



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)

DEADLINE
With the implementation report, 60 days before the meeting of the Commission - annually

Reporting year: 2019

Date of reporting: 4th March 2020

Reporting flag CPC: SRI LANKA

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). 	<ul style="list-style-type: none"> ▪ Data collected through port sampling, log books, and observer programme ▪ Catch data submission to IOTC in every Year June. Including By-catch and discard data submitted.
<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 	<ul style="list-style-type: none"> ▪ It is legally mandatory to take line cutters and de-hooks on board, (High seas fishing regulations 2014). Samples equipments provided for the fishermen to prepare and use. Vessels are not allowed to depart for fishing without line cutters and de-hooks on board. ▪ Awareness on turtle conservation and release of incidental caught turtles is been conducted ▪ Dept. of Wild Life Conservation of Sri Lanka also enforce their regulations on conservation of turtles including their nesting habitats.
<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 	<ul style="list-style-type: none"> ▪ Maximum length of the drift gill net in high seas restricted to be less than 2.5km seiners (High seas fishing regulations 2014). ▪ To be comply with IOTC Resolution 17/07 , Sri Lanka in a process of is phasing out use of gill net within EEZ as explain in the implementation reports of 2018 and 2019 in a view to enforce complete prohibition of gill net >2.5 km with in EEZ by 2022. ▪ Fishermen make aware on proper disposal of fishing gear/ nets and the repercussion of ghost fishing by nets. ▪ Trawling is prohibited (Fisheries and Aquatic Resources (amendment) Act, No.11 of 2017). ▪ Collect information through port sampling, log books, and observer programme



	<ul style="list-style-type: none"> The fishermen are instructed to keep records of incidental entangles of turtles by giving geographical coordinates and the form of release whether dead or alive. Display of poster on turtle conservation
<ul style="list-style-type: none"> For longline vessels (a) Ensure that long line 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. 	<ul style="list-style-type: none"> It is legally mandatory to take line cutters and de-hooks on board for long lines. (High seas fishing regulations 2014) . Basically use whole fin fish or squids as the bait in longlines. Local production of fin fish for baits has been initiated in 2017. Collect information through port sampling, log books, and observer programme
<ul style="list-style-type: none"> For purse seine vessels: (a) Ensure that vessels: <ul style="list-style-type: none"> (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 	<ul style="list-style-type: none"> Currently no operating purse seines. However, in a thought of future developments, dip nets onboard is legally mandatory for purse seiners (High seas fishing regulations 2014.) Increase of awareness among fishermen The National research institute is experimenting on FAD designs of zero impact on tuna associated species Instructed to release the Entangled and remained live turtles immediately. Collect information through, log books, and observer programme
<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 	<ul style="list-style-type: none"> Long line fishing is basically conduct using circular hooks Basically use whole fin fish or squids as the bait in long lines. Local production of fin fish for baits has been initiated in 2017 Use of monofilament net is banned.
<ul style="list-style-type: none"> CPCs continue to undertake research and development to improve the mitigation of adverse affects on marine turtles & provide research outcomes to the Scientific Committee. 	<ul style="list-style-type: none"> Continue undertake research, monitoring and conservation activities and the results are regularly informed. Monitoring nesting sites of turtles in western and southern coasts. Report on the main turtle nesting areas of southern coast of Sri Lanka has been presented to the WPEB in 2017. Tuttle ressources are conserve and use for Eco tourism.
<ul style="list-style-type: none"> Collaborate with the IOSEA and take into account the IOSEA MoU 	

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.	(i) Turtles are legally prohibited to catch under fishing operation Regulations 1996 (ii) Turtles are protected under Fauna and Flora Ordinance of 1993 (iii) Sri Lanka is party to CITES. (iv) Made legally mandatory to carry line cutter and de-hooks on board and dip nets onboard under the High seas fishing regulations 2014. Currently no operating purse seines. (v) Legal actions have been taken against the violators. (vi) Drift gill nets >2.5 km is legally prohibited to use in High seas. (vii) Use of monofilament nets legally prohibited

<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 by catch 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 by catch or incidental catch and mortality. (iii) Implementation of successful methodologies developed as a result of B(ii).</p>	<p>(i) Trawling fishery is legally ban Sri Lanka. (Fisheries and Aquatic Resources (amendment) Act, No.11 of 2017).</p>
<p>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).</p>	<ul style="list-style-type: none"> ▪ No currently operating purse seine fleet ▪ Ring nets are operate targeting free swimming schools of <i>Decaptraerus sp.</i>, <i>Rastregillerkanaguata</i>, balistids etc. ▪ The National research institute is experimenting on FAD designs of to reduce impact on tuna associated species
<p>1. Fishing operations / D. Long line (i) Development and implementation of appropriate combinations of hook design, type of bait, depth, gear specifications and fishing practices in order to minimize by catch 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 by caught and incidentally caught sea turtles, including de-hooking, line cutting tools and scoop nets.</p>	<ul style="list-style-type: none"> ▪ Long line fishing is basically conduct using circular hooks and whole baits
<p>1. Fishing operations / E. Other fisheries (i) Assessment and monitoring of sea turtle by catch or incidental catch and mortality in relevant fishing operations. (ii) Research and development of necessary measures for reducing by catch or incidental catch or to control mortality in other fisheries with a priority on reducing by catch or incidental catch in gillnet fisheries. (iii) In other set net fisheries, collect data to identify sea turtle interactions and conduct when needed research on possible measures to reduce sea turtle by catch or incidental catch and mortality. (iv) Implementation of successful methodologies developed as a result of E (ii) and (iii).</p>	<ul style="list-style-type: none"> ▪ In port sampling data collection system a separate sheet is allocated to record catch data of other fisheries (if any) ▪ There is a separate box in the log sheet to report incidental catches of turtles and live releases or dead discards.
<p>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.</p>	<ul style="list-style-type: none"> ▪ Fishermen are made aware the proper disposal of fishing gear and the repercussions of ghost fishing.
<p>2. Research, monitoring and sharing of information / A. Collection of information and data, and research (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. (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. (iii) Joint research with other states and/or the FAO and relevant RFBs. (iv) Research on survival possibilities of released sea turtles and on areas and periods with high incidental catches. (v) Research on socio-economic impacts of sea turtle conservation and management measures on fishers and fisheries industries and ways to improve communication. (vi) Use of traditional knowledge of fishing communities about sea turtle conservation and management.</p>	<ul style="list-style-type: none"> ▪ The national observer is placed on board for Scientific data collection. ▪ Collect information through, log books, and observer programme and port sampling. ▪ Provide collected data and information to the IOTC. ▪
<p>2. Research, monitoring and sharing of information / B. Information exchange (i) Sharing and dissemination of data and research results, directly or through relevant RFBs, regional sea turtle arrangements or other mechanisms. (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>	<ul style="list-style-type: none"> ▪ Sharing and Dissemination of data through IOTC

<p>2. Research, monitoring and sharing of information / C. Review of the effectiveness of measures (i) Continuous assessment of the effectiveness of measures taken in accordance with these guidelines. (ii) Review of the implementation and improvement of measures stipulated above.</p>	<p>-</p>
<p>3. Ensuring policy consistency 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. B. Maintaining consistency and seeking harmonization of sea turtle management and conservation-related legislation at national, sub-regional and regional level.</p>	<ul style="list-style-type: none"> ▪ This a good coordination among the relevant agencies on turtle conservation. The Department of Wildlife conservation, Department of Fisheries and Aquatic Resources (DFAR), Dept.of Coast Guard, Sri Lanka Navy, Department of Customs and the National Research institute (NARA) and the National Universities work closely to conserve the turtles resources in Sri Lanka. ▪ All turtle species protected under Fauna and Flora protection act and subjected to CITES . Catching, retain, sell, transport and export of turtles is prohibited under Fisheries and Aquatic Resources Act. ▪ Comply with FAO and IOTC Conservation and Management measures
<p>4. Education and training A. Preparation and distribution of information materials such as brochures, manuals, pamphlets and laminated instruction cards. B. Organization of seminars for fishers and fisheries industries on: – Nature of the sea turtle-fishery interaction problem – Need to take mitigation measures – Sea turtles species identification – Appropriate handling and treatment of by caught 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 C. Promotion of awareness of the general public of sea turtle conservation and management issues, by government as well as other organizations</p>	<p>A. There are two major NGOs working on turtle conservation in south coast of Sri Lanka. There are posters, publications and leaflets published by these organizations on turtle conservation. In addition Department of Wildlife conservation has published poster and brochures.</p> <p>B. The NGOs , National Aquatic Resources Research and Development Agency and DFAR conduct awareness programs to fishermen on reducing of incidental catches of turtles. And releasing of entangled turtles at minimum harm.</p> <p>C. The turtle identification cards provided by IOTC is distributed to port samplers, observers and fisher societies to facilitate species confirmation.</p> <p>The NGOs conduct lectures and awareness program to school children, Fishermen and all visitors and tourists their turtle conservation centres and do visit the places where need on the request .</p> <ul style="list-style-type: none"> ▪ The National Aquatic Resources Research and Development Agency and Department of Wild Life Conservation (DWLC) working on turtle conservation. DWLC is running <i>in-situ</i> conservation activities at Bundala while NARA is running hatchery and refuge centre at Kalpitiya. The conservation mostly <i>in-situ</i> conditions, Mainly nest protection, hatching rearing and safe releasing. Eco tourism is one of the main advantage of these projects. This has provided alternative livelihood for the people those engaged in poaching of turtle eggs and there of protected the turtles. These projects conduct turtle rescue programs with fisher community.
<p>5. Capacity building A. Financial and technical support for implementation of these guidelines in developing countries. 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. C. Establishment of a voluntary support fund. D. Facilitation of technology transfer.</p>	<ul style="list-style-type: none"> ▪ Monitoring nesting sites of turtles in western and southern coasts by Nara through the Government treasury funds. ▪ Report on the main turtle nesting areas of southern coast of Sri Lanka has been presented to the WPEB in 2017
<p>6. Socio-economic and cultural considerations A. Taking into account : (i) socio-economic aspects in implementing sea turtle conservation and management measures. (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>(i) Maintain turtle nesting sites and the turtle refugee as a tourist attractions.</p> <p>(ii) Provision of employments, in the turtle refugees, those depend on turtle meet and egg sales..</p> <p>(iii) Train the turtle dependent fisher Falk as tourist guided.</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>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>	<ul style="list-style-type: none">• National Research officers and Managers of Fisheries Dept. together participate in IOTC activities and present the research studies to Eco system and by-catch working party and report the progress of implementation to the Scientific Committee and the Commission of IOTC.



Annexe I

Institution	Research/ Monitoring	Conservation/ Management	Control/ Enforcement	Networking
Establishment of scientifically managed sea turtle hatchery and refuge center for disabled or injured sea turtles at Kalpitiya Regional Research Station		Conservation and management		
Monitoring of sea turtle nesting beaches	Research and monitoring			
Regularly monitoring the fish catch and landings for detect illegal landings by the Department of Fisheries and Aquatic Resources, Department of Wild Life Conservation, Sri Lanka Navy, Coast Guard Department, Sri Lanka Navy and Police Department			Control/Enforcement	

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