

**BEFORE THE NATIONAL GREEN TRIBUNAL**

**SOUTHERN ZONE, CHENNAI**

**Original Application No.13 of 2025 (SZ)**

**In the matter of:**

Tribunal on its own motion - SUO MOTU based on the News item in The New Indian Express newspaper, Chennai e-edition dated 16.01.2025, titled, "Experts are alarmed as 350 turtles was ashore dead till January 15".

Versus

Union of India, Represented by its Secretary,  
MOEF & CC, New Delhi and ors.

...Respondent(s)

**REPORT FILED BY 5<sup>TH</sup> RESPONDENT-**  
**DEPARTMENT OF FISHERIES AND FISHERMEN WELFARE**

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Through  
Dr. D. Shanmuganathan  
Standing Counsel of Tamil Nadu  
National Green Tribunal  
Southern Zone, Chennai

**DATE: 30.01.2025**

**BEFORE THE NATIONAL GREEN TRIBUNAL**  
**SOUTHERN ZONE, CHENNAI**  
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**In the matter of:**

Tribunal on its own motion - SUO MOTU  
based on the News item in The New  
Indian Express newspaper,  
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turtles was ashore dead till January 15".

Versus

1.Union of India,  
Represented by its Secretary,  
MOEF & CC, New Delhi.

2. The Principal Secretary to Govt. of Tamil Nadu,  
Department of Environment, Climate Change and Forest,  
Chennai.

3.Tamil Nadu State Coastal Zone Management Authority,  
Through the Member Secretary,  
Chennai.

4.The Chairman,  
Tamil Nadu Pollution Control Board,  
Chennai.

5.Department of Fisheries and Fishermen Welfare,  
Rep by its Commissioner,  
Chennai.

6. Principal Chief Conservator of Forest &  
Chief Wildlife Warden,  
(Head of Department)  
Chennai.

...Respondent(s)

## **Action Taken Report on Protection and Conservation of Sea turtles**

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The Chief Secretary to Government conducted a meeting on the conservation of Sea Turtles on 21.01.2024. This meeting was participated by the Principal Secretary to Government, Environment, Climate change and Forests, Principal Secretary to Government, AHDF&FW, Principal Chief Conservator of Forest, officials from fisheries and Fishermen welfare department, Indian Coast Guard and Coastal Security group. Based on the instructions instructed during this meeting to the Fisheries and Fishermen Welfare Department.

The following instructions have been issued to the Coastal Regional Joint/Deputy Directors of Fisheries and Authorized officers/ Asst. Directors of Fisheries vide Memorandum No. Rc. No. 1368 /J6/2024, dated.22.01.2025.

1. As per the sub-rule-5 of Rule-17 of Tamil Nadu Marine Fishing Regulation Rules, 2020; no trawl net shall be used without fixing Turtle Excluder Device (TED) before the cod end during the specified period as may be notified by the authorized officer.

Accordingly, all the authorized officers have already been instructed to ensure that the trawl nets are fixed with Turtle Excluder Device (TED) during the period of **1<sup>st</sup> January to April 30<sup>th</sup>**. In this regard has been reiterated to ensure that the trawl nets are fixed with Turtle Excluder Device (TED) especially during the period of January to April every year. Hence, all the officer have been instructed to ensure strict compliance through regular departmental as well as joint patrolling and to monitor, any violation closely so as to take action to under the provisions of TNMFR Act.

2. The Government have issued notification vide G.O.(Ms)No.146, Animal Husbandry, Dairying and Fisheries (FS-3) Department, dated 27.09.2016 and G.O.Ms.No.62, Animal Husbandry, Dairying and

Fisheries (Fs-3) Department, dated 10.03.2017 to prohibit the fishing by mechanized fishing vessels, motorized country crafts with engine capacity more than 10 HP and usage of 'ray fish nets' by motorized country crafts and those using mechanized fishing techniques in a radius of 5 (five) nautical miles around potential nesting and breeding sites of sea turtles identified by Central Marine Fisheries Research Institute and Department of Forest in the coastal areas of Chennai, Kanchipuram, Cuddalore, Villupuram, Nagapattinam, Ramanathapuram, Thoothukudi and Kanniyakumari Districts of Tamil Nadu during the turtle breeding season. (Notification copy enclosed)

Use of Ray Fish net during the Turtle Breeding Season should be monitored by conducting regular departmental and joint patrol as per the guidelines of the Task Force constituted for the conservation of sea turtle. Fishing within 5 nautical miles shall be monitored through installed transponders with Nabhmitra Application. Hence, the authorized officers have been instructed to file charge sheets against the violators of the above notifications towards sea turtle conservations and to stop all Government relief assistance and welfare scheme benefits to violators.

3. They have also been instructed to Conduct awareness campaigns in the fishing villages by involving officials from Forest Department, Fishing Boat Owners Association, NGO's and Village Panchayat Presidents. It is to be ensured that sufficient hoardings are erected in the prominent places of FHs/FLCs/FLPs regarding conservation of Sea Turtles.
4. The Authorised Officers have been instructed to frame charges under section 17 and penalize under sub section (1)(a), (1)(b), (1)(c), (1)(d), (1)(f), (2) and (3) of section 18 of TNMFR Act 1983 for violation of provisions in the act especially during the Turtle breeding season as specified in the notification for protection and conservation of sea turtles.

Further, the Authorised officers have been instructed to send the weekly report regarding the patrolling, awareness created, no of charges

framed and the details of penalties imposed. In view of conserving the sea turtles to protect the ecological balance of the sea environment and to ensure responsible and sustainable fisheries, the subordinate officers have also been instructed to pay special attention in the above aspects.

Subsequently , the following actions has been taken by the Authorised officer/ Assistant Director of Fisheries

Sl.No	ADF office	Actions Taken
1	Thiruvallur	<ul style="list-style-type: none"> <li>• District Collector meeting conducted on 24.01.2025 with all stakeholders regarding the Conservation sea turtles</li> <li>• Joint Patrolling is planned to be conducted on regular basis.</li> <li>• Awareness program is to be conducted on 29.01.2025</li> </ul>
2	Chennai	<ul style="list-style-type: none"> <li>• Awareness program has been conducted on 20.1.2025 with all stakeholders along with NGOs.</li> <li>• <b>24 Fishing Boats has been charge sheeted due to contravention of TNMFR Act (Fishing Within 5-Nm).</b></li> <li>• Joint Patrolling is planned to be conducted on regular basis during the Turtle breeding Season.</li> </ul>
3	Chengalpattu	<ul style="list-style-type: none"> <li>• The department officials on 23.01.2025 have conducted patrol in territorial waters.</li> <li>• 06.01.2025 an Awareness meeting on conservation of fishery resources conducted in association with Tree Foundation and the Dept. of Forest, at Kadapakkam, Chengalpattu District.</li> <li>• On 17.01.2025, an Awareness meeting on conservation and protection of sea turtles in collaboration with Department of Forest along with fishermen at Soolerikattukuppam and Pudhupattinam fishing village</li> <li>• Awareness program conducted on 24.01.2025 Pazhyanadukuppam, Kadapakkam, Division</li> </ul>

SI.No	ADF office	Actions Taken						
		<ul style="list-style-type: none"> <li>Assistant Director of fisheries conducted for village representatives and Sagar Mitras on 24.01.2025.</li> <li>Joint Patrolling is planned to be conducted on regular basis during the Turtle breeding Season along with ADF&amp;FW Chennai (FHMW).</li> </ul>						
4	Villupuram	<ul style="list-style-type: none"> <li>Awareness program conducted in all Villages on the Sea Turtle conservation and protection.</li> </ul>						
5	Cuddalore	<ul style="list-style-type: none"> <li>Regular patrol is being conducted by department officials</li> <li>Circular issued to all fishermen and Fishermen association on the usage of TED and Penal provisions in the TNMFR Act-1983 on 23.01.2025</li> <li>A awareness program is conducted along with MPEDA on 28 &amp; 29.01.2025</li> </ul>						
6	Nagapattinam	<ul style="list-style-type: none"> <li>Circular issued to all fishermen and Fishermen association on the usage of TED and Penal provisions in the TNMFR Act-1983 on 24.01.2025</li> <li><b>Action has been taken on 3 Boats Fishing for fishing in contravention of the TNMFR act.</b></li> <li>Awareness meetings was conducted 28.01.2025</li> <li>Awareness meetings were conducted in the following places also</li> </ul> <table border="1" data-bbox="687 1570 1378 1845"> <tbody> <tr> <td data-bbox="687 1570 1098 1659">Akkaraipettai and Samanthanpettai</td> <td data-bbox="1098 1570 1378 1659">22.12.2024</td> </tr> <tr> <td data-bbox="687 1659 1098 1749">Nambiyar Nagar and Aryanatutheru</td> <td data-bbox="1098 1659 1378 1749">30.12.2024</td> </tr> <tr> <td data-bbox="687 1749 1098 1845">Keechankuppam Kallar and Nagore</td> <td data-bbox="1098 1749 1378 1845">31.12.2024</td> </tr> </tbody> </table>	Akkaraipettai and Samanthanpettai	22.12.2024	Nambiyar Nagar and Aryanatutheru	30.12.2024	Keechankuppam Kallar and Nagore	31.12.2024
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Keechankuppam Kallar and Nagore	31.12.2024							
7	Mayiladuthurai	<ul style="list-style-type: none"> <li>Awareness program conducted on the Sea Turtle conservation and protection on 24.01.2025</li> </ul>						

SI.No	ADF office	Actions Taken				
		<ul style="list-style-type: none"> <li>• TED trail run conducted on 24.01.2025 along with MPEDA and CIFT.</li> <li>• Joint Patrolling is being conducted on regular basis along with line departments.</li> </ul>				
8	Thanjavur	<ul style="list-style-type: none"> <li>• Awareness program conducted on Thanjavur on the Sea Turtle conservation and protection on 24.01.2025</li> <li>• Joint Patrolling is being conducted on regular basis along with line departments.</li> </ul>				
9	Thiruvarur	<ul style="list-style-type: none"> <li>• Awareness program conducted on the Sea Turtle conservation and protection on 25.01.2025</li> <li>• Joint Patrolling is being conducted on regular basis along with line departments.</li> </ul>				
10	Ramanathapuram (North)	<ul style="list-style-type: none"> <li>• Awareness program conducted on Thondi Village on the Sea Turtle conservation and protection on 25.01.2025.</li> <li>• Joint Patrolling is being conducted on regular basis along with line departments.</li> </ul>				
11	Ramanathapuram (South)	<ul style="list-style-type: none"> <li>• Awareness program conducted on Mookiyoor Village on the Sea Turtle conservation and protection on 29.01.2025.</li> <li>• Awareness program is proposed to be conducted on following schedule <table border="1" data-bbox="748 1386 1315 1532"> <tbody> <tr> <td data-bbox="748 1386 952 1458">Ervadi</td> <td data-bbox="952 1386 1315 1458">31.01.2025</td> </tr> <tr> <td data-bbox="748 1458 952 1532">Kilakkarai</td> <td data-bbox="952 1458 1315 1532">01.02.2025</td> </tr> </tbody> </table> </li> </ul>	Ervadi	31.01.2025	Kilakkarai	01.02.2025
Ervadi	31.01.2025					
Kilakkarai	01.02.2025					
12	Mandapam	<ul style="list-style-type: none"> <li>• Awareness program conducted on 27.01.2025</li> <li>• Joint Patrolling is planned to be conducted on regular basis.</li> </ul>				
13	Rameshwaram	<ul style="list-style-type: none"> <li>• Awareness program conducted on 27.01.2025</li> <li>• Joint Patrolling is being conducted on regular basis along with line departments.</li> </ul>				

Sl.No	ADF office	Actions Taken				
14	Thoothukudi (FHM)	<ul style="list-style-type: none"> <li>Awareness program conducted on Kombuthurai, Alanthalai, Amalinagar on 29.01.2025</li> <li>Awareness program is planned to be conducted on following schedule <table border="1"> <tr> <td>Periyasamayapuram</td> <td>30.01.2025</td> </tr> <tr> <td>Manapad, Kulasekarapatinam, Periyathalai</td> <td>01.02.2025</td> </tr> </table> </li> </ul>	Periyasamayapuram	30.01.2025	Manapad, Kulasekarapatinam, Periyathalai	01.02.2025
Periyasamayapuram	30.01.2025					
Manapad, Kulasekarapatinam, Periyathalai	01.02.2025					
15	Radhapuram	<ul style="list-style-type: none"> <li>Awareness program is being conducted on 7 fishing village by department officials.</li> </ul>				
16	Kanyakumari	<ul style="list-style-type: none"> <li>Awareness program has been conducted in Thengapattinam and colachel on 28 and 29.01.2025 respectively.</li> </ul>				

As per the recommendation and instructions during the CS meeting on 21.01.2025 in order to comply the G.O.Ms.No.186, Animal Husbandry, Dairying and Fisheries (Fs-4) Department, dated 30.09.2015 and to enforce the Sub-rule-5 of Rule-17 of Tamil Nadu Marine Fishing Regulation Rules, 2020; it has been instructed to the authorized officer of this department to strictly enforce the TED installation and to penalize the violators. However the status on the installation of TED in trawl boats is humbly submitted as follows.

In 2016, this Department along with Forest Department under the guidance of Central Institute of Fisheries Technology (CIFT), had conducted a series of fishing trials with Trawl nets fitted with TED in Tamil Nadu. During these trials, it was observed that along with turtle, bigger size high value commercially important fishes (>20% in terms of quantity in total catch) were also escaped through TED. As a result, the fishermen showed stiff resistance to install TED. Also, the design of TED varies with types and size of gears and crafts and depth of its operation. Therefore TED design which is successful in other countries (USA) is not for India. Even in United States, it took two decades to finalise the design for higher efficiency as on date. Turtle Excluder Device (TED) design standardisation is still under research in India since

2016. CIFT and MPEDA are the organisations working on it as on date in India, there is no approved design of TED readily available in the market to enforce TED in Trawlers.

In this regard, it is submitted that Marine product export development Agency (MPEDA) conducted National level Stakeholder Workshop on Development of Turtle Excluder Device (TED) in India at Chennai on 25.01.2024. During the Workshop, MPEDA/CIFT explained to the stakeholders about the modification of existing TED as per the US National Oceanic and Atmospheric Administration (NOAA) specification and performance of the TED in the onboard trials conducted in Kochi, India. The trial of this improved design TED is under progress in Mayiladuthurai. The cost of the marine grade aluminium (TED designed by CIFT & NOAA is Rs 25,000 to 30,000, which is also under pilot scale production by CIFT & Matsyafed, Kochi.

Under these circumstances, due to non availability of TED devices, unproven results and efficacy of TED in trophic multi species trawl fishing methods in Indian waters, it is not feasible to enforce fitment of TED by all fishermen in their trawlers immediately till a standard design of TED is finalised and approved by the appropriate agency.

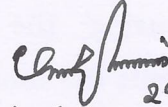
In addition to this, the mechanised fishing boats, fishing within five nautical miles are being monitored through NABHMITRA web portal on daily basis and if any violations are observed the same is communicated to the concerned authorised officer to take necessary action.

Further, as per the recommendations of the CS during the meeting on 21.01.2025 proposal has been sent to Government to permit department to allow the authorised officers to designate officer not below the rank of Sub Inspector of Fisheries from Coastal Security Group (CSG), Indian Coast guard, Marine Enforcement Wing under relevant provisions of TNMFR Act 1983 to exercise the powers of Inspecting officers to enter, search, seize, any fishing vessel, as may be specified in the TNMFR Act 1983 and submit inspecting

note to Authorised officer/Assistant Director of fisheries for necessary further action as per TNMFR Act 1983.

DATE : 29.01.2025

Sd/-Shunchongam Jatak Chiru  
Principal Secretary/Commissioner,  
Fisheries and Fishermen Welfare (FAC)

  
29/01/2025

for Principal Secretary/Commissioner,  
Fisheries and Fishermen Welfare (FAC)

  
29/1/25



**Environment, Climate Change  
and Forests (FR.5) Department,  
Secretariat, Chennai-9.**  
**Phone:- 044-25671511**  
**E-mail:-eccfd@tn.gov.in**

**Letter No.108/FR.5/2025 - 4, Dated 27.01.2025**

**From**

Dr. P. Senthilkumar, I.A.S.,  
Principal Secretary to Government.

**To**

The Additional Chief Secretary to Government,  
Rural Development and Panchayat Raj Department,  
Secretariat, Chennai – 9 (w.e).

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The Principal Secretary to Government,  
Animal Husbandry, Dairying, Fisheries and Fishermen  
Welfare Department, Chennai – 9.(w.e)

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The Principal Secretary to Government,  
Municipal Administration and Water Supply Department,  
Secretariat, Chennai – 9 (w.e)

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The Commissioner,  
Greater Chennai Corporation,  
Chennai – 2 (w.e.)

-----  
The Director,  
Commissioner of Fisheries and Fishermen Welfare,  
Chennai -35 (w.e).

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The Inspector General,  
Coast Guard, Chennai (w.e).

-----  
The Principal Chief Conservator of Forests,  
(Head of Forest Force), Chennai – 32 (w.e).

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The Principal Chief Conservator of Forests and Director,  
Advanced Institute for Wildlife Conservation (AIWC),  
Vandalur, Chennai-48 (w.e).

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The Principal Chief Conservator of Forests and  
Chief Wildlife Warden, Chennai – 32 (w.e).

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The Chief Mission Director,  
Tamil Nadu Coastal Restoration Mission,  
O/o. the Principal Chief Conservator of Forests,  
Chennai – 32 (w.e).

The Additional Director General of Police,  
Coastal Security Group of Tamil Nadu  
Chennai – 600 004 (w.e).

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The Chairperson,  
Tamil Nadu Pollution Control Board,  
Chennai – 32 (w.e).

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The Wildlife Warden,  
Chennai (w.e).

**Sir/Madam,**

Sub: Forest- Wildlife – Conservation of Sea Turtle  
– Meeting held on 21.01.2025 under the  
Chairmanship of Chief Secretary to  
Government at Chief Secretary's Conference  
Hall, Secretariat, Chennai – Minutes  
Communicated - Regarding.  
Ref: Government letter No.108/FR5/2024-1, dated  
20.01.2025.

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In continuation of Government letter cited, I am directed to enclose a copy of the approved minutes of the meeting of the Conservation of Sea Turtle under the Chairmanship of Chief Secretary to Government held on 21.01.2025 for necessary action. The action taken report on the minutes may be sent to Government early.

Yours faithfully,

*P. S. Ch*  
27.1.25

for Principal Secretary to Government

**Copy to:-**

The Senior Principal Private Secretary to Chief Secretary to  
Government, Chennai – 9.

The Private Secretary to Principal Secretary to Government,  
Environment, Climate Change and Forests Department,  
Chennai – 9.

**Minutes of meeting held on 21.01.2025 under the Chairmanship of Chief Secretary regarding Conservation of Sea Turtle**

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In the meeting chaired by the Chief Secretary to Government held on 21.01.2025, after detailed deliberations the following actionable points were arrived at to reduce mortality of Sea Turtles during the turtle breeding season.

The list of participants is annexed.

- To strictly implement the orders issued in the G.O.(Ms)No.186, Animal Husbandry, Dairying and Fisheries (FS-4) Department, dated 30.09.2015 as no trawl net shall be used without fixing Turtle Excluder Device (TED) before the Cod end, during November to April.

**Action: Fisheries Department**

- To enforce the orders issued in the G.O.(Ms)No.146, Animal Husbandry, Dairying and Fisheries (FS-3) Department, dated 27.09.2016 to prohibit the fishing by mechanized fishing vessels, motorized country crafts and those using mechanized fishing techniques in a radius of 5 (five) nautical miles around potential nesting and breeding sites of sea turtles identified by Central Marine Fisheries Research Institute and Department of Forest in the coastal areas of Chennai, Kanchipuram, Cuddalore, Villupuram, Nagapattinam, Ramanathapuram, Thoothukudi and Kanniyakumari Districts of Tamil Nadu during the turtle breeding season.

**Action: Fisheries Department**

- Penal action to be taken by Authorized Officers / Adjudicating Officers of Fisheries Department under Tamil Nadu Marine Fishing Regulation Act, 1983 for violations of above Government Orders.

**Action: Fisheries Department**

- Commissioner, Fisheries may authorize officials of Coastal Security Group (Sub-inspector of Police and above) and Marine Enforcement Wing to initiate penal action against the violators of Tamil Nadu Marine Fishing Regulation Act and Rules.

**Action: Fisheries Department/CSG & MEW**

- Amendment may be issued to Tamil Nadu Marine Fishing Regulation Act and Rules to make switching off of GPS transponders in fishing boats as an offence.

**Action: Fisheries Department**

- All fishing boats in 5 nautical miles may be monitored through GPS technology to analyze their movement and amount of time spent along the coast. Suitable technical platform may be developed for that.

**Action: Fisheries Department /SP, CSG**

- Diesel subsidy and other allowances given by Government should not be extended to fishermen who are not fitting TED during the period of November to April.

**Action: Fisheries Department**

- To implement the orders issued in the G.O.(Ms)No.30, Animal Husbandry, Dairying and Fisheries (FS-3) Department, dated 09.02.2017. The Task Force constituted by the above G.O should meet once in a week during the breeding season of sea turtles. If required more departments may be included in the task force.

**Action: PCCF & CWW**

- Task force should arrange for joint inspection including representatives of all departments concerned.

**Action: PCCF & CWW**

- Task force should share information on hotspots of turtle activity to Coast Guard. Coast Guard will monitor activities of fishing boats in the hotspots and send periodical reports to task force.

**Action: PCCF & CWW/CMFRI/Coast Guard**

- Capacity building of departments of Fisheries and Animal Husbandry, Forests and Research institutions like AIWC and TANUVAS should be done to equip them to deal with turtle mortality.

**Action: Fisheries / Forest Department**

- Forest Department should ensure daily night patrol in turtle nesting areas and whenever increase in mortality is observed, it should be immediately reported.

**Action: Forest Department**

- Forest Department to take action to involve more turtle volunteers to support conservation initiatives.

**Action: Forest Department**

- To instruct the local bodies to control the movement of stray dogs in and around the nesting areas during turtle nesting season.

**Action: GCC / RD&PR / MA&WS Department**

- Local bodies may take action to regulate unlicensed local eateries along beaches and ensure proper waste disposal.

**Action: GCC / RD&PR / MA&WS Department**

- Enforce Ray fish net ban during the period of November to April.

**Action: Fisheries Department**

- To instruct the Local bodies to strictly implement ban of beach front lighting during turtle nesting period as ordered in G.O.(Ms)No.35, Municipal Administration and Water Supply (MC-1) Department, dated 31.01.2011.

**Action: MA&WS / GCC /RD&PR Department**

- Forest Department should increase no of post mortem carried out in cases of turtle mortality (minimum 50%) so that some scientific conclusion on cause of death may be arrived at.

**Action: Forest Department**

- Fisheries department may examine the feasibility of taking up a pilot study on efficiency of nets fitted with specially designed LED lights to scare off turtles.  
**Action: Fisheries Department**
- Long term telemetry studies on movement of turtles along Tamil Nadu Coast may be undertaken to collect proper scientific data on turtle movement and local migration.  
**Action: AIWC**

The Chief Secretary to Government instructed all departments concerned to take follow-up action immediately.

**N. MURUGANANDAM,  
CHIEF SECRETARY TO GOVERNMENT**

**// True Copy //**

*P. Selvi*  
27.1.25  
**SECTION OFFICER**  
*27/1/25*

**List of Participant's**

1. Thiru. Satyabrata Sahoo, I.A.S.,  
Principal Secretary to Government,  
Animal Husbandry, Dairying, Fisheries and Fishermen Welfare Department
2. Dr. P. Senthilkumar, I.A.S.,  
Principal Secretary to Government,  
Environment, Climate Change and Forests Department.
3. Thiru. Srinivas R.Reddy, I.F.S.,  
Principal Chief Conservator of Forests & Head of Forest Force.
4. Thiru. A. Udhayan, I.F.S.,  
Principal Chief Conservator of Forests and Director,  
Advanced Institute of Wildlife Conservation, Vandalur.
5. Thiru. Rakesh Kumar Dogra, I.F.S.,  
Principal Chief Conservator of Forests & Chief Wildlife Warden.
6. Thiru.Anurag Mishra, I.F.S.,  
Special Secretary (Environment, Climate Change)
7. Thiru. Deepak S. Bilgi, I.F.S.,  
Chief Mission Director, TNSHORE.
8. Thiru. Ritto Cyriac, I.F.S.,  
Special Secretary (Forests)
9. Thiru.Manish Meena, I.F.S.,  
Wildlife Warden, Chennai.
10. Thiru. V.A. Saravanan,  
District Forest Officer, Chennai.
11. Thiru. Sanjay Kumar,  
Additional Director General of Police,  
Coastal Security Group.
12. Thiru.S. Prem kumar, Commandant,  
Regional Head Quarters (East).
13. Thiru. I. Inbarajan,  
Deputy Commandant, DHQ-5.
14. Thiru. R. Kannan, Member Secretary,  
Tamil Nadu Pollution Control Board.

15. Ms. Sharmila,  
Joint Director (Regional), Chennai.
16. Thiru. Julius Edward,  
Deputy Director (marine).
17. Thiru D.Kumar,  
Superintendent of Police,  
Marine Enforcement Wing.

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**Draft Revised****STANDARD OPERATING PROCEDURE (SOP)**  
**FOR PROTECTION AND CONSERVATION OF SEA TURTLES**

## Introduction

Sea Turtles are some of the oldest known reptile groups on Earth, having lived for over 200 million years. There are five species of sea turtles reported in the waters of India's coastline, viz., (1) Back Logger Head Turtle, Olive (*Lepidochelys olivacea*), (2) green turtle (*Chelonia mydas*), (3) Hanksbill (*Eretmochelys imbricate*), (4) Leatherback (*Dermochelys coriacea*) and (5) Loggerhead turtle (*Caretta caretta*). Of these, only the first four turtles nest on Indian beaches, while the Loggerhead turtle swims through the Arabian Sea en-route to the Arabian beach to nest.

All the above mentioned Sea turtles are protected under the International Conventions such as Convention on International Trade in Endangered Species of Wild Flora and Fauna (CITES, 1973) and the Bonn Convention on Migratory Species (CMS 1979) to which India is a signatory. Sea turtles are listed as 'critically endangered', 'endangered' or 'threatened' on the World Conservation Union (IUCN) Red list.

In India, fishing and trading in sea turtle products are banned from 1977 as the sea turtles were protected under Schedule-I Part-II of the Indian Wildlife (Protection) Act, 1972 (Central Act No.53 of 1972) as per the amendments made to the schedule in September 1977, thereby giving them the highest degree of protection.

**Mortality of Sea Turtles**

Even though sea turtles have long life spans, their mortality rates have been increased due to various environmental changes and anthropogenic activities along the coast, they became endangered. Major threats to sea turtles include non-fisheries related causes such as nesting habitat destruction and egg harvesting. Various studies across the globe have indicated a globally declining trend in Sea Turtle populations due to the following major hazards or threats to sea turtles.

- Non-fisheries related hazards
  - Egg predation by feral animals such as pigs or foxes
  - Beach habitat destruction including beach construction and development

- Foraging habitat destruction
- Direct take or hunting, or boat strikes
- Coastal fisheries related hazards
  - Trawl net
  - Gillnet

Capture and mortality of most of the Sea turtles during trawling/gill netting is only due to incidental and not intentional. The Sea turtles which are on migration for breeding and nesting incidentally get caught in the fishing gears of the fishermen. Furthermore, many fishing activities do not individually have much impact, but collectively with all other impacts contribute to a significant overall challenge to the recovery of sea turtle stock.

### **Standard Operating Procedure (SOP)**

Sea turtles, world over face several anthropogenic threats such as dumping of debris into coastal waters, habitat loss, pollution, unsustainable development in the coastal areas, fishing activities and climate change. Reliable estimation of sea turtle abundance that would be suitable for stock assessment and conservation management planning depends on sampling the entire demographic structure of a population resident in the foraging grounds. Yet such foraging ground abundance estimates are available only for a few species of Sea Turtles.

In the absence of such vital data, Management measures that may be appropriate for reduction or even elimination of fishery-related mortality will only be effective if coupled with protection of nesting population. A piecemeal approach, concentrating on a single component, such as nesting site protection or fisheries bycatch reduction, simply is not enough.

Sea turtle conservation and management programmes should recognize the important contributions of fisheries to employment, income and food security and should be effectively integrated into fisheries management programmes. The development, design and implementation of turtle conservation and management measures should take into account the socio-economic aspects of fishers and fishing communities. These are dependent on marine fishery resources for their life and livelihood and balance should be sought between conservation and management of turtles on the one hand, and sustainable livelihood and poverty alleviation, on the other.

With all the above being taken into consideration, an all inclusive Standard Operating Procedure (SOP) for protection and conservation of Sea Turtles is detailed below.

#### 1. Management Measures for protection and conservation of Sea Turtle

The following aspects shall be taken into account during the design and implementation of any management measures for protection and conservation of Sea Turtle:

- Sea turtle conservation programmes should recognize the rights and responsibilities of fishers under international, national and local legal instruments, especially under the 1982 United Nation Convention on the Law of the Sea, the 1995 United Nation Fish Stocks Agreement, and the 1995 Food and Agriculture Organization (FAO) Code of Conduct for Responsible Fisheries.
- Sea turtle conservation and management programmes should encourage active participation of fishers, fishing communities and other stakeholders in sea turtle conservation programmes, including nesting beach cleaning and protection, fisheries programmes, and should also build upon the traditional ecological knowledge of local communities.
- Efforts should be made to promote sustainable fishing gear and practices, compatible with turtle conservation and management objectives, and to minimize dislocation of fishing communities and disruption of their fishing activities.
- There should be training and awareness-building programmes for fishers to better tackle the problems of sea turtle mortality arising from fishing activities, especially through better training in effective use of fishing gear that reduces marine turtle mortality. Sea Turtle conservation awareness campaign will be conducted at all Schools at the coastal districts.

Management measures for protection and conservation of Sea Turtle principally involves:-

- a) Coastal Fisheries Management Measures to be implemented by the State Fisheries Department.

- b) Nest Monitoring and Stock Protection Program to be implemented by the State Forest Department
- c) Beachfront Lighting regulation and Beachfront Obstruction removal programme to be implemented by the local administration.
- d) Research and Development Programme to be suggested and implemented by Central Marine fisheries Research Institute, Chennai.**
- a) Coastal Fisheries Management Measures during Sea Turtle Nesting/ Breeding Period
- **Turtle Excluding Device (TED) shall be fixed in all trawl nets to help escape of sea turtles from trawl nets during the specified period as may be prescribed by the authorized officers.**
  - **On the directions of the Hon'ble High Court, an expert Committee to be formed to suggest the suitable design of TED. Upon finalizing the suitable design, a road map and time line for installing the TEDs in trawl nets will be drawn.**
  - **Monitoring and enforcement of the use of Turtle Excluding Device will be jointly carried out by Fisheries, Forest, Coastal Security Group and Indian coast Guard in their respective jurisdiction. A detailed daily joint patrolling plan to be drawn by Coastal Security Group involving Fisheries, Forest and Indian Coast Guard. The Concerned regional officers shall depute officers for joint patrolling as per the plan.**
  - **Penal action will be taken under Tamil Nadu Marine Fishing Regulation Act, 1983 (Tamil Nadu Act 8 of 1983) for violations by the Authorized officers / Adjudicating Officers of Fisheries Department.**
  - **Prohibiting the fishing by mechanized fishing vessels, motorized country crafts and those using mechanized fishing techniques in a radius of 5 nautical miles around the potential nesting and breeding sites of sea turtles (i.e. January to April of every year) identified by Central Marine Fisheries Research Institute (CMFRI) and Department of Forest in the coastal areas of Chennai, Kanchipuram, Cuddalore, Villupuram,**

**Nagapattinam, Ramanathapuram, Thoothukudi and Kanniyakumari Districts of Tamil Nadu” except motorized country crafts having engine capacity 10 horse power and below subject to the condition that ray fish nets shall not be used for fishing during the turtle breeding and nesting season.**

- Prominent hoardings in Tamil with clear, unambiguous images and text about the protected status of turtles and penalties for violation of Tamil Nadu Marine Fishing Regulation Act should be erected in prominent places in the fishing villages during Sea Turtle nesting/ breeding period.
- **The designated agencies viz., Indian Coast Guard, Coastal Security Group, Forest Department and Fisheries Department shall patrol in their respective jurisdiction. However if any need arises for a joint patrolling, Coastal Security Group shall be the nodal agency for coordinating and ensuring the joint patrolling. The patrolling shall be undertaken with a well planned schedule of patrolling. Each agency shall have a written documentation on patrolling.**
- **Penal action on the offender shall be dealt under Tamil Nadu Marine Fishing Regulation Act, 1983 Tamil Nadu Act 8 of 1983 / Wildlife (Protection) Act, 1972 (Central Act No. 53 of 1972) by the Authorized officers concerned, as the case may be.**
- During periodic ‘Village Vigilance Committee’ meeting with local fishers, awareness shall be created on conservation of sea turtles and to use Turtle Excluding Device in their bottom trawls and the importance of releasing the live Turtles if any found on their net.
- All the stake holders including fishermen are to be provided with adequate training and awareness in hauling, handling and release of turtles to minimize incidental mortality of turtles.

This task shall be undertaken by the Fisheries Department in coordination with Indian Coast Guard and Coastal Security Group.

b) Nest Monitoring and Stock Protection Measures during Sea Turtle Nesting/ Breeding Period

- The biological goal of Nest Monitoring and Stock protection Programme is to increase the productivity of our beaches for sea turtle nesting.
- The nesting beaches all along the coast shall be identified and communicated to all concerned of this standard operating procedure for effective implementation of the standard operating procedure.
- Identified nesting beaches shall be cleaned involving the local fishers and others in advance of the turtle breeding season.
- Identified nesting beaches shall be protected from jolly rides and other forms of destruction and necessary caution boards shall be displayed to this effect.
- Structures / constructions that are obstruction on the nesting beaches shall be informed to District Coastal Zone Management Authority and to the Chennai Corporation as the case may be for necessary action.
- This requires monitoring of state's shoreline to record detailed nesting data that can be analyzed and used in management decisions.

**A detailed procedure to be followed in turtle nest monitoring and stock protection is as follows:-**

- **Olive (Back Logger Head Turtle (*Lepidochelys Olivacea*) is listed under Schedule I part 2 (13) of the Wildlife (Protection) Act,1972. Under Sub-section (36) of section 2 of the said Central Act "Wild animal" means any animal found Wild in nature and includes any animal specified in Schedules I to IV or Schedule V and found wild in nature. Any person committing an offence in any parts of Tamil Nadu against the Wild Animal shall be prosecuted under section 50 of the Wildlife (Protection) Act, 1972.**
- **In all the coastal district of the Tamil Nadu, during the nesting season established protection standard protocol shall**

be followed for patrolling by Special Protection team comprising of Range Officer, Forester, Forest Guard and between 15 to 25 Protection watcher / Anti poaching watcher in each coastal districts. In Gulf of Mannar Marine National Park Anti poaching watchers engaged for protection of Marine Life. Joint Patrolling by coastal security Group and Forest Department staff on daily basis during nesting season shall be done.

- The patrolling staff during nesting season shall be engaged in identification and protection of nesting site against any kind of threats, records mortality, create awareness among the local people, collection of eggs for the hatcheries, on the beaches where maximum disturbances are noticed etc. An average 1-2 hatchery shall be established in each coastal district.
- Non-governmental Organizations and their volunteers who are experts in the field of sea turtle conservation and management shall be engaged to assist Forest Department Protection staff in patrolling and protection of sea turtle.
- Tamil Nadu Forest Department will record mortality detected on the beaches with the assistance of Non-governmental Organizations and their volunteers every year during nesting season.

This task shall be undertaken by the Forest Department along with other such activities of Turtle stock enhancement.

c) Beachfront Lighting Regulation Measures During Sea Turtle Nesting/ Breeding Period

Beachfront lighting based on scientific documentation that such lighting disorients turtle hatchlings and consequently causes mortality. These disoriented hatchlings crawl toward artificial lighting instead of the ocean, and are subsequently eaten by predators, such as stray cats, or they die from dehydration. In addition, adult turtles will frequently avoid nesting on lighted beaches. Hence, during the sea turtle breeding season, regulation

of Beachfront lighting shall be regulated by the local administration as follows:-

- Lights illuminating buildings or associated grounds for decorative or recreational purposes shall be shielded or screened such that they are not visible from the beach, or turned off after 9:00pm during the Turtle Breeding period each year.
- Lights illuminating any areas seaward shall be turned off after 9:00pm during the Turtle Breeding period each year.
- Window treatments in windows facing the ocean of single and multistory structures are required so that interior lights do not illuminate the beach.

This task shall be undertaken by the local administration concerned and necessary notice to all concerned shall be issued by the authorities one month in advance of the commencement the Turtle breeding season.

d) Research and Development Measures During Sea Turtle Nesting/ Breeding Period

The Central Marine Fisheries Research Institute in collaboration with other fisheries research institutes to take up studies to ascertain cause of death, measures to reduce mortality, enhance breeding and nesting, etc.

2. Implementation and Coordination of Management Measures

The respective Heads of the Departments concerned with this standard operating procedure shall coordinate and monitor sea turtle conservation measures to be implemented by the respective department in the state, with a clear mandate to reduce turtle mortalities. For effective implementation of conservation measures, the Commissioner of Fisheries and the Chief Conservator of Forest shall jointly convene coordination meeting of all concerned before the commencement of the turtle breeding and nesting season for formulating policy frame work, legal frame work and institutional frame work for the entire state.

**The coordination meeting shall be conducted preferably in the month of August every year of the commencement of the Turtle breeding season.**

**The progress shall be reviewed by the District Collectors every month and the State level committees every two months till the end of the Turtle breeding season”.**

The District Collector of coastal districts shall implement the sea turtle conservation measures at field level. The District Collector shall convene the meeting of all the stakeholders (i.e) Superintendent of Police, District Forest Officer/ Wild Life Warden (Convener), Assistant Director of Fisheries, District Environmental Engineer, Deputy Superintendent of Police, Coastal Security Group, Representative, Indian Coast Guard, One member from NGO to be nominated by the Regional Joint Director of Fisheries / Deputy Director of Fisheries, One member from Mechanized Fishing boat sector to be nominated by the Regional Joint Director of Fisheries / Deputy Director of Fisheries, One member from Motorized and Traditional fishing craft sector to be nominated by the Regional Joint Director of Fisheries / Deputy Director of Fisheries from one month in advance of the commencement of the Turtle breeding season and continue the review every month till the end of the Turtle breeding season.

**The Nodal Task force is headed by the Principal Chief Conservator of Forests, Chennai. The Nodal task force coordination committee will consist of the representative from the following agencies:-**

- (i) Department of Fisheries;**
- (ii) Department of Environment;**
- (iii) Department of Forest;**
- (iv) Indian Coast Guard;**
- (v) Coastal Security Group;**
- (vi) Representative from mechanized fishing boat owners association;**
- (vii) Representative from motorized country boat owners association;**  
(To be nominated by the Joint Director of Fisheries  
(Regional) Chennai)
- (viii) Non-governmental Organization representative; and**
- (ix) Representative from another NGO dealing in turtle conservation.**

**The Nodal task force will conduct review meetings on regular interval basis for a period of five years and monitor the progress of implementation of Standard Operating Procedure. The Nodal Task force**

shall recommend to Government for changes or alterations if any to be made in the Standard Operating Procedure for effective implementation of conservation measures. An independent Auditor duly appointed by the Government shall conduct an independent audit on the steps taken and effectiveness of the Standard Operating Procedure on the conservation and protection of sea turtles

GAGANDEEP SINGH BEDI  
Principal Secretary to Government

//True Copy//

21/12/17  
Section Officer  
21/12/17

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