



DEPARTMENT OF FISHERIES,
KERALA
5th Jan 2024

Harnessing The Potential of Fisheries in Marine States



Marine Fisheries- Kerala Profile

Length of coast line - 590 Km

Exclusive economic zone - 2,18,536 Sq.Km

Continental Shelf - 39,139 Sq.Km.

Marine Fishing villages - 222 nos.

Marine fisher population - 812223 nos.

Active fishermen - 190028 nos.

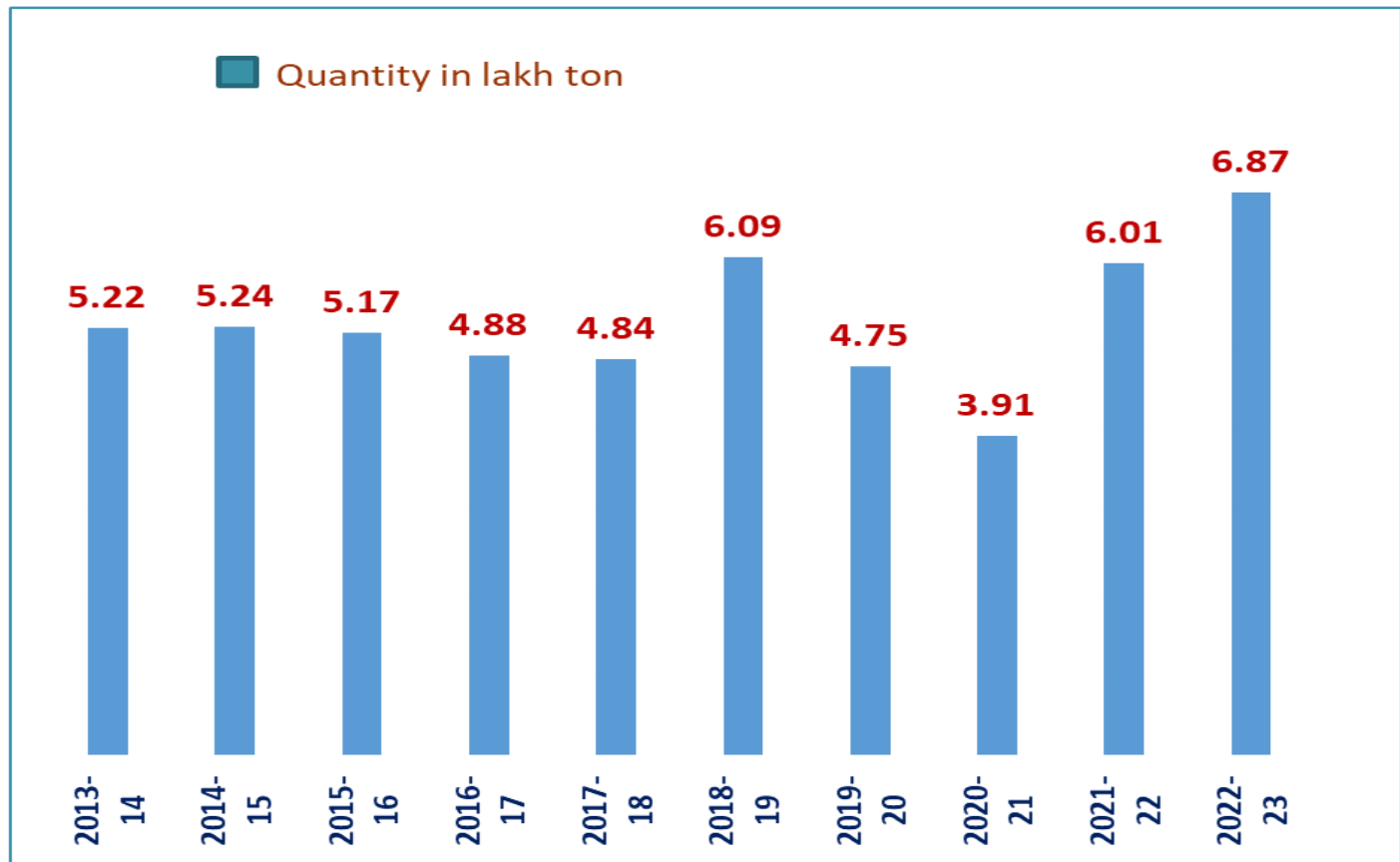
Mechanised vessels - 6791 nos.

Traditional crafts - 37642 nos.

Fishing Harbours - 26 nos. (21 operational, 5 under constrn); **FLC** – 204 nos

Marine Fish Production Trend in Kerala - Last 10 Years

- *Kerala recorded the 'highest catch of the last decade' with 6.87 lakh tonnes in 2022-23 & stood at 3rd position in the country preceded by TN & Karnataka.*
- **Estimated Catchable Marine Fish potential of Kerala - 7.5 lakh ton**



Kerala- Major Highlights of the Year 2022-23

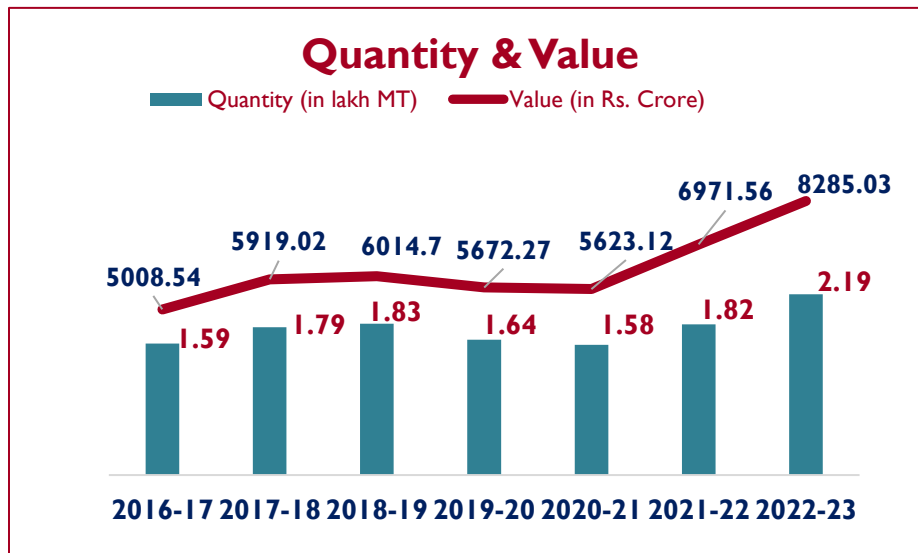
Recovery of the 'Oil sardine fishery' -: 3297 tons of 2021 increased to top most position with 1.10 lakh tonnes.

'Indian mackerel', the other prominent resource, also recorded a catch of 1.01 lakh tonnes, almost double its estimated landings of 2021

Among districts, Ernakulam positioned at top with more than 2 lakh tons with a share of 30% of the total landings.

In 2023-24 the production upto 2nd Qtr has reached 3.83 lakh tonnes

Seafood Export Growth in Kerala 2016-17 to 2022-23

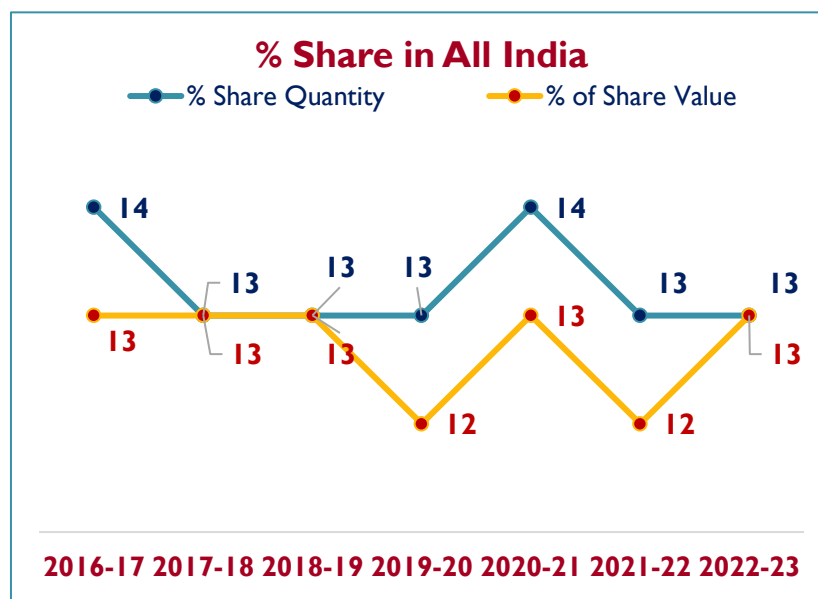


Major Export Items:

- Frozen shrimp-68%, Frozen Fish-8%, Frozen Squid-5%, Frozen Cuttlefish- 4%, Dried Items -5%

Major markets:

- USA -32%, China -19%, European Union-16%, SE Asia – 15%, Japan-6%, Middle East-4 % & others-8%



Harnessing Marine Fisheries Potential of Kerala-

Major Interventions by Department

I
**Timely
Amendment of
KMFR Act**

II
**Notification of Minimum
Legal Size(MLS) of
commercially Important
fishes**

III
**Participatory
Management Functioning
of Fisheries Management
Councils**

IV
**Strict
Enforcement of
KMFRA**

V
**Sustainable fishing
Practices-Square
mesh cod end**

VI
**Reducing pollution and
carbon emission
Conversion of Kerosene
Engine to LPG & Petrol**

VII
**Replenishment of
resources -
Establishment of
Artificial reef**

VIII
**Exploitation of Deep
Sea Resources**
Deep sea fishing vessels
for traditional fishermen

IX
**Kerala Fish Procurement,
Marketing and
Maintenance of Quality
Act, 2021 Act**

X
**'Clean Sea Beautiful
Coast' -To make the
sea and coast plastic-
free**

I. Major Amendments of KMFR Act (2017)

KMFR Act, 1980 has been amended in 2017 & 2021 in view of Conservation, Management & Sustainable utilisation of Fish resources. New Rules came into Force in 2018.

The major amendments that are made mandatory are:-

Vessels above 20 meter Overall length and 250 Hp are not given license to fish within 12 NM but are permitted to use the harbour facilities by remitting an annual permit fee of Rs. 25,000/-

All mechanised fishing vessels registered after notification of KMFR Act 2018 are not allowed to fish within 12 nm

Fishing vessels without adhering length and horsepower ratio (upto 15m : 140 HP, 15-17.5m : 200 HP, 17.5 - 20 m : 250 HP) registered 3 months after notification of KMFR Act 2018 are regulated

The dimensions of fishing gear and mesh size has been regulated for major species

Major Amendments of KMFR Act (Contd.)

Destructive fishing using poison, explosives and artificial light more than 12 watt is prohibited

Fishing using Fish Aggregating Devices are prohibited









Registration of Boat building yards & Net production units made mandatory

The violations of KMFRA & MLS are penalised for an amount ranging from Rs. 5000 to Rs. 2.5 lakh based on the Horse power of the engine.










Carrying ID cards while fishing is made mandatory and is penalised for violation










Sl. No.	Horse power of the Engine	Penalty (in Rs.)
1	Upto 10 HP	5000
2	Above 10 Hp and Upto 25 HP	10000
3	Above 25 HP and Upto 50 HP	25000
4	Above 50 Hp and Upto 90 HP	50000
5	Above 90 HP and Upto 120 HP	90000
6	Above 120 HP and Upto 150 HP	120000
7	Above 150 HP and Upto 200 HP	150000
8	Above 200 HP and Upto 280 HP	200000
9	Above 280 HP	250000

II. Notification of Minimum Legal Size (MLS) of 58 nos. of commercially important Fishes

 TL 10cm മത്തീ/നെൽ ചാള <i>Sardinella longiceps</i>	 TL 14cm അയല <i>Rastrelliger kanagurta</i>	 FL 31cm കേര ചുര <i>Euthynnus affinis</i>
 300g കടൽ കൊഞ്ച് <i>Panulirus polyphagus</i>	 500g കടൽ കൊഞ്ച് <i>Panulirus ornatus</i>	 150g അടിപ്പൻ <i>Thenus unimaculatus</i>
 FL 44cm കാർ ചുര <i>Thunnus tonggol</i>	 FL 50cm പള്ളൻ ചുര <i>Gymnosarda unicolor</i>	 FL 50cm അയ്ക്കുറ/നെൽമീൻ <i>Scomberomorus commerson</i>










 TL 12cm കിളിമീൻ/പുതിയാപ്പ കോർ <i>Nemipterus japonicus</i>	 TL 10cm പരവ/അടവ് <i>Lactarius lactarius</i>	 200g കടൽ കൊഞ്ച് <i>Panulirus homarus homarus</i>
 FL 50cm കേര ചുര <i>Thunnus albacares</i>	 FL 18cm എലി ചുര <i>Auxis rochei</i>	 FL 35cm നെൽമീൻ ചുര <i>Sarda orientalis</i>
 TL 19cm വക്കട <i>Megalaspis cordyla</i>	 TL 16cm അയിലക്കണ്ണി <i>Selar crumenophthalmus</i>	 TL 9cm മാന്തൽ/നക്സ് <i>Cynoglossus macrostomus</i>








 FL 25cm ഉരുളൻ ചുര/എലി ചുര <i>Auxis thazard</i>	 TL 46cm പാമ്പാട <i>Trichiurus lepturus</i>	 TL 11cm തിരിയൻ ചാമ്പാൻ <i>Decapterus russelli</i>
 APM 2cm കല്ലി കക്ക <i>Paphia malabarica</i>	 APM 2cm കറുത്ത കക്ക <i>Villorita cyprinoides</i>	 FL 35cm വരയൻ ചുര <i>Katsuwonus pelamis</i>
 FL 37cm സ്വീല നെൽമീൻ <i>Scomberomorus guttatus</i>	 FL 61cm മോത <i>Rachycentron canadum</i>	 FL 38cm പുളളി മോത <i>Coryphaena hippurus</i>

 TL 10cm കിളിമീൻ/പുതിയാപ്പ കോർ <i>Nemipterus randalli</i>	 TL 17cm അരണ മീൻ <i>Saurida tumbil</i>	 TL 10cm അരണ മീൻ <i>Saurida undosquamis</i>
 TL 15cm കുട്ടൻ കോർ <i>Johnius carutta</i>	 TL 14cm കോർ <i>Johnius belangerii</i>	 TL 15cm കുട്ടൻ കോർ <i>Johnius glaucus</i>
 TL 53cm പാൽ സ്രാവ് <i>Rhizoprionodon oliginx</i>	 CW 5cm കുരിശ് ഞണ്ട് <i>Charybdis feriatus</i>	 CW 7cm കാവാലൻ ഞണ്ട് <i>Portunus sanguinolentus</i>

Minimum Legal Size

Contd.....

 TL 13cm വെള്ള ആവോലി <i>Pampus argenteus</i>	 TL 17cm കറുത്ത ആവോലി/മുളൻ <i>Parastromateus niger</i>	 TL 14cm കലവക്കുട്ടൻ <i>Priacanthus hamrur</i>
 TL 14cm കൊറുക്ക <i>Nibea maculata</i>	 TL 13cm കോര <i>Pennahia anea</i>	 TL 18cm കലവ <i>Epinephelus diacanthus</i>
 CW 9cm കാവാലൻ ഞണ്ട് <i>Portunus pelagicus</i>	 TL 6cm പുവാലൻ ചെമ്മീൻ <i>Metapenaeus dobsoni</i>	 TL 7cm കരിക്കാടി ചെമ്മീൻ <i>Parapenaeopsis stylifera</i>

 TL 17cm കോര <i>Otolithes ruber</i>	 TL 16cm പല്ലി കോര <i>Otolithes cuvieri</i>	 TL 11cm മട്ടി കോര <i>Johnius sina</i>
 DW 14cm മുക്കാതിരി <i>Himantura imbricata</i>	 DW 61cm തിരണ്ടി <i>Himantura jenkinsii</i>	 DW 29cm പെരുന്തിരണ്ടി <i>Gymnura poecillura</i>
 TL 11cm ചുടൻ ചെമ്മീൻ <i>Metapenaeus monoceros</i>	 TL 9cm കടന്നൻ ചെമ്മീൻ <i>Metapenaeus affinis</i>	 TL 8cm ഡീപ്പ് നീ പുളുൻ <i>Plesionika quasigrandis</i>

 TL 13cm റെഡ് റിംഗ് <i>Aristeus alcocki</i>	 DML 8cm കുന്തൽ/ഓലക്കണവ <i>Uroteuthis (photololigo) duvauceli</i>	 DML 11cm കാലൻ/ഓലക്കണവ <i>Sepia pharaonis</i>	 DML 5cm നീരാളി/കിനാവള്ളി <i>Amphioctopus neglectus</i>
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TL : Total Length
FL : Fork Length
SL : Standard Length
DW : Disc Width
CW : Carapace Width
DML : Dorsal Mantle Length
APM : Anterior Posterior Measurement
g : gram

- The MLS regulation will come into complete effect only when all the neighbouring States also enforce the same

III. Participatory Approach in Fishery Resource Management

The State Fisheries Management Council (SFMC)- one of the key components of the Kerala Marine Fisheries Regulation Act (KMFR), is a crucial step taken by State in the regulation of fishing practices and conservation of marine resources

Fisheries management Councils (FMCs) functions as a 3-tier system - at the State, District and Village level Including representatives of fishermen, government officials, boat owners, boat builders, fish traders, NGOs and Scientists

Empowers the fishermen - make them part of the fisheries management team, helping in planning, balancing their rights and responsibilities

Participatory management - Addresses the requirements for sustainability, equity and efficiency in fisheries and coastal resources management

IV. Strict Enforcement of KMFR Act

- The Implementation and Enforcement of KMFR Act is coordinated by Dept. through 9 Fisheries Stations in the 9 Coastal Districts, assisted by Marine Enforcement Wing.

Year	No. of Patrolling	Violation of KMFR ACT	Fine imposed & Fish Auction (Rs.)
2015-16	975	123	7565942
2016-17	1168	170	5817315
2017-18	1441	175	11254740
2018-19	1874	150	14434532
2019-20	2186	216	26676270
2020-21	1973	87	7885775
2021-22	2364	248	19027445
2022-23	2730	288	23554833
2023-24 Upto December 30	2938	327	20389319
Total	17649	1784	13,66,06,171/-

KMFRA implementation

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CCTV Surveillance and Electronic Display boards are placed at 12 major fishing harbours in the State with link to Master Control Room and Regional Control Rooms for effective Enforcement of KMFR Act and ensuring Coastal Security. The initiative commenced from 2018-19 onwards

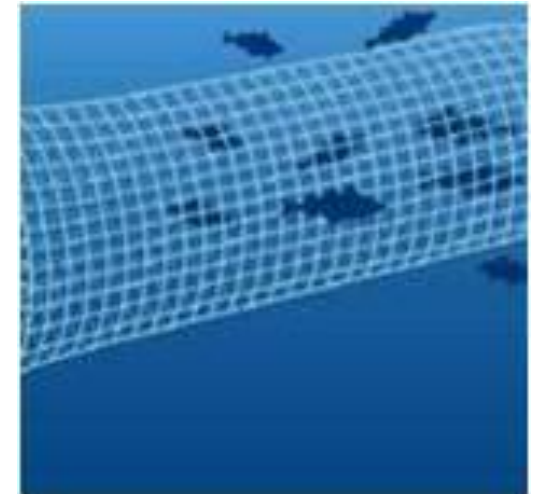
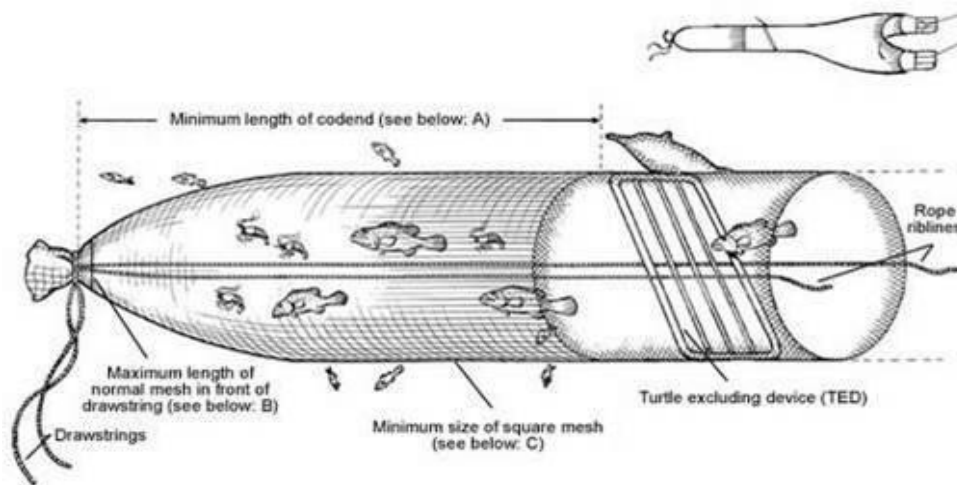
Sl. No.	District	CCTV At Fishing Harbour	Display Board At Fishing harbour
1	Thiruvananthapuram	Vizhinjam	Vizhinjam
2	Kollam	Neendakara	Neendakara
		Sakthikulangara	
3	Ernakulam	Munambam	Munambam
4	Kozhikode	Puthiyappa	
		Beypore	Beypore
		Koyilandy (being initiated)	
5	Thrissur	Chettuva (being initiated)	
6	Malappuram	Ponnani	
7	Kannur	Azheekkal	
		Moplabay	
		Madakkara	

V. Sustainable Fishing practices- Square Mesh CodEnds

- Kerala has made square mesh cod-ends mandatory in trawl nets. Mesh size being enforced is 35mm for Fin Fish trawl net and 25mm for Shrimp trawl net.
- To ensure responsible fishing practices, reduce the by-catch in trawl fishing & promote sustainable fishing by allowing juvenile fishes to escape and grow

Achievement

2019-20	-	200 Nos
2020-21	-	200 Nos
2021-22	-	200 Nos
2022-23	-	375 Nos
2023-24	-	750 Nos being implemented



VI. Sustainable Fishing practices - Projects undertaken for Reducing pollution and Reduction of carbon emission

Conversion of crafts with kerosene OBM's to LPG –

- LPG emits less carbondioxide than most conventional fossil fuels and emits practically no black carbon – the second biggest contributor to climate change
- 500 crafts will be converted under Plan scheme 2023-24

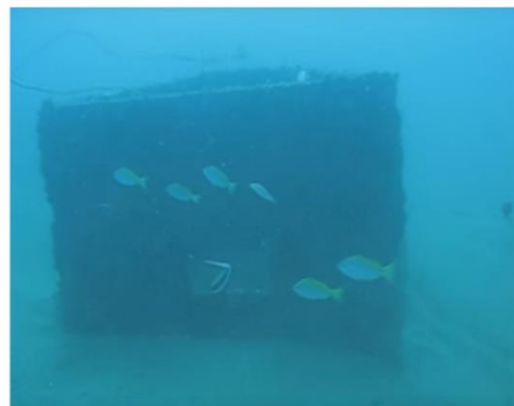
Conversion of crafts with kerosene engines to petrol engines –

- **for reducing pollution and increased fuel efficiency**
- 1000 crafts will be converted under Plan scheme 2023-24

VII. Establishment of Artificial reef

Installation of Artificial Reef is undertaken by Dept. for promotion of sustainable fisheries and Livelihoods

Achievement: Deployed 4190 reef modules in 17 sites under State Plan schemes 2016 onwards and also 6300 reef modules ready for deployment in 42 sites under PMMSY scheme 2022-23 in Thiruvananthapuram district



VIII. Projects undertaken for Exploitation of Deep Sea Resources

Deep sea fishing vessels to Traditional fishermen - Provided 6 nos. and ready to distribute another 4 nos. under PMMSY scheme.
AS obtained for distribution of another 10 nos. also

Deep Water Line Fishing Gears To Traditional Fishermen for undertaking Tuna Long lining, Hook and line fishing, Reef long line, Shark long line



IX Kerala Fish Procurement, Marketing and Maintenance of Quality Act, 2021 Act

- The State has constituted the 'Kerala Fish Procurement, Marketing and Maintenance of Quality Act, 2021 Act' for regulating of fish procurement, auctioning and marketing, to promote systematic, hygienic and efficient auctioning and marketing, to maintain quality and for other matters connected therewith or incidental thereto.

As per provisions of the said Act, the following Societies are being constituted

- Fish Landing Center Management Societies (FLCMS),
- Harbour Management Societies (HMS) – constituted in 21 Fishing harbours in the state
- Fish Market Management Societies (MMS),
- State Level Fish Quality Maintenance Committee (SLFQMC)

The 'Kerala Fish Procurement, Marketing and Maintenance of Quality Rule' is under finalisation for enactment.

X. Suchitwa Sagaram Sundhara Theeram

- Inspired by the UN recognized Venture 'Suchitwa Sagaram' project implemented in the State from 2018 onwards to free the sea from plastic waste with the cooperation of trawl vessel owners and workers, State has brought out a new initiative 'Clean Sea Beautiful Coast' project to be implemented in three phases.

Ist Phase - Awareness Activities

- Phase completed June 2022,** Seminars, bit notices, brochures, art shows, road shows, bike rallies, candlelight processions, beach walks, family gatherings, quiz competitions for students, drawing competitions, social media, F.M. Radio

IInd phase- 'Plastic Nirmarjana Yajna'

- Collection of plastic waste throughout a day and its recycling
- 600 action groups consisting of 25 volunteers each will be formed to carry out these activities at each kilometer stretch

IIIrd phase collection from sea

- Recycling and follow-up campaigns will be organized at the harbours

Major Strategies to be Adopted by Coastal States

Amendment of Marine Fishing Regulation Act (MFRA)

- Must be amended by all Coastal States for ensuring Conservation and Management of Fishery Resource

Enforcement of Minimum Legal Size (MLS)

- Must be uniformly implemented by all neighbouring States for ensuring effective enforcement, sustainable fisheries and thereby enhancing fish production

Curb Demand for Juveniles Fishes

- By regulating use of commercially important fishes by such entities engaged in production of fish meal & manure

Kerala-Future prospective



Promotion of diversification of species specific fishing technologies in Marine sector.

Conservation of fishery in continental shelf area by reducing the fishing effort.

Waste reduction and more quality assurance in catch, Development of an efficient marketing, quality assurance and value addition infrastructure facilities.

Gap filling in Coastal Social and Fisheries Infrastructure Development.

Development of Coastal eco-development committees under SFMC for participatory management of coastal eco tourism activities.



**"WE HAVE SALT IN OUR
BLOOD, IN OUR SWEAT,
IN OUR TEARS. WE ARE
TIED TO THE OCEAN."**

— JOHN F. KENNEDY



THANK YOU!