



ABSTRACT

Forests – Wildlife – Scheme for implementation of “Project Dolphin” under Integrated Development of Wildlife Habitats in Tamil Nadu during the year 2023-2024 – Administrative Sanction – Release of 1st Instalment - Orders - issued.

Environment, Climate Change and Forests (FR.5) Department

G.O.(D)No.209

Dated: 06.11.2023

சோபகிருது வருடம், ஐப்பசி 20

திருவள்ளூர் ஆண்டு - 2054

Read:

1. Scientist-D, Government of India, Ministry of Environment, Forests & Climate Change, New Delhi F. No.34/7/2013-WL, dated:09.10.2023.
2. From the Principal Chief Conservator of Forests and Chief Wildlife Warden letter No: WL3/5150/ 2022, dated: 12.10.2023.

ORDER

INTRODUCTION

Cetaceans are an aquatic group of mammals commonly known as whales, dolphins and porpoises. About 30 Cetacean Species are found in Indian Waters. Cetacean species play critical roles in ecosystem functioning, at the same time these animals are extremely vulnerable to anthropogenic pressures and sudden environmental changes which are adversely impacting their survival. Risso's Dolphins, Spinner Dolphins, Bottlenose Dolphins, pilot whales and some common dolphins have been often spotted in Ramanathapuram and Thoothukudi Districts.

Coastal species like the Indian Ocean humpback dolphin (*Sousa plumbea*), the Indo-Pacific finless porpoise (*Neophocaena phocaenoides*), Irrawaddy dolphins (*Orcaella brevirostris*), along with at least three species of baleen whales; blue (*Balaenoptera musculus*), Bryde's (*Balaenoptera edeni*) and humpback whales (*Megaptera novaeangliae*) are found in areas of high overlap with anthropogenic activity and are some of the most vulnerable cetaceans along the Indian coast. The Irrawaddy dolphins in Chilika have already been classified as vulnerable under the IUCN red list.

Recent IUCN assessment has placed Indian Ocean humpback dolphins under Endangered and Indo-Pacific finless porpoises under Vulnerable category. There is

therefore a critical need for monitoring the population of these species and taking immediate measures for their conservation.

Considering increasing anthropogenic pressure in the marine environment and the overarching effects of global climate change, there is a pressing need to gather long-term systematic information on population trends, distribution, and space use of cetaceans along Indian waters for their effective conservation.

II. RICH BIODIVERSITY OF THE GULF OF MANNAR

In Tamil Nadu, the Gulf of Mannar in the southeast coast of India extends from Rameshwaram in the North to Kanyakumari in the South. It has a chain of 21 uninhabited islands stretching from Mandapam to Tuticorin to a distance of 140 km along the coast. The islands occur at an average distance of 8-10 km from the mainland. The Gulf of Mannar Biosphere Reserve was notified in 1989 by Government of India covering 10,500 Sq. km area between Rameshwaram and Kanyakumari. The Government of Tamil Nadu in 1986 declared the 21 islands and surrounding shallow waters as Marine National Park for the purpose of protecting marine wildlife and its environment.

The Gulf of Mannar is considered as "Biologists' paradise" with over 4223 species of flora and fauna. The Gulf of Mannar is endowed with a rich variety of marine flora and fauna as it includes ecosystems like coral reefs, rocky shores, sandy beaches, mud flats, estuaries, mangrove forests, seaweed stretches and seagrass beds. These ecosystems support a wide variety of fauna and flora including rare chanks, shrimps, lobsters, pearl oysters, whales, dugongs, turtles, seahorses, sea snakes, sea cucumbers etc. The diverse nature of ecosystems in the Gulf of Mannar supports a wide variety of significant species including 117 species of corals, 14 species of seagrasses, 158 species of crustaceans, 856 species of molluscs, 1147 species of fin fishes, 153 species of echinoderms and 181 species of seaweeds apart from the seasonally migrating marine mammals like whales, dolphins, porpoises and turtles. The mangrove habitats in the Gulf of Mannar have 9 different species of vegetation supporting a variety of marine fauna including seabirds and sea snakes.

More than four types of dolphin species are found in Gulf of Mannar Biosphere Reserve (GoMBR) namely *Steno bredanensis*, *Stenella attenuate*, *Stenella longirostris*, *Delphinus delphis*. Gulf of Mannar Biosphere Reserve is an area of high productivity with rich marine biodiversity including marine mammals such as dugongs etc (Choudhary and Sivakumar, 2009). This region is holding an isolated but an important dugong population of south Asia (Marsh, 1989; Marsh et al., 2002; Ilangakoon, et al., 2007; Pande et al., 2010; Sivakumar and Nair, 2013), along with few other mammalian species of dolphins, porpoises and whales. Some Surveys have suggested that at least three species of baleen whales, killer whales, pilot whales, small delphinids and dugongs use this area.

III. CHALLENGES

Dolphins around the world face various natural and human-induced threats which include hunting, entanglement in fishing nets, overfishing, climate change, ship strikes,

tourism activities, toxic contamination, noise pollution, oil and gas development and habitat degradation. Of these threats, overfishing, entanglement in fishing nets, climate change, boat strikes and habitat degradation affect the survival of dolphins. Global trade of different species of dolphins is restricted under Appendix I and II of CITES (Convention on International Trade in Endangered Species of Wild Fauna and Flora). Similarly, many species of dolphins have also been listed and protected under IUCN (International Union for Conservation Network) red list of threatened species.

In India, all the aquatic mammals under the order Cetacea have been put under Schedule I of Wildlife (Protection) Act, 1972, making their sale, purchase, or any other form of utilization of the species, or their parts and derivatives, illegal and punishable.

IV. PROJECT DOLPHIN DETAILS

The recent stranding incidents reveal that the Dolphins are frequently found along the Gulf of Mannar coast of Tamil Nadu. Therefore, the conservation of dolphins and their aquatic habitat through use of modern technology by engaging with fishermen and other ocean dependent population is proposed. This will be helpful in improving the population of Dolphin species and protection of their habitat at the same time improving livelihood of the local communities. Under the project a number of activities will be undertaken to handle challenges for saving critically endangered species.

- 1) Strengthening of protection activities through better patrolling anti-poaching activities and strengthening of the surveillance and patrolling teams with modern equipment and technology.
- 2) Rescue and rehabilitation activities through strengthening of veterinary services, patrolling and training etc.
- 3) Dolphin habitat improvement through restoration of coastal eco-system like mangroves, corals, sea grass etc.
- 4) Removal of ghost nets and reduction of pollution in coastal areas.
- 5) Enhancing awareness through celebration of "National Dolphin Day" with the involvement of local community and educational Institutions including launch of 'Dolphin Scholarship'.
- 6) Encouragement of local community through incentives and awards.
- 7) Launch of Dolphin scholarship programme and enhance understanding of their habitats etc. promoting eco-tourism and creating livelihood opportunities as a substitute to the conventional fishing practices.
- 8) Symposium, seminars, meetings etc. for better learning and understanding of this endangered species.

V. EXPECTED OUTCOMES OF THE PROPOSED INTERVENTIONS

- Better protection of Dolphins
- Regeneration of Dolphin habitat
- Better diversity due to sea grass and coral restoration
- Reduction in illegal activities.
- Reduction in the offences, Protection and Enforcement strengthened.
- Increased awareness, Co-operation and good will of the fishermen in protection and conservation of rich biodiversity of marine flora and fauna ensured.
- Restoration of degraded habitats and enhancement of endangered species recovery and its replenishment.
- Better fish production due to better and healthy marine ecosystem

Details of works proposed under Project Dolphin during 2023-2024 are as below:-

Sl. No.	Item of work	Quantity & Rate (Rs. in Lakhs)	Amount (Rs. in Lakhs)
	Non-Recurring Activities		
1	Purchase of Boats to Monitor Dolphin population	2 Nos. @ 30.00	60.00
2	Construction of Anti-poaching Towers at islands in National Park	2 Nos. @ 20	40.00
3	Purchase of Underwater drone monitoring for dolphin movement	1 No.	10.00
4	Procurement of SCUBA diving kits for monitoring Dolphin habitat.	3 Nos. @ 2.00	6.00
5	Construction of Dolphin observation tower at Kurusadai Island	1 No.	20.00
6	Interpretation centre for dolphin and other related bio-fauna	1 No.	20.00
7	Eco huts for tourists	5 Nos. @ 3.00	15.00
8	Semi permanent cloak room	1 No.	15.00
9	Ticket counter cum reception center (Semi permanent)	1 No.	8.00
10	Improvement in arches , name boards, logos, etc at Krusadai Island Eco tourism in Gulf of Mannar Marine National Park	1 No.	20.00
11	Dolphin Safari - Ferry Boats with accessories	1 No. @ 60.00	60.00
	Sub-Total		274.00

Sl. No.	Item of work	Quantity & Rate (Rs. in Lakhs)	Amount (Rs. in Lakhs)
	Non-Recurring Activities		
12	Maintenance of Anti-poaching Sheds	6 Nos. @ 2.00	12.00
13	Yearly maintenance of old boats and engines	6 Nos. @ 0.75	4.50
14	Prosecution of offenders and Legal support for defending court cases etc.	3 Nos. @ 1.00	3.00
15	Conducting Anti-poaching camps involving local fishermen	3 Range @ 0.60	1.80
16	Providing and maintaining Anti-poaching Materials and other Gadgets	LS	8.00
17	Engaging Dolphin Protection watchers for 12 months	6 Nos. @ 1.50	9.00
18	Engaging boatmen for 12 months	4 Nos. x 12 Months x 0.125	6.00
19	Providing ration to Dolphin Protection Watchers and boat drivers (10 Nos.)	10 Nos. @ 0.002 /p.m	4.80
20	Fuel for existing patrolling boats- @ 300 lit petrol / month /Range for 4 Ranges	14400 ltr @ Rs.100/-	14.40
21	Engaging one Marine biologist	1 No. x 12 Months x 0.330	3.93
22	Scuba Diving Training for field staffs	5 Nos. @ 0.40	2.00
23	Rescue, Rehabilitation and veterinary training to staffs (including honorarium, travel and local hospitality of National and International experts)	LS	3.20
24	Biodiversity conservation and enhancement	60 Ha. @ 0.40	24.00
25	Dolphin Habitat Improvement through restoration of coastal ecosystem such as Mangrove, etc	40 Ha. @ 0.40	16.00
26	Dolphin Habitat Improvement through Coral restoration	8 acre @ 20.00	160.00
27	Dolphin Habitat Improvement through sea grass restoration	5 acre @ 10.00	50.00
28	Ghost net removal	LS	20.00
29	Using pingers and other deterrent devices on pilot basis (purchasing and fixing)	20 Nos. @ 0.25	5.00

Sl. No.	Item of work	Quantity & Rate (Rs. in Lakhs)	Amount (Rs. in Lakhs)
30	Dolphin Scholarship Programme	LS	2.00
31	Conducting dolphin estimation	LS	10.00
32	Award for fishermen to incentive them to release the dolphin stranded in net and generate awareness	LS	2.00
33	Establishment of marine mammal Stranding and Conservation network for rescue and rehabilitation of entangled dolphin and other marine megafauna.	LS	3.00
34	Animal rescue and release operation along with related expenditure	LS	12.00
35	Celebrating 'National Dolphin Day' and Conducting awareness campaign at School, Colleges, Community, etc (Rs.50000 per event)	10 Nos. @ 0.50	5.00
36	Conducting Beach Clean Up drive to prevent entry of plastic pollution in the dolphin habitat(Rs. 50000/ clean up)	20 Nos. @ 0.50	10.00
37	Creation of awareness by conducting awareness camp for local fishermen and students in and around island - training for under water Eco system	6 No. @ 0.30	1.80
38	Erection of Caution Boards(GI Metal Boards) for creating awareness @ Islands	3 Nos. @ 0.75	2.25
39	Maintenance of signages ,old board @ islands	LS	3.00
40	Field dress for Eco tourism guide, boat drivers and watchers	25 Nos. @ 0.04	1.00
41	Documentation of the scheme works, Publication	LS	4.00
42	Dolphin interpretation centre with Board walk/Canopy walk	LS	38.00
43	Study on impact of coastal industrial activities including fisheries on dolphins.	2 Nos. @ 1.00	2.00
44	Research on basic ecology of dolphin (feeding ecology, behaviour ecology, conservation genetics, movement and ranging patters, acoustics).	2 Nos. @ 10.00	20.00
45	Promote pisciculture and oyster culture with native marine species.	5 Nos. @ 10.00	50.00
46	A study on impact of dolphin conservation on fisheries and socio-	LS	5.00

Sl. No.	Item of work	Quantity & Rate (Rs. in Lakhs)	Amount (Rs. in Lakhs)
	economic status of fishermen communities.		
47	Traveling to neighboring country (Officer level) to improve coordination of conservation of dolphins and their habitats.	10 Nos. @ 1.00	10.00
48	Conducting Joint patrolling, meeting with other department and coordination with other department.	10 Nos. @ 1.00	10.00
	Sub-Total		538.68
	Grand Total		812.68
	Central Share (60%)		487.608
	State Share (40%)		325.072
	1st installment (25%) (Central Share Rs.121.902 lakhs + State Share Rs.81.268 lakhs)		203.170

2. The Government of India, Ministry of Environment, Forests and Climate Change in the letter first read above, have communicated administrative/financial approval for **Rs.812.680 lakhs** for Project Dolphin - Integrated Development of Wildlife Habitats in Tamil Nadu for the year 2023-24. The total cost of the scheme will be shared on 60:40 basis by the Government of India and the State Government of Tamil Nadu as per the change in funding pattern.

3. In this letter second read above, the Principal Chief Conservator of Forests and Chief Wildlife Warden has requested the Government to issue orders for administrative sanction for 812.680 lakh and release a sum of Rs.203.170 lakh to implement scheme for Project Dolphin under the Integrated Development of Wildlife Habitats in Tamil Nadu for the year 2023-24.

4. The Government after careful examination accord administrative sanction for a sum of Rs.812.680 lakh [Central share Rs.487.608 lakh and State share 325.072 lakh] and release a sum of Rs.203.170 lakh (Rupees two crore three lakh and seventeen thousand only) as first installment [Central share Rs.121.902 lakh + State share Rs.81.268 lakh] for implementation of Project Dolphin under Integrated Development of Wildlife Habitats in Tamil Nadu during 2023-24.

5. The expenditure sanctioned in para 4 above shall be debited to the following head of account:-

General

a. Central Share Rs. 60,96,200/-

4406 – Capital outlay on Forestry and Wildlife – 02 Environmental Forestry and Wildlife - 110 Wildlife – Schemes Shared between State and Centre - UR Wildlife Sanctuary - 416 Major works – 01 Major Works

(DP Code 4406-02-110-UR- 41601)

b. State Share Rs. 40,63,400/-

4406 – Capital outlay on Forestry and Wildlife – 02 Environmental Forestry and Wildlife - 110 Wildlife – Schemes Shared between State and Centre - UT Integrated Development of Wildlife Habitats – State Share - 416 Major works – 01 Major Works

(DP Code 4406-02-110-UT- 41601)

Scheduled Cast Sub Plan

a. Central Share Rs. 30,47,000/-

4406 – Capital outlay on Forestry and Wildlife – 02 Environmental Forestry and Wildlife - 793 Special Central assistance for Scheduled Cast Component Plan – Schemes Shared between State and Centre - UB Integrated Development of Wildlife Habitat - 416 Major works – 01 Major Works

(DP Code 4406-02-793-UB-41601)

b. State Share Rs. 20,31,700/-

4406 – Capital outlay on Forestry and Wildlife – 02 Environmental Forestry and Wildlife - 793 Special Central assistance for Scheduled Cast Component Plan – Schemes Shared between State and Centre - UC Integrated Development of Wildlife Habitat - 416 Major works – 01 Major Works

(DP Code 4406-02-793-UC-41601)

Tribal Sub Plan

a. Central Share Rs. 30,47,000/-

4406 – Capital outlay on Forestry and Wildlife – 02 Environmental Forestry and Wildlife - 794 Special Central assistance for Tribal Sub Plan – Schemes Shared between State and Centre - UA Integrated Development of Wildlife Habitat - 416 Major works – 01 Major Works

(DP Code 4406-02-794-UA-41601)

b. State Share Rs. 20,31,700/-

4406 – Capital outlay on Forestry and Wildlife – 02 Environmental Forestry and Wildlife - 794 Special Central assistance for Tribal Sub Plan – Schemes Shared between State and Centre - UB Integrated Development of Wildlife Habitat - 416 Major works – 01 Major Works

(DP Code 4406-02-794-UB-41601)

6. Necessary additional funds of Rs.1,01,58,000/- over and above BE 2023-24 Provision will be provided in RE/FMA 2023-2024. Pending provision of such funds, the Principal Chief Conservator of Forests (Head of Forest Force), Chennai-32 is authorized to draw and disburse the amount sanctioned in para-4 above. However, this expenditure shall be brought to the notice of the Legislative Assembly by Specific Inclusion in the Supplementary Estimate 2023-2024. The Principal Chief Conservator of Forests (HoFF), Chennai-32 is also directed to include this item of expenditure while sending the Budget proposal for RE/FMA 2023-2024 and also to send draft explanatory notes for inclusion of the expenditure in the Supplementary Estimate 2023-2024 to Government in Finance (E,CC&F/BG-I) Department, without fail.

7. The Principal Chief Conservator of Forests and Chief Wildlife Warden shall ensure that the terms, item of works and conditions laid down by the Government of India in their letter first read above should be followed strictly. He is advised to observe economy measures so as to keep the actual expenditure to the minimum.

8. The Principal Chief Conservator of Forests (Head of Forest Force) Chennai-32 is authorized to draw and utilize the amount sanctioned in para 4 above to the Single Nodal Bank Account of the Concerned (Single Nodal Agency) as details given below:-

		State Nodal Agency
Central Scheme Code	:	9186
State Scheme Code	:	TN22
Name of the Single Nodal Agency	:	Forest Department, Tamil Nadu
Unique ID assigned to SNA	:	TNRA00003840
Single Nodal Account Details		
Name of the Bank	:	State Bank of India
Branch	:	Saidapet
Bank Account No.	:	40506640574
IFSC Code	:	SBIN0000912

9. This order issues with the concurrence of Finance Department vide its U.O.No.163/DS(SA)/Fin(BG-II)/2023, dated 03.11.2023 and ASL No.1216 (One thousand two hundred and Sixteen) (IFHRMS ASL No.2023111216)

(BY ORDER OF THE GOVERNOR)

SUPRIYA SAHU
ADDITIONAL CHIEF SECRETARY TO GOVERNMENT

To
The Principal Chief Conservator of Forests (HoFF), Chennai-32.
The Principal Chief Conservator of Forests and Chief Wildlife Warden,
Chennai -32.

Dr. Rajendra Kumar,
The Scientist 'C',
Government of India,
Ministry of Environment, Forests and Climate Change,
(Wildlife Division), Indira Paryavaran Bhavan,
Jorbagh Road, New Delhi – 110 003.
Treasury Officers Concerned.
(Through Principal Chief Conservator of Forests and
Chief Wildlife Warden, Chennai-32)
The Pay and Accounts Officer (South), Chennai-600 035.
The Principal Accountant General (A&E), Chennai – 18.
The Accountant General-I/II, 361, Anna Salai, Chennai-18.
The Accountant General-I/II, 361, Anna Salai, Chennai-18(BN)
The Resident Audit Officer,
Office of the Principal Accountant General,
(General and Social Sector Audit)
Tamil Nadu Secretariat, Chennai – 9.

Copy to:

The Finance(ECC&F/BGII) (BG.I/GBC/PFMS/B.G.M/W&M-I)Department,
Chennai-9.
The Financial Adviser,
Office of the Principal Chief Conservator of Forests, Chennai-32.
Stock File / Spare Copy.

//FORWARDED BY ORDER//

P. Selvi
6.11.23
SECTION OFFICER

6/11/2023