> <p>(ii) cultural aspects of sea turtles interactions in fisheries as well as integration of cultural norms in sea turtle conservation and management efforts.</p> <p>(iii) sea turtle conservation and management benefits to fishing and coastal communities, with particular reference to small-scale and artisanal fisheries.</p> <p>B. Promotion of the active participation and, where possible, cooperation and engagement of fishing industries, fishing communities and other affected stakeholders.</p>	<p>turtle species by the local communities. Interaction of turtle is extremely rare in troll line, pole and line and handline fishing practice in the country so there is no economic impact to the fishing communities in putting up measures to mitigate turtle bycatch.</p>
<p>8. Consideration of other aspects of sea turtle conservation and management</p> <p>Fishers, research institutions, management authorities and other interested parties dealing with fisheries conservation and management should collaborate with relevant conservation and management bodies, at national, sub-regional and regional level, in the following subject matters:</p> <p>A. Collection and sharing of information on sea turtles relative to:</p> <p>(i) Biology and ecology (population dynamics, stock identification, behaviour, diet selection, habitats, breeding, nesting, foraging, migration patterns/areas, nursery grounds, etc).</p> <p>(ii) Sources of mortality other than fisheries.</p> <p>(iii) Status of sea turtle populations, including human-related threats.</p> <p>B. Improvement and development of conservation and management measures applied throughout the sea turtle life cycle (habitat/ nesting beach protection, enhancement of sea turtle populations).</p> <p>C. Promotion, as appropriate, of participation in regional sea turtle conservation and management arrangements with a view to cooperate on sea turtle conservation and management.</p>	<p>There is no specific research conducted apart from assessment done through logbook and observer data of turtle bycatch and interactions. The research on turtles in Maldives is mainly conducted through conservation focussed civil society groups. Regulator monitoring of such activities are conducted through these groups under collaborations with the government research institute. Research on turtles in the Maldives is now focussed on regular monitoring and assessment of turtle population and nesting sites as they are a protected species. Such data is collected regularly and is used to advise policy.</p>



Annexe I

Institution	Research/ Monitoring	Conservation/ Management	Control/ Enforcement	Networking
<i>Ministry of Fisheries, Marine Resources and Agriculture</i>	✓	✓	✓	✓
<i>Maldives Marine Research Institute</i>	✓	✓		✓
<i>Ministry of Environment</i>	✓	✓	✓	✓
<i>Maldives Police Service</i>			✓	
<i>Maldives Customs Service</i>			✓	
<i>Maldives Coast Guard</i>			✓	
<i>Maldives Custom Service</i>			✓	
<i>Ministry of Tourism</i>				✓
<i>Local government Authorities</i>				✓

Res/Mon = Research and Monitoring; Cons/Manag = Conservation and Management; Contr/Enfo = Control and Enforcement; Net = Networking