



**Fisheries & Fishermen Welfare Department
Tamil Nadu**

**Status, Challenges and Best practices in Harnessing
Potential of Marine Fisheries**

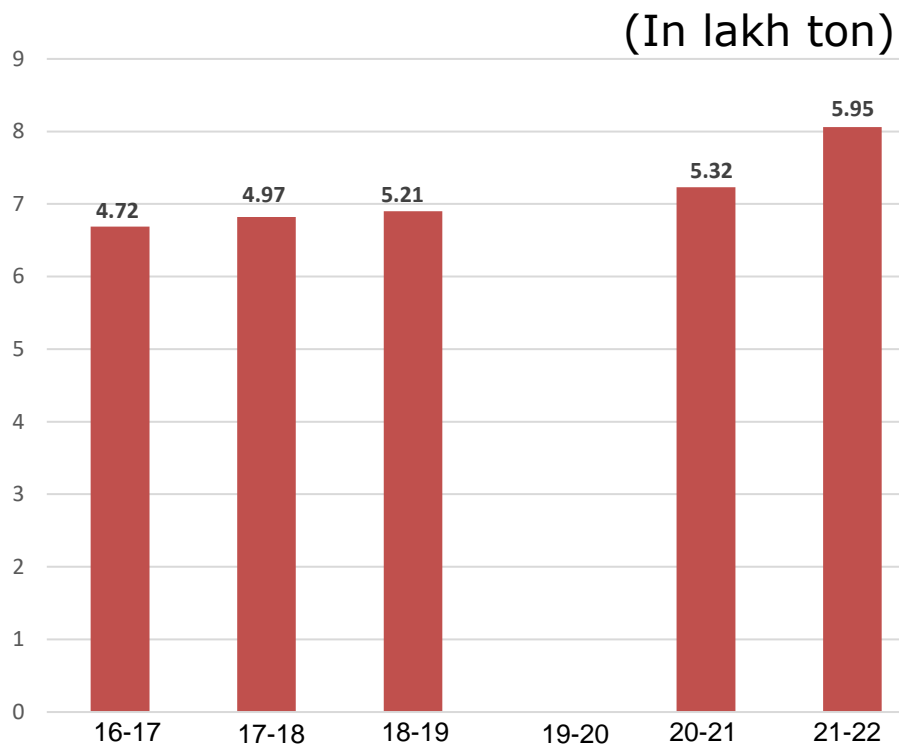
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Marine Fisheries

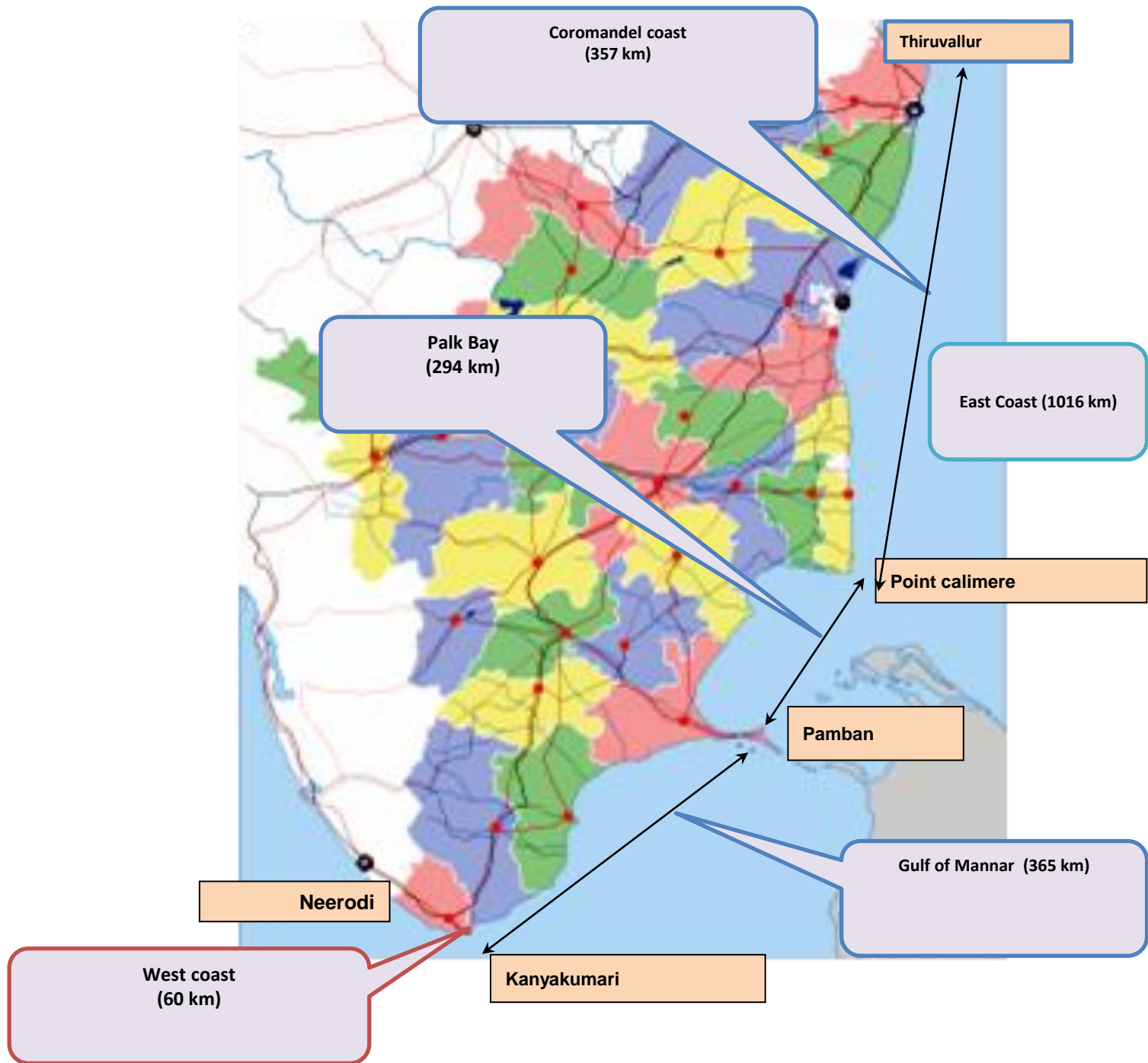
Fishing Villages	608 (1,076 Km coast line) 14 Districts
Fishing crafts	5,830 Mechanized boats 41,593 Motorized boats 4,092 Non-motorized boats
Marine Fisherfolk Population	10.48 lakh
Major Harbours	9 Nos.
Medium Harbour	4 Nos.
Minor Harbour	5 Nos.
Harbour Under Construction	3 Nos.
FLC	52 Nos
FLP	251 Nos

Marine Fish Production



Fish Products Export (2022-23)

Quantity (MT)	1,23,157 MT
Value	Rs.6,957.67 crore



Status of Marine Fish Production of Tamil Nadu

Maximum Sustainable Yield (MSY) of Marine fishery resource for Tamil Nadu is 7.74 Lakh metric tonnes

Marine Fish Production of Tamil Nadu

Year	Production (in Lakh MT)
2015-16	4.67
2016-17	4.72
2017-18	4.97
2018-19	5.21
2019-20	
2020-21	5.32
2021-22	5.95

Stock Health Status

As per CMFRI Booklet Series No. 32/2023

Marine Fish Stock Status of India 2022

South East coast of India contribute **28.3 %** of Total Indian Marine Fish Production

- Total Species Assessed : **70**
- Total Stock Assessed : **39 (Fin fish 29, Shell Fish 10)**
- Healthy Stock : **97.4 % (Fin fish 96.6%, Shell Fish 100%)**

Healthy Stock status implies that the current management measures are adequate enough to maintain the stock status.

Measures to improve harnessing capabilities



Policies to achieve Sustainable Development Goal (SDG) in fisheries



Enforcement of regulatory frame work for sustainable fisheries



Increase the availability of fish in domestic market and ensuring the creation of required marketing places



Increase the income of fishermen and their families engaged in fishery activities



Increase the infrastructure facilities at harbours to achieve hygienic handling and maintenance of the quality



Increase the export of fish and fish products volume & value Year on Year



Enhance the skill of fishers and promoting the entrepreneurship for doubling the income



Creating the disaster resilient response system to ensure safety of fishermen

Policies to achieve Sustainable development goal in fisheries

Goal:

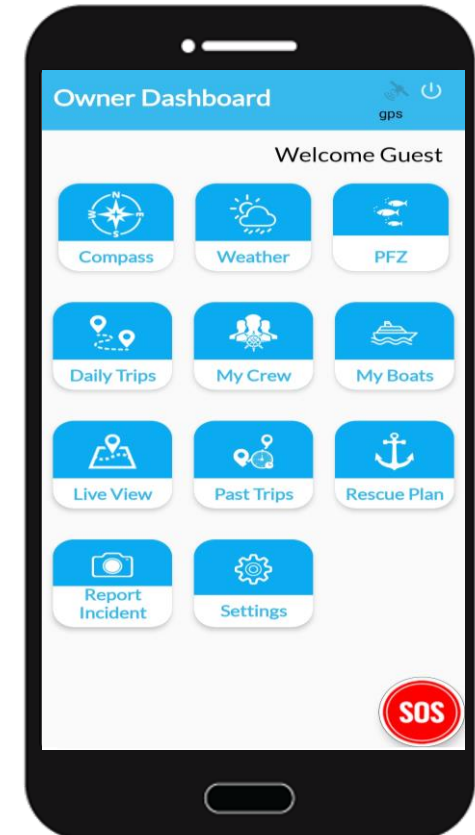
- ✓ Climate resilient sustainable fisheries for adaptation to climate change

Strategies:

- Identification of potential fishing zones to avoid Habitat loss
- Protection of seashore from erosion.

Action plan:

- ❖ Deployment of Artificial Reefs near inshore waters at selected locations
- ❖ Ranching of commercially important Fish species
- ❖ Construction of Groynes, RMS wall & stabilization of Barmouths



Enforcement of regulatory frame work for sustainable fisheries

Goal:

- ✓ Better enforcement of TNMFR act

Strategies:

- Creation of dedicated marine enforcement wing.
- Amendment of Tamil Nadu marine fisheries regulation act.
- Monitoring, Control and surveillance system.

Action Plan:

- ❖ Judicious implementation of Act and Rules is being enforced for sustainable fishing activities.
- ❖ The different communication system already in place will be brought under surveillance for better monitoring and control



Increase the availability of fish in domestic market and ensuring the creation of required marketing places

Goal:

- ✓ Creation of cold chain facilities & construction, improvement and modernization of fish market and stall

Strategies:

- Creation of additional retail and whole sale fish marketing places in co-ordination with local bodies.
- Identification of places to create centralized fish storage and handling centres in all districts headquarters.

Action Plan:

- ❖ New fish markets & retail outlets is being taken up in consultation with local bodies.
- ❖ Under NFDB, PMMSY and FAIDF centralized fish storage and handling centres are being established.



Modernization of Fish Market

For hygienic handling of fish and to supply good quality fish to the consumers at reasonable prices, Fish markets are being constructed/renovated with modern hygienic handling facilities with financial assistance from National Fisheries Development Board and State Government.



Increase the income of fishermen and their families engaged in fishery activities

Goal:

- ✓ To double the income of fishers

Strategies:

- Identification of activities suitable for different coasts
- Providing skill-oriented training to fishers
- Diversion to deep sea (offshore) fishing

Action Plan:

- ❖ The deep sea fishing resources shall be tapped by diversion of fishing fleets into deep sea (offshore)
- ❖ Upgraded infrastructure is being provided in fishing harbours for better handling and cold chain facilities are provided to get better prices
- ❖ Three types of DSFV schemes are in place from 2012-2013 onwards.
- ❖ Trying to cut across the marketing issues (Quality Vs Offered Price)



Increase the infrastructure facilities at harbours to achieve hygienic handling and maintenance of the quality

Goal:

- ✓ Creation of shore facilities & reduce post-harvest losses

Strategies:

- ✓ Construction of New fishing Harbours/ Fish Landing centres.
- ✓ Improvements in existing fishing harbours/Fish Landing centres.
- ✓ Strengthening Harbour Management Committee.

Action Plan:

- ❖ Fishing Harbours/ Fish Landing Centres at required places to improve the berthing and fish handling facilities.
- ❖ Harbour management committee are being tuned up to achieve the hygienic standards.
- ❖ Infrastructure gap studies conducted



Increase the export of fish and fish products volume & value Year on Year

Goal:

- ✓ Improving Productivity, Value addition and Export value

Strategies:

- Establishment of pre-processing facilities
- Diversification of fishing methods
- Training for fishers on Hygienic on board handling of fishes
- Training on value addition of fish and fishery products

Action Plan:

- ❖ Establishment of pre-processing units near/within FH
- ❖ Promote construction of deep sea fishing vessels (promote offshore fishing)
- ❖ Sustained action to reduce the gap between Processor/International quality demand with the available quality (confidence building)
- ❖ Training of fishers



Enhance the skill of fishers and promoting the entrepreneurship for doubling the income

Goal:

- ✓ Skill upgradation of Fishers and Fish farmers

Strategies:

- To provide Special training for handling & post-harvest management.

Action Plan:

- ❖ Training is being imparted to fishers on onboard handling and post-harvest management through CIFNET & CIFT
- ❖ Under Recognition of Prior learning (RPL) program fisher are being identified and trained.
- ❖ Navigation & Seamanship training is being provided for boat drivers for upgrading the deep sea maneuvering skills.



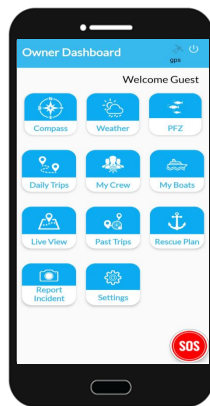
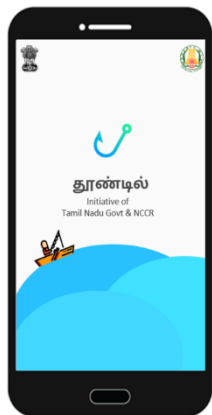
Creating disaster resilient response system to ensure safety of fishermen

Goal:

- ✓ To ensure the safety of fishermen at each stage.

Strategies:

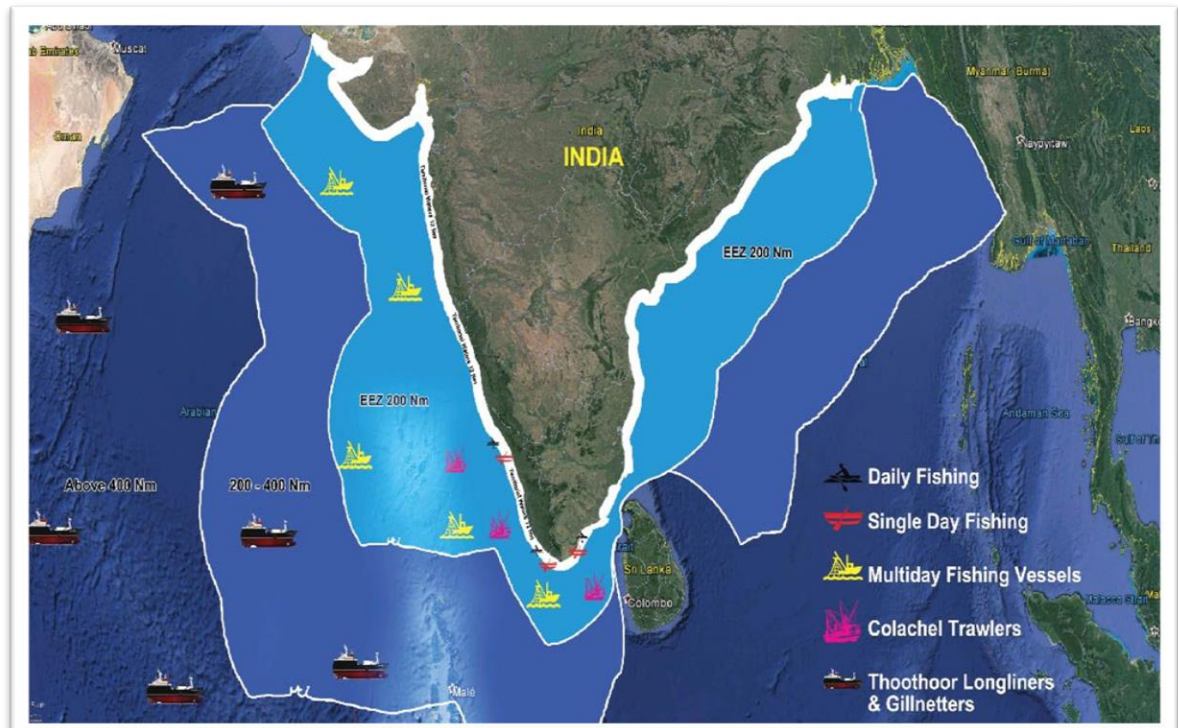
- Providing sea safety equipment & communication equipment for marine fishers.
- Creation of Web and mobile tool for Information dissemination, and monitoring



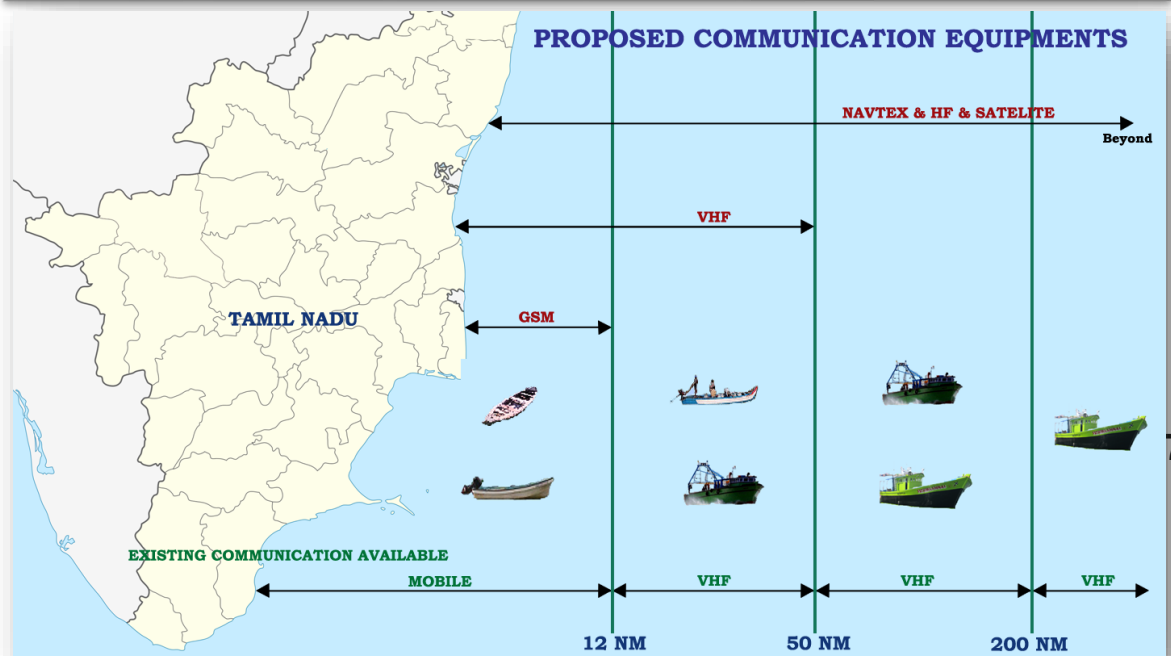
Communication system in Tamil Nadu

Tier	Communication Equipment	Number of beneficiaries	Range
1	Thoondil App	30,000 +	GSM connectivity range (upto 10 NM)
2	VHF	5W – 17,795 25W – 3,135	upto 40 NM
3	Deep Sea Communication	Navic - 200 Navtex - 80 I-Sat - 660	EEZ & beyond
4	ISRO – Transponder (Nabhmitra)	4,997	Presently upto EEZ

Distance in NM	Earlier Communication
Up to 12 nm	MOBILE (GSM) / VHF
12 nm TO 50 nm	VHF
50 nm TO 200 nm	VHF
beyond 200 nm	VHF



Distance in NM	Equipment in Use
0-12 NM	Thoondil Mobile App
0-50NM	Thoondil App, 5W VHF
5-100NM	Thoondil App, DAT/ Transponder
12- >EEZ	25W VHF / Sat Phone / Navtex / NaVIC/ Transponder



Comparison



DETAILS	THOONDIL APP	VHF (5W)	VHF (25W)	NAVTEX	NAVIC	SATPHONE	TRANSPONER	DAT
RANGE	10-15 KM	12-15 NM 30 KM	25-35 NM 75 KM	200 NM 450 KM	IOR	GLOBAL	EEZ	IOR
CAPITAL COST	NIL	RS. 16,000/-	RS.32,000/-	RS. 60,000/-	RS. 8,000/-	RS. 1,00,000/-	RS 23,000	RS 16,000
RECURING COST	NIL	NIL	NIL	NIL	NIL	RS. 2500-4000 PER MONTH	NIL	NIL
TECHNOLOGY	GSM	RF WAVE	RF WAVE	MF WAVE	SATELLITE	SATELLITE	SATELLITE	SATELLITE
SERVICE PROVIDER	DEPT. OF FISHERIES	DEPT. OF FISHERIES	DEPT. OF FISHERIES	DG, LIGHT HOUSE	ISRO	BSNL/ INMARSAT	ISRO	ISRO
EQUIPMENT MANUFACTURER	NCCR & DOF	UNIDEN & OTHERS	UNIDEN & OTHERS	SAMYUNG & OTHERS	ANTRIX CORP.LTD. (ISRO)	INMARSAT	SAANKYA & OTHERS 3 VENDORS	KOMOLINE AEROSPACE LTD & OTHERS
COMMUNICATION TYPE	TWO WAY APP THROUGH MOBILE	TWO WAY VOICE	TWO WAY VOICE	ONE WAY TEXT	ONE WAY TEXT	TWO WAY VOICE & TEXT	TWO WAY TEXT THROUGH SAT DATA	ONE WAY ENCODED MESSAGE BOAT TO SHORE

Lessons learnt

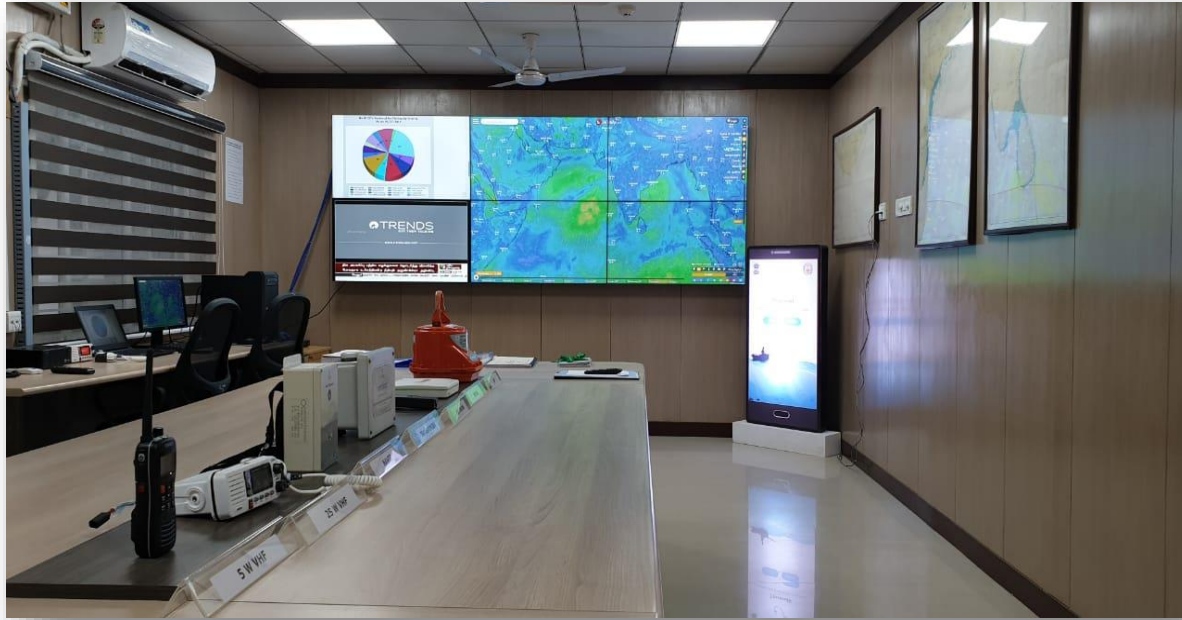
- ★ Sat Phones provided not working inside cabin (additional cost for docking unit).
- ★ Fishermen I-Sat Phones are not working beyond EEZ.
- ★ Restriction to be removed for Arabian Sea, BoB & Indian Ocean region.
- ★ Now only voice call is permitted in GSPS system, need to activate data to get better result.
- ★ Stringent norms of WPC - needs to be Judiciously altered for Fishermen Usage without compromising national security.
- ★ Transponder – GSAT 6 Satellite coverage limited (foot print 230-260nm) in Arabian Sea & BoB
- ★ Where as GAGAN's GSAT 8, 10 and 15 covers whole Arabian Sea & BoB.
- ★ Need to relook the immediate possibility to extend the transponder coverage area.
- ★ AIS (B) transponders found to be cost effective in locating the vessel.

Suggestions for better MCS & SAR

- ★ Common National Platform to be developed by Integrating various Communication systems
- ★ Ensuring affordability- Reducing the user fee/import duties/WPC charges.
- ★ Needs to firmup cost effective maritime communication model (KU Band)
- ★ Safety of fishers- Integrating communication systems with MRCC.
- ★ National Security-Linking MCS with IMAC

Schemes list to harness the productivity in sustainable way

- ★ Promotion of Seaweed farming and related industry.
- ★ Deployment of Artificial reef.
- ★ Promotion of Deep Sea Fishing.
 - ★ State Funded 50 % subsidy (Unit Cost 60 Lakh) from 2012-13
 - ★ Special scheme for Palkbay 70% subsidy (Unit cost 80 Lakh)
 - ★ PMMSY scheme 40 % subsidy (Unit cost 120 Lakh)
- Replacement of traditional craft with 10 OAL FRP boat,engine & others.
- Motorisation of Traditional Crafts.
- Fuel Subsidy (Diesel & Kerosene).
- Providing insulated ice box & safety equipments at subsidised/affordable price.
- New Construction & Renovation of Existing domestic marketing Infra.
- Enforcing regulatory measures through participatory/ co-management.



THANK YOU