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GOVERNMENT OF ODISHA
FISHERIES & ARD DEPARTMENT

HARNESSING POTENTIAL OF FISHERIES IN ODISHA



Directorate of Fisheries, Odisha, Cuttack

Present Status of Marine Fisheries



Marine Fisheries Resources	Details	Production
Length of Coastline	480 KM	<p><u>Marine Fish Production- 2.13 lakh MT</u></p> <p>➤ Odisha Rank 7th in India in Marine Fish Production (2021-22)</p> <p>➤ Odisha Rank 4th in India in Total Fish Production (10.52 lakh MT)</p> <p>(Potential exist for harnessing additional <u>0.80 lakh MT in Marine</u>)</p>
Exclusive Economic Zone	0.17 million sq km.	
Continental Shelf	24000 sq. km.	
MSY Potential	2.93 lakh MT	
Fishing Harbor	04	
Fish Landing centre	69	
Mechanised craft	1727	
Motorized craft	12,259	
Non Motorized craft	8959	
Fish Drying Platform	10	

General Information on Odisha Coast



SN	District	Coastline (km)
1	Balasore	80
2	Bhadrak	50
3	Kendrapara	68
4	Jagatsinghpur	67
5	Puri	155
6	Ganjam	60
	Total	480

SN	Depth Zone (in metres)	Area (Sq km)
1	00 - 20	6,820
2	21 - 50	8,650
3	51 - 100	4,810
4	101 - 200	3,550
	Total	23,830

Total Coastline – **480km**

Continental Shelf Area – **24,000 sq km**



Plying status of Fishing Boats in Odisha State

SN	Name of the Establishment	Name of the District	Plying status			
			MM	MO	NM	Total
1	Addl F.O(M),Balasore	Balasore	722	971	474	2167
2		Bhadrak	354	529	87	970
3	Addl F.O(M),Kujang	Jagatsinghpur	553	473	329	1355
4		Kendrapada	0	1598	1056	2654
5	Addl F.O(M),Puri	Puri	98	982	2850	3930
6	Addl F.O(M),Ganjam	Ganjam	0	973	762	1735
7	DFO BT Balugaon	Balugaon	0	6733	3401	10134
Grand Total for State Odisha			1727	12259	8959	22945

Implementation of Various Schemes in Marine Sector in Odisha State

State plan Schemes:-

- Motorization of Traditional Crafts
- Supply of New Boat, Engine and Net to marine Fishers with financial assistance
- Popularization of Fisheries Machineries/Equipment
- Livelihood support to Marine fishermen during fishing ban period for sea turtle Conservation

Central Sector Schemes:-

- Livelihood and Nutritional support for socio Economically backward, Active Traditional Fishers families for conservation of fisheries resources during fishing ban/Lean period under PMMSY
- Group Accident Insurance of fishers under CSS-PMMY–Around 11.00 lakhs fishers are being covered annually under this scheme in Odisha
- Assistance for post harvest marketing Infrastructure like Refrigerated Truck, Insulated Van, Moped with Ice Box, Auto Rickshaw with Ice Box
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New Marine Initiatives taken in Odisha



MARINE CAGE CULTURE

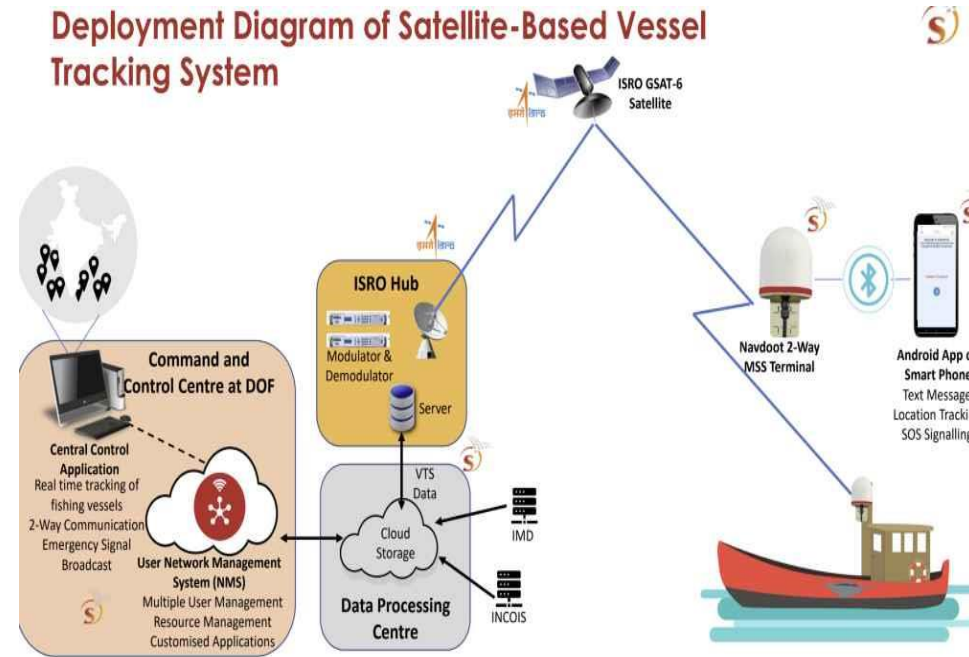
- ✓ Demonstration of Cage culture by CMFRI (FY 2020-21 to FY 2022-23)
- ✓ Location- Bahabalpur, Balasore
- ✓ Species –Indian Pompano
- ✓ Budget- Rs 257.37 lakh
- ✓ Funding Agency-NFDB
- ✓ No of Cages installed- 30
- ✓ Production from 30 cages- 21.0 MT
- ✓ Learning
- ✓ Demonstration to be re-established
- ✓ Need for diversification of species
- ✓ **Status:**
- ✓ **GoO had requested Gol to undertake cage culture demonstration for two more year for ascertaining feasibility of the project and popularization of mariculture technology in the State**
- ✓ **NFDB is in preparedness for sea bass culture in the cages**

SEA WEED CULTURE

- ✓ Feasibility study done by CMFRI cochin with demonstration along Odisha coast during 2020-2021
- ✓ As per the feasibility report
- **See weed cultivation in Odisha coast is not possible due to high tidal amplitude and salinity fluctuation due to heavy influx of water**
- ✓ Need more Feasibility study for undertaking cultivation.

TRANSPONDER

Deployment Diagram of Satellite-Based Vessel Tracking System



- ✓ To be taken up under CS-PMMSY
- ✓ No. of Transponder to be installed -**2083** (MM-1733,MO-350)
- ✓ **7 hub station** has been proposed for Monitoring, Control & Surveillance.
- ✓ GoI would Roll it out through National Space India Limited (NSIL)

Status:

- ✓ **NSIL** would instal ISRO transponders in next 12 months

Objective:

- ✓ **Real time tracking of fishing vessels**
- ✓ **Assist fishers in distress at sea during fishing**

New Marine Initiatives taken in Odisha



Artificial Reef (AR) Installation



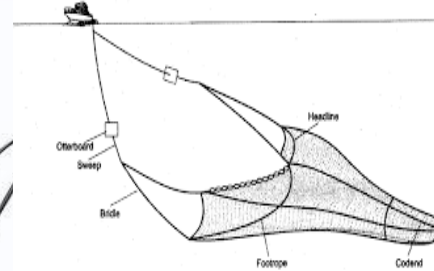
- ✓ To be taken up under CS-PMMSY
- ✓ Deployment of AR at **93 sites**
- ✓ Location- Coastal Districts
- ✓ Budget- **Rs 28.83 Crore**
- ✓ **Status**
Finalization of agency for AR deployment-in process
(NIO, Goa / CMFRI, Cochin/ FSI, Mumbai)
- ✓ **Objective:**
 1. Develop a natural fishing habitat
 2. Increase in fish stock of the area

Popularisation of Fisheries Machineries

Introduction of new component under the MMKY scheme during FY 2023-24



Gen set



Trawl Net



Solar Based smart Technology

- ✓ **Proposed Budget- Rs 5.00 crore**
- ✓ **Aim:**
 - To enhance the production in culture system
 - To Harness the marine catch with sustainability
- ✓ **Expected outcome:**
 - Uninterrupted power supply at BW ponds
 - Reduce operational cost of fish culture
 - Enhance production and productivity

CHALLENGES



A. Development of Infrastructure facility

- Up gradation/Renovation of existing FLC/FH
- Construction of new FH

B. Siltation of River mouth near FLC/FH

- Needs periodical dredging for ease venturing as well as berthing fishing vessels

C. Increase of fishing fleet size

- As there is no change in fleet size for last 10 years and lesser numbers of mechanised fishing crafts.

D. Alternative livelihood to fisher folk

sea weed culture and Marine Cage culture and Mari-culture during ban period may be entertained by overcoming the various challenges like:-

- Frequent cyclonic weathers and storms through out the year makes it non-conducive
- Heavy influx of nutrients also comes with heavy influx of freshwater that reduces salinity.
- Slope in the Intertidal zones is very less and therefore achieving adequate depth for farming is challenging.
- Wave action in open sea is very high.

E. Provision of Assistance for Livelihood Support to Marine Fishers affected by Fishing Ban Period for sea Turtle conservation from Gol.

F. Enhancement of financial assistance for Livelihood and Nutritional support for socio Economically backward, Active Traditional Fishers families for conservation of fisheries resources during fishing ban/Lean period under PMMSY

G. Exploring of Deep sea fishing Vessel

- Fishermen of Odisha Coast are not interested for Steel body DSFV, rather they are interested for modification of their existing fishing vessels to Deep sea worthy fishing vessels as per DSFV criteria which is under consideration at Gol level.
- Voyage period DSFV as designed by CSL is about 21 days but for reaching at the Tuna ground from coast will take 15 to 16 days(to and fro) by the DSFV designed by CSL. There will be only 5 to 6 days period is left for fishing. So the voyage period of proposed DSFV may be increased as per the State specific requirement.

H. Skill Enhancement and capacity building of Stakeholders

Skill Enhancement and capacity building of Stakeholders for Value addition, Sea safety measures, Operation of DSFV/Vessels/Gear, Alternative livelihood like Mari-culture

Best Practices for leveraging Marine Fisheries Potential in Odisha



A. Strict Enforcement of OMFRAct and Rules

Sea Turtle Ban - 1st November-31st May



Ban effective across stretch of 120 km for 7 Months.

Gahirmatha Marine wildlife sanctuary, Devi River mouth, Rushikulya River mouth, Dhamara river Mouth.

UNIFORM BAN - 15th April- 14th June



Ban effective across stretch of 480 km of Odisha coast for 61 days.

Only non Motorised Boats within 5 km permissible for fishing.

YEAR ROUND BAN



- Prohibition the use of fishing gear made by seine nets (Ring nets) along the entire coast line in Odisha and through out the year for resource conservation and minimize bycatch of protected species



OMFR Act and Rules

Provision for regulating fishing and conservation measures in the Territorial waters (OMFRA Act 1982 and OMFRA Rules 1983)

- ▶ Highlights
- ▶ Protection of Fish and Fish species
- ▶ Regulation of mesh size to avoid catch of juvenile fishing
- ▶ Minimum and Maximum fleet sizes
- ▶ Regulation of gear to avoid over exploitation of specific species
- ▶ Declaration of closed season
- ▶ Reservation of zones to Traditional fishermen
- ▶ Power to regulate, restrict, or prohibit certain fishing activities within specified area
- ▶ Prohibition of using fishing vessels which are not licensed
- ▶ Licensing of fishing vessels
- ▶ Registration of fishing vessels
- ▶ Cancellation, suspension and amendment of License
- ▶ Permission for operating vessel for the area other than specified in Certificate of registration
- ▶ Ownership change and specification change in fishing vessels
- ▶ Periodical patrolling for strict enforcement of OMFR Act & Rule

Best Practices for leveraging Marine Fisheries Potential in Odisha

B. Implementation of ICZM and OCZM programmes

C. Implementation of Odisha Export Policy-2022

- ▶ Promotion of Sea food Exports with value addition,
- ▶ Diversified export baskets and earning more foreign exchanges,
- ▶ Establishment of more mega sea food park in Odisha

D. Provision for development of post harvest infrastructures

E. Conduct of regular awareness program among marine fishers for strict implementation of different SOP

F. Provision for establishment of Hygiene fish market/Kiosks as well as hygiene Dry fish Market

G. Engagement of Sagarmitras

Total 498 Sagarmitras have been engaged in coastal districts of Odisha and entrusted with following assignments:-

- ▶ Create awareness among marine fishers on sustainable utilization of fisheries Resources and relevant regulations including CCRF & Coastal Security by using QR coded Aadhar Card
- ▶ Dissemination of information on weather forecast /warning, Natural calamities and PFZ etc
- ▶ Sensitization of Fishers about Govt. Policies/Programmes/Schemes
- ▶ Participation in the coastal security activities.



THANK YOU