



# MPEDA-NETFISH ANNUAL REPORT 2022-23







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NETWORK FOR FISH QUALITY MANAGEMENT AND SUSTAINABLE FISHING  
(NETFISH)

(MPEDA, Ministry of Commerce & Industry, Govt. of India)  
Vallarpadam P.O., Kochi-682 504

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## **NETFISH Annual Report 2022-23**

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## ACRONYMS

FY- Financial Year

SC - Scheduled Caste

ST- Scheduled Tribe

IISS- India International Seafood Show

CSR- Community Social Responsibility

FIMSUL- Fisheries Management for Sustainable Livelihoods

CCRF- Code of Conduct for Responsible Fisheries

MFRA- Marine Fisheries Regulation Act

MOU- Memorandum Of Understanding

PMMSY- Pradhan Mantri Matsya Sampada Yojana

FH-Fishing Harbour

EU- European Union

ATM - Automated Teller Machine

HCL - Hindustan Computers Limited

LC- Landing Centre

GIDC - Gujarat Industrial Development Corporation

SIC - Scientist In Charge

MM&T - Marine Mammal & Turtle

TED - Turtle Excluder Device

SHG - Self Help Group

SCO - NETFISH State Coordinator

FV - Fishing vessel

QC - Quality Control

APU - Azim Premji University

ICCD - International Coastal Cleanup Day

HED - Harbour Engineering

HDCs -Harbour Data Collectors

IUU - Illegal Unreported Unregulated Fishing



## 1. EXECUTIVE SUMMARY

### MAJOR ACTIVITIES

- In the FY 2022-23, the NETFISH conducted 4646 nos. of extension activities, including awareness classes, hands-on training, demonstrations, stakeholder meetings, and collaborative programs, to improve the quality of marine fishery products, ensure sustainability of the industry and improve livelihood of fishers.
- Carried out 866 programs under NETFISH General Grant-in-aid fund, focusing mainly at fishing harbours and landing centers to reduce post-harvest losses and conserve fishery resources. Of these, 652 programs were fishing harbour-based, 79 were stakeholder meetings, 115 were dry fish development trainings,
- Celebrated the International Coastal Clean-up Day on the theme "Swachh Sagar Surakshit Sagar" in July-September 2022 by conducting 14 beach/coastal clean-up programs along the 9 coastal states and Pondicherry UT in association with NGOs, government agencies, schools, colleges, and fishery stakeholder groups.
- A total of 107 Seafood unit training programs were conducted, to enhance the understanding of processing workers and technologists on hygienic practices in the workplace.

These programs organized by collecting training fees helped NETFISH to gain Rs. 10.70 lakh as external income.

- Through the MPEDA SC fund, a total of 349 programs were carried out in the regions of West Bengal, Odisha, Karnataka and Kerala. These programs encompassed various initiatives such as harbour-based activities, week-long skill development sessions, value addition programs, sea safety programs, and black clam trainings. Furthermore, as part of the program, 1052 insulated fish boxes were distributed to boat owners belonging to SC communities in West Bengal and Odisha. Also, facilitated a two-day ornamental fish training program for SC fishers in Pondicherry, and an exposure visit for SC fishers in West Bengal to attend IISS 2023.
- Utilizing the MPEDA ST fund, NETFISH facilitated for an exposure visit of 18 fishers from Lakshadweep to Kolkata for attending the IISS 2023, interacting with Japanese buyers regarding quality of tuna and visiting seafood factories.
- Under the CIFT SCSP program, NETFISH received a grant of 20 lakh rupees which was utilized for conducting 105 capacity building programs including harbour based



programs, dry fish programs, black clam processing trainings and value addition trainings for SC fishers in West Bengal, Odisha, Kerala and Karnataka. Also, distributed 35 nos. of aluminium vessel to the black clam fishers at Vaikom area and 12 nos. of life jackets to the SC fishers at Kakdwip.

- Organized 10 nos. of capacity building programs on fish quality management, responsible fishing and sustainable management in the marine fisheries sector for the fisher folks in Paradeep Odisha, utilizing the CSR fund of Paradeep Port Trust.
- Using the FIMSUL project fund received from Fisheries Dept. of Pondicherry, 20 nos. of training programs were conducted to upgrade the skills of the personal who are employed in the field of fisheries and those who venture fishing as their occupation. Trainings on CCRF, MFRA, Food Safety and Ornamental fish and a field visit were arranged for the fishers.
- NETFISH had signed an MOU with CIFNET in April 2022 for conducting joint training programs for the welfare and socio-economic upliftment of the fishers, as well as resource conservation and post-harvest quality management by imparting adequate skill development training programs under PMMSY scheme. Further, NETFISH Maharashtra North and Gujarat region had coordinated and sent 72 fishers for attending 3 nos. of tuna long line training programs at CIFNET, Kochi.
- Organized 2 training programs on 'Value added fishery product preparation and Hygienic handling' at Dive Kevani Village, Thane on 17 & 18 May 2022,

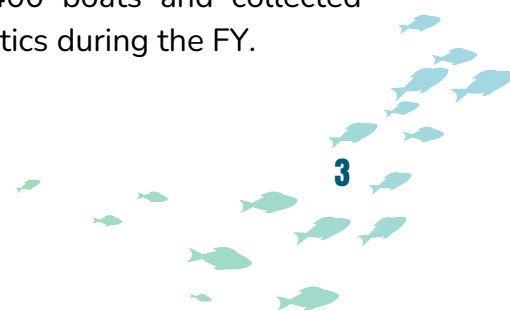
with the financial assistance from Mangrove Foundation of Maharashtra.

- NETFISH received Rs. 1 lakh grant from Munambam Harbour Management Society for conducting capacity building programs. The program at Munambam was inaugurated on 29th July 2022. A total of 200 pairs of rubber gloves and 94 set of uniforms consisted of Track suit and T-shirt were distributed to the workers in the harbour.
- In the project 'Marine Mammal Stock Assessment in India' sanctioned by DoF under the PMMSY scheme, surveys to understand on the by-catch of marine mammals/turtles were conducted by NETFISH twice in this year, interviewing 11805 fishers at 138 selected landing sites across the 9 coastal states. Besides, 50 seagoing fishers were identified and engaged as Marine observers in the project for at sea data collection on marine mammals/turtles sightings and fishery interactions. During February-March 2023, 15 sightings and 18 fishery interactions were reported by them.
- Carried out real-time data collection from 97 selected harbours/landing centres and reported 8,19,879 tonnes of catch landings and 3,83,051 nos. of boat arrivals. Data on species-wise fish rate from 35 landing sites was provided to NFDB on weekly basis and thus received Rs. 6.93 lakh as external income during the year.
- The fishers were given regular awareness through HDCs at the respective harbours, by conducting 2856 nos. of programs. Also, awareness messages were disseminated through Whatsapp groups formed at harbours.



## MAJOR IMPACTS

- The pre-cooling practice is adopted in more fishing vessels by which post-harvest loss has reduced by ~10% and the fishers are getting 15-35% more value in auction due to improved quality & appearance of fish.
- Some of the exporters after availing NETFISH training have started export of value added cephalopods to EU countries and the unit value has increased. The price of cephalopods has increased by Rs.200/- to 350/- per kg at harbours as well.
- Minimum support price for pomfret in 7 coastal districts of Maharashtra has increased after two years.
- 150 fish handling workers of Beypore & 34 nos. of fish handling workers of Vypin fishing harbours have adopted dress code for working inside the harbour.
- Fishers use sheets, baskets, net boxes, crates etc. to keep fish for sorting and auctioning at the harbour thereby minimizing the contact with floor and use hand gloves and gum boots while handling fish and ice. Fishers intensified the use of trolleys and crates for handling catch and pack the material with sufficient quantity of ice without keeping on floor.
- The SEAI, Kerala region had sponsored 10 numbers of crate baskets to the harbour workers at Sakthikulangara FH and M/s. Torri Harris had sponsored 10 numbers of rubber mats at Azheekkal harbour, Kayakulam for the sorting of export variety species without dumping on floor.
- Fishers at Alibaug harbour had purchased conveyor for hygienic ice handling. In Visakhapatnam & Kakinada harbours the fishers attach a tarpaulin to the ice crusher to transfer ice directly to fish hold, avoiding floor contact.
- Facilitated the implementation of coin operated Water ATM at Thoppumpady Fishing harbour with the financial support of Cochin Shipyard Ltd. and Cochin Port Trust and the harbour users are now getting potable water at a cheap rate of Rs.1 per litre.
- The Vizag Port Trust had arranged 4 nos. of high mast lights and CCTV cameras in the harbour, due to NETFISH intervention.
- 90% of fishers of Vizag harbour use tarpaulin sheets for fish drying in place of bare lands. The fisherwomen from Pajpandhari village, Harnai use wooden pole structure covered with net to hang fish for drying. Dry fishers at Umargam use plastic sheets, tub and basket for hygienic handling of fishes.
- More trawlers in Paradeep, Dhamara, Bahabalapur, Sakthikulangara, Harnai, Chapora and Porbandar have obtained square mesh cod ends and using it.
- More fishers have started bringing back plastic from sea for safe disposal at land.
- Facilitated in initiating the project DROP at Munambam harbour for the removal of plastic from sea, with funding from HCL. Currently implemented in 50 trawl boats out of 400 boats and collected 400 kgs of plastics during the FY.



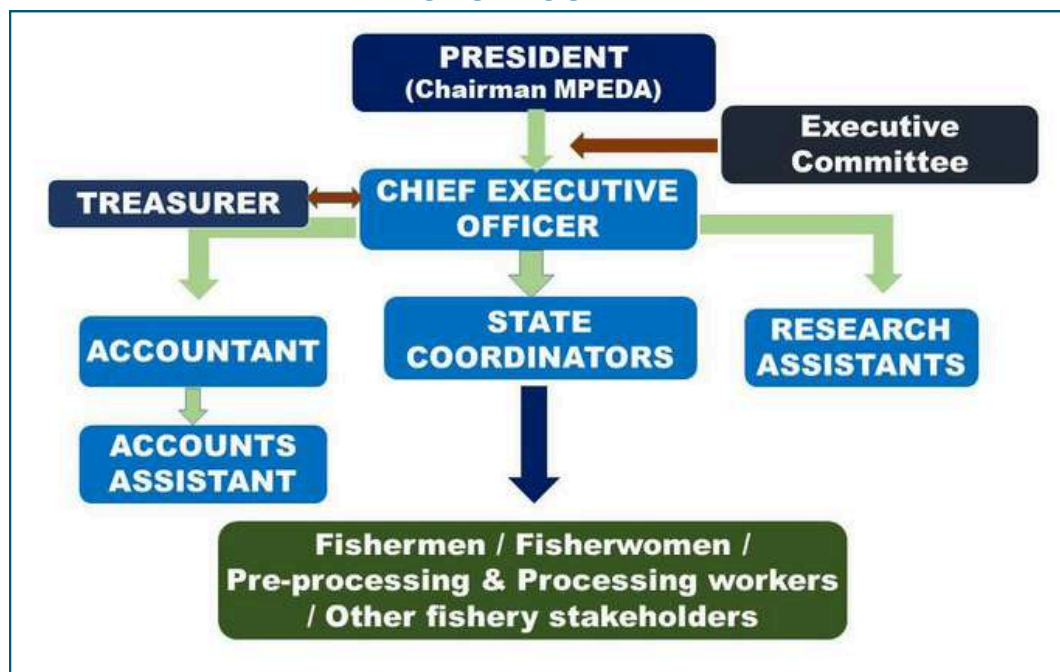


## 2. NETFISH PROFILE

Network for Fish Quality Management and Sustainable Fishing (NETFISH) is a society formed in 2006 under the aegis of Marine Products Export Development Authority (MPEDA), Kochi. MPEDA-NETFISH functions as the extension arm of MPEDA in capture fisheries sector and supports in improving the quality of fishery products exported from the country and the sustainability of fishery resources as well. MPEDA-NETFISH

Head Office is located at Vallarpadam, Kochi. The Chairman of MPEDA is the President of MPEDA-NETFISH and the Chief Executive Officer is the Officer-in-Charge of the society. MPEDA-NETFISH have its State Coordinators in all the 9 maritime states of India, attached to the respective MPEDA offices in that state, to execute the capacity building training programs in the marine capture fisheries sector.

### ORGANOGRAM



### ACTIVITIES & SERVICES

- Organizes capacity building programs among fishers, fish handlers, processing workers and other stakeholders by networking with fisher societies, federations and other governmental and non-governmental organizations in all the nine maritime states of India.
- Conducts fishing vessel and fishing harbour based awareness programs to inculcate good handling and sustainable

fishing practices to reduce post-harvest loss, augment supply of good quality fish for more export and ensure future fish resource availability for export.

- Provides training to pre-processing & processing centre workers on good handling practices, sanitation and personal hygiene to maintain the quality at par with the guidelines of importing countries

- Conducts awareness programs for dryfish workers and SHGs to improve the quality of the dry fish production, thus improving dry fish export from the country.
- Conducts Skill Development Programs on Square mesh cod end, Tuna onboard handling and processing, Sea safety and navigation, Value addition of fishery products etc.
- Arranges street plays, door to door campaigns, rallies, medical camps, school programs, exposure visit, etc. on need basis.
- Joins hand in Swacchh Bharat mission by conducting Harbour/Coastal Clean-ups and initiating various plastic eradication programs with the support of fishers.
- Organizes stakeholder workshops & meetings for changes in the sector.
- Runs collaborative programs/ projects with NFDB, ICAR-CIFT, ICAR-CMFRI, CIFNET, FSI, NIFPHATT, State Fisheries Departments, Forest Departments, Port Trusts, and Universities.
- Conducts exclusive capacity building activities for the welfare of SC/ST fishers of the country.
- To address traceability, collects real time data on boat arrivals, catch landings and fish rate from about 100 major landing sites in India, on a daily basis and maintains the database.
- Involves in Marine Mammal and Turtle Conservation network by collecting data on their occurrence and by-catch at sea.

### 3. PROGRAM TARGET:2022-23

S. N.	Type of program	West Bengal	Odisha	Andhra North	Andhra South	Tamilnadu North	Tamilnadu South	Kerala South	Kerala North	Karnataka	Maharashtra South & Goa	Maharashtra North	Gujarat	Total
1	<b>MPEDA GRANT-IN AID GENERAL FUND PROGRAMS</b>													
a	Fishing harbour based program	20	20	80	80	80	80	40	100	60	80	80	80	800
b	Dry fish based program	10	10	20	20	20	20	0	0	20	20	20	20	180
c	Special programs	1	1	1	1	1	1	1	1	1	1	1	1	12
	<b>Total</b>	<b>31</b>	<b>31</b>	<b>101</b>	<b>101</b>	<b>101</b>	<b>101</b>	<b>41</b>	<b>101</b>	<b>81</b>	<b>101</b>	<b>101</b>	<b>101</b>	<b>992</b>
2	<b>MPEDA SC/ST WELFARE FUND PROGRAMS</b>	110	140	0	0	0	0	60	0	20	0	0	0	330
3	<b>EXTERNAL FUNDED PROGRAMS</b>													
a	CIFT SCSP Fund Program	43	22	0	0	0	0	2	0	10	0	0	0	77
b	Seafood unit training program	5	5	5	5	5	5	5	5	5	5	5	5	60
c	Paradip Port Trust CSR fund		10											10
	<b>GRAND TOTAL</b>	<b>189</b>	<b>208</b>	<b>106</b>	<b>106</b>	<b>106</b>	<b>106</b>	<b>108</b>	<b>106</b>	<b>116</b>	<b>106</b>	<b>106</b>	<b>106</b>	<b>1459</b>



## 4. STATEWISE ACTIVITIES & ACHIEVEMENTS 2022-23

Table: Activities Conducted by MPEDA-NETFISH during FY 2022-23

S.N	Type of program	West Bengal	Odisha	Andhra North	Andhra South	Tamilnadu North	Tamilnadu South	Kerala South	Kerala North	Karnataka	Maharashtra South & Goa	Maharashtra North	Gujarat	Total
<b>1</b>	<b>NETFISH FUNDED PROGRAMS</b>													
a	Harbour based program	6	22	61	75	39	50	19	100	56	64	80	80	652
b	Dry fish development program			12	7	15	22			14	5	20	20	115
c	Special program	1	1	1	1	2	1	1	5	1	2	1	3	20
d	Stakeholder meeting	13		4		4	5	12	8	1	2	20	10	79
<b>2</b>	<b>MPEDA SC/ST FUND PROGRAMS</b>													
a	Harbour based program	81	120					21						222
b	One week skill development training		19											19
c	Dry fish development program	20												20
d	Value addition training	5						20		20				45
e	Sea safety & navigation training	5												5
f	Black clam training	0						31						31
g	Ornamental fish training	0				1								1
h	Exposure visit	1												1
i	Distribution of Insulated Fish boxes	5												5
<b>3</b>	<b>EXTERNAL FUNDED PROGRAMS</b>													
a	CIFT SCSP													
	Harbour based program	38	22											60
	Dry fish development program	17												17
	Value addition training	3								23				26
	Training on hygienic handling of black clam for export							2						2
b	Seafood unit training program	14	6	21	6	4	5	1	1	4	3	8	34	107
c	Paradeep Port Trust funded program		10											10
d	Maharashtra Mangrove Foundation funded program											2		2
e	Munambam Harbour Management Society funded program								2					2
f	Pondicherry-FIMSUL-program					20								20
g	Joint Training with CIFNET, Kochi											1	2	3
h	Marine Mammal Project-Marine Observer Training	4	1	3	3	5	4	4	3	5	5	3	6	46
<b>4</b>	<b>OTHER ACTIVITIES</b>													
a	Awareness classes/Meetings conducted by HDCs	516	11	50	73	42	32	32	22	38	181	32	35	285
						8	7	6	3			4	9	6
b	Training & Evaluation of HDCs	13	3	5	0	14	26	10	13	17	9	24	15	149
c	Participation in meetings/classes/activities organized by others / official's visits	13		21	4		7	25	22	16	2	13	7	130
	<b>GRAND TOTAL</b>	<b>755</b>	<b>215</b>	<b>178</b>	<b>169</b>	<b>532</b>	<b>447</b>	<b>472</b>	<b>377</b>	<b>195</b>	<b>273</b>	<b>496</b>	<b>536</b>	<b>4646</b>

Fig: Category-wise activities conducted during the year

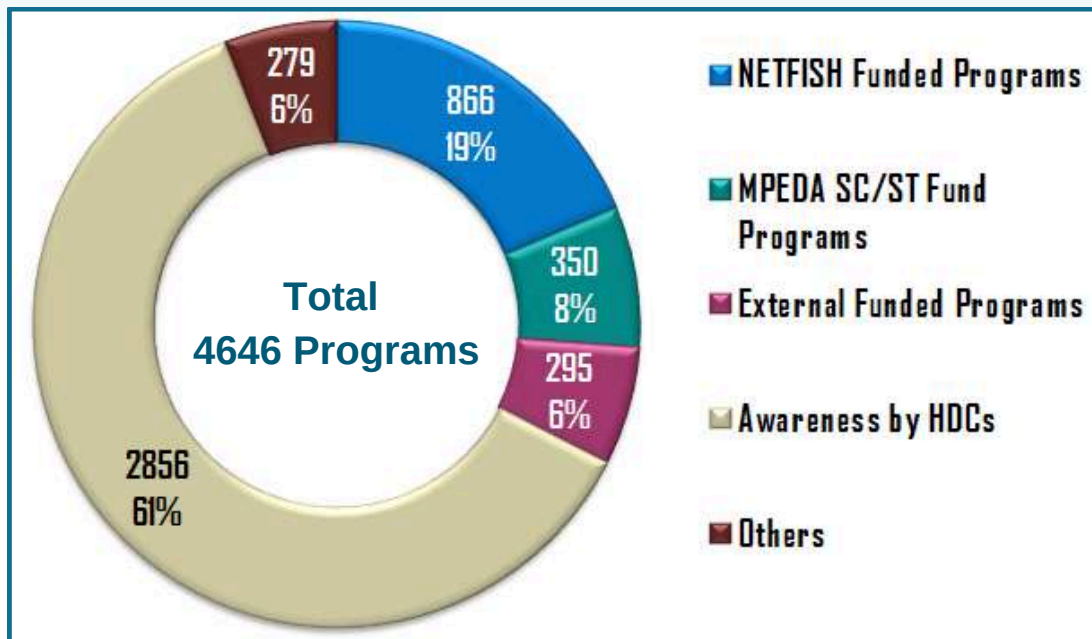
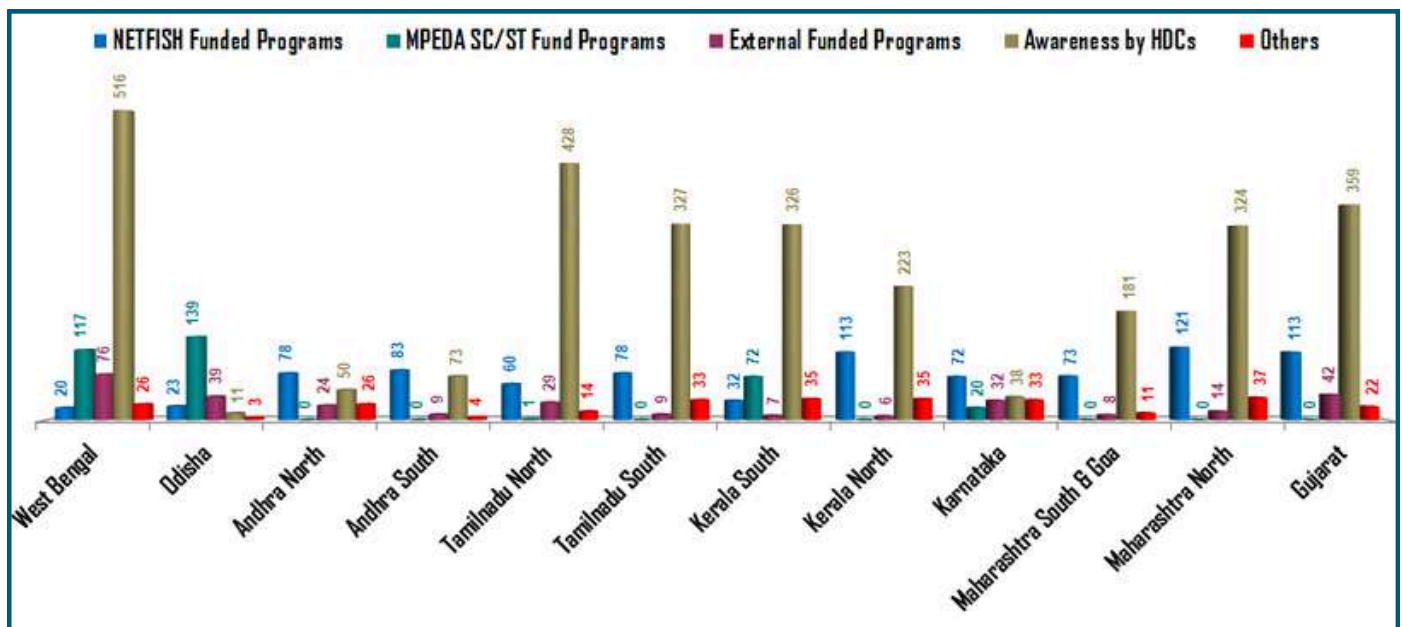


Fig: State-wise activities conducted during the year







## 4.1 GUJARAT

Sri. Jignesh Visavadia, State Coordinator, NETFISH has executed 536 programs along the coastal districts of

Gujarat, benefitting 5842 fishery stakeholders.

*Table: Programs conducted in Gujarat during 2022-23*

Sl.No.	Type of program	No. of programs	No. of Beneficiaries
1	Harbour based programs	80	1662
2	Awareness classes/Meetings conducted by HDCs	359	2348
3	Dryfish development programs	20	328
4	Coastal cleanup program	1	300
5	Exposure visit	1	2
6	Appreciation program	1	100
7	Seafood unit training program	34	974
8	Stakeholder meeting	10	80
9	Marine Mammal Project-Marine Observer Training	6	-
10	Joint Training with CIFNET	2	48
11	Training/Evaluation of HDCs	15	-
12	Participation in meetings/classes / activities organized by others	4	-
13	Coordination of visit of officials	3	-
	<b>Total</b>	<b>536</b>	<b>5842</b>

#### 4.1.1.HARBOUR BASED PROGRAMS

- Conducted 80 harbour/landing centre based programs, reaching 1662 beneficiaries including fishers, boat owners, crew members, captains of fishing vessels, etc. All the programs were conducted utilizing the NETFISH

general fund. Gumboot, gloves, shovel, box, crates, powder, cap, plastic sheets, brush, plastic boot, plastic basket and plastic tubs were given as aid materials in the programs as an encouragement to adopt hygienic handling practices.



Harbour / LC	No: of Programs	No: of beneficiaries
Veraval	45	926
Mangrol	17	376
Porbandar	18	360
<b>Total</b>	<b>80</b>	<b>1662</b>

*Table: Harbourwise Programs conducted*

#### Awareness by HDCs

- The Harbour Data Collectors at 8 landing sites have given regular awareness classes to boat owner/ crew member/ fishermen/ suppliers in their respective harbours to promote

hygienic handling, reduction of post harvest loss, sustainable fishing and conservation of marine mammals and turtles.





Harbour	No: of Programs	No: of Beneficiaries
Veraval	56	317
Mangrol	35	314
Porbandar	65	434
Chorwad	51	274
Okha	44	301
Vanakbara	83	560
Kotada	9	63
Jafrabad	16	85
<b>Total</b>	<b>359</b>	<b>2348</b>

Table: Harbourwise Programs by HDCs

## OUTCOMES AFTER TRAINING

- 30% fishing vessels in Veraval & 20% in Mangrol & Porbandar has adopted pre-cooling/quick chilling practice
- 30% fishing vessels in Veraval & 20% in Mangrol has adopted the practice of cleaning of fishing vessels using clean sea water brought during the fishing trip.
- All the fishing vessels in Mangrol, 40% in Veraval and 20% in Porbandar have stopped dumping plastic wastes into sea; instead they

bring back all the plastic wastes generated during the fishing trip for safe disposal at land.

- Cleanliness of booth, crates & utensils improved up to 30%.
- One person from Porbandar fishing harbour started using Square mesh cod end.

## IMPACT

- Due to adoption of pre-cooling practice and regular cleaning of fishing vessels, the earning per trip has increased by Rs. 50,000 to 1,50,000.





ON-BOARD PRE-COOLING PRACTICE



CLEANING OF FISHING VESSELS USING CLEAN SEA WATER



FISHERS BRINGS BACK PLASTIC WASTES DURING FISHING TRIPS



MAINTAINING CLEANLINESS OF BOOTH & CRATES





USAGE OF SQUARE MESH COD END BY PORBANDAR FISHER

#### 4.1.2. DRYFISH DEVELOPMENT PROGRAM

- For the improvement of fish drying activity 20 awareness programs were conducted for 328 dryfish workers in Umergam.

Plastic sheets, plastic baskets & plastic tubs were given to the trainees as a support to adopt the hygienic handling practices



OUTCOMES AFTER TRAINING

- 100 % dry fishers use plastic sheet to keep the raw material for sorting.
- 50 % dry fishers use ice to maintain raw material quality.
- 50 % dry fishers using clean water to wash the fish before drying.

- 10% dry fishers changed the packaging style of dry fish products.

#### IMPACT

- Increased over all dry fish quality and getting better price.
- Fetching Rs.50 to Rs.100/- more per kg. than traditional packaging.





USING PLASTIC SHEET FOR SORTING AND PROPER ICING OF THE RAW MATERIAL



PROPER CLEANING OF RAW MATERIAL AND IMPROVED PACKING OF FINISHED DRYFISH PRODUCTS

#### 4.1.3.COASTAL CLEAN-UP PROGRAM

- The event under the theme 'Swacch Sagar Surakshit Sagar' was held in Gujarat on the International Coastal Clean-up Day 2022, 17th September 2022, at Mangrol Chowpati Sea Beach, Junagadh District. The clean-up program was arranged in association with Shri. Kharwa Samaj, Mangrol, Shri. Mahavir Fisheries Cooperative Society, Boat Association, DSP association, Sagar Bharti Sansthan and Dept. of Fisheries, Mangrol.

Officials of Mangrol Municipality, Mangrol Police station, Marine Police, BRS college, Forest office, students of Parmesh Vidhyalaya, Jignasha Vidhyalaya, Primary School, Mahila Mandal and Fishers had actively participated in the event. Around 300 people have taken part in the program and were given T-shirts, caps, hand gloves, etc. All the participants jointly collected plastic wastes, marine litters, garbage from the beach.



INAUGURAL EVENT OF THE CLEAN-UP PROGRAM



PICKING UP THE PLASTIC WASTES FROM THE BEACH AREA &amp; STUDENT'S GROUP WITH THE COLLECTED WASTES

### IMPACT

- Around 20 tons solid and plastic wastes were removed from the beach area and created awareness among fishers about reducing

marine litters, minimal use of plastic, segregation at source and waste management.

#### 4.1.4. EXPOSURE VISIT

- Arranged an exposure visit to CIFT and College of Fisheries, Veraval on 20th June 2022 for the dryfishers and made them aware of preparation of

various types of drying methods, dry fish products, attractive packaging and better marketing.





**IMPACT**

- After viewing various kinds of dry fish products and solar dryer machine, the dry fishers changed

their old packing style and handling practices and due to this they are fetching better price.

**4.1.5. APPRECIATION PROGRAM**

- On 25th June 2022, NETFISH arranged a function at Mangrol and appreciated the captains of the vessel for bringing plastic waste from sea during the season. The President of Mahavir Cooperative Society, -

- President of Community, Ex-Authority member MPEDA and around 100 people including captains of vessel and boat owners were present on the occasion.

**IMPACT**

- More than 50 fishing vessels bring plastic waste to land at Mangrol fishing harbour on a daily basis. The Mahavir Fisheries Cooperative

Society, Mangrol give 1 litre cooldrinks to them as an inspiration and spend Rs.4000 to 5000 everyday for this project.

**4.1.6. SEAFOOD UNIT TRAINING PROGRAM**

- Conducted 34 training programs on hygiene and sanitation in the seafood processing units, reaching 974 beneficiaries including seafood

processing workers, supervisors and technologists. An amount of Rs. 3,40,000 was earned as training fees by these programs.





S.N	Name of the Processing Unit	Location	Program Date	No: of Beneficiaries
1	Sagar Samrat Sea food	Porbandar	17-06-2022	30
2	Nilesh Sea foods	Porbandar	22-07-2022	30
3	Goodwill Exports	GIDC, Veraval	09-10-2022	30
4	Soneri marine food	GIDC, Veraval	16-11-2022	30
5	Shivganaga Marine	GIDC, Veraval	02-12-2022	30
6	Bilal Fish Supplier	GIDC, Veraval	07-12-2022	30
7	Keshodwala foods Unit II	GIDC, Veraval	08-12-2022	30
8	Capital Fish Centre	GIDC, Veraval	15-12-2022	30
9	Gopal Sea Foods	GIDC, Veraval	16-12-2022	30
10	Keshodwala Foods	GIDC, Veraval	19-12-2022	30
11	Maruti Frozen Foods	Mangrol	20-12-2022	32
12	Sagar Marine Impex	GIDC, Veraval	22-12-2022	27
13	Sun Exports	GIDC, Veraval	23-12-2022	30
14	SK Foods	GIDC, Veraval	26-12-2022	25
15	Favourite Exports	GIDC, Veraval	28-12-2022	31
16	Asha Ganaga Exports	GIDC, Veraval	29-12-2022	30
17	Rahemat Fish Centre	GIDC, Veraval	30-12-2022	30
18	Winsor World Exports Unit II	GIDC, Veraval	03-01-2023	30
19	Sun Marine Exports	GIDC, Veraval	04-01-2023	30
20	Anjani Marine	GIDC, Veraval	06-01-2023	29
21	Star Marine Exports	GIDC, Veraval	16-01-2023	29
22	Vinta Cold storage	Mangrol	17-01-2023	30
23	Pesca Marine Product	GIDC, Veraval	19-01-2023	18
24	Somanath Marine Foods	GIDC, Veraval	20-01-2023	25
25	Keval Exports	GIDC, Veraval	23-01-2023	25
26	Win Marine Exports	GIDC, Veraval	24-01-2023	26
27	Deepmala Marine Exports	GIDC, Veraval	27-01-2023	33
28	Vanita Cold Storage	GIDC, Veraval	30-01-2023	30
29	H H Marine	GIDC, Veraval	31-01-2023	29
30	Zenith Exports	GIDC, Veraval	06-02-2023	28
31	Shyama Marine Export	GIDC, Veraval	07-02-2023	30
32	Rich Marine Exports	GIDC, Veraval	09-02-2023	25
33	New Faizan Food	GIDC, Veraval	13-02-2023	25
34	Raunaq Ice & Cold Storage	Mangrol	02-03-2023	29

*Table: Details of Processing unit trainings conducted in Gujarat during the year*

## OUTCOMES AFTER TRAINING

- 100% personal hygiene among processing plant workers
- Post-harvest loss reduced by 25% in processing plants
- Implemented Covid -19 Guidelines effectively

### 4.1.7. STAKEHOLDER MEETINGS

- Visited the office of Director of Fisheries on 10.08.22 at Daman UT and made discussion on Japan catch certificate scheme & Seal
- On 26.08.22, met the President & Members of Porbandar Boat association and discussed about plastic collection, vessel log sheet implementation and value addition program.
- Met the President of Bhidya Koli Samaj on 30.08.22 at Veraval and made discussion of plastic waste collection from Sea
- Had a discussion with DIG of Indian Coast Guard station on 19.09.22 at Porbandar on Developing Long line Deep Sea Fishing in Gujarat
- On 22.09.22, met dry fish purchaser and exporter at Umargam and discussed with them about Dry fish training for better fish quality and market
- On 28.09.22, visited CIFT Veraval and discussed with SIC on Value

## IMPACT

- Exporters are getting better price due to the improvement in product quality
- No export rejections during the period

added fishery products program especially from Ribbon fish, croaker fish, cat fish and other fish item to assist exporter for alternate market

- Met Ex. President of Boat Association and discussed about Value added program, visit to model fishing harbours in India, juvenile fishing etc.
- Conducted a meeting with Exporters on 18.01.23 at Veraval and discussed on seafood trainings and other activities by NETFISH
- Had a meeting with Tushar Kotia, AD, Dept. of Fisheries, Porbandar on 20.02.23 regarding NETFISH activity at Porbandar region and submitted proposal for financial assistance schemes.
- Had a discussion with Department of fisheries DIU UT on 06.03.23 regarding development of Vanakbara Harbour, MM&T survey, appointment marine observer, use of square mesh cod end, etc.



Meeting with Exporters

#### 4.1.8. MARINE MAMMAL PROJECT

- Carried out fishermen surveys twice during the year to understand on the by-catch of marine mammals and sea turtles. The phase 1 survey was conducted at 12 different landing sites, covering 1964 fishers whereas in the second phase survey 940 fishers at 7 locations were interviewed.
- For collecting data on at sea sighting and fishery interaction of marine

mammals and sea turtles, 6 fishers were engaged as Marine Observers in the state. For the marine observers 6 training programs were arranged, on identification of species and provided them with the Hand book consisted of pictures of various species of marine mammals and turtles. A sighting of spinner dolphins was reported by one of the marine observers



*Bycatch surveys by HDCs*



*Training to Marine Observer & Spinner dolphins sighted off Gujarat*



#### 4.1.9. COLLABORATIVE PROGRAM WITH CIFNET

- Coordinated in arranging 48 fishers and boat owners from Veraval for the 6 days Training program on 'Monofilament longline and tuna

handling onboard' held at CIFNET Kochi during 25th-30th April, 2022, 30th May to 4th June, 2022 and 25th-30th July 2022.



#### IMPACT

- Some of the fishers are willing to do longlining after converting their

vessel in to long liner so as to find better market for their fish catch.

#### 4.1.10. OTHER ACTIVITIES

- Coordinated the visit of Chairman & Director MPEDA to Gujarat during September 2022
- Coordinated the visit of Director, MPEDA to Veraval and Mangrol fishing harbours and arranged meeting with stakeholders on 15.05.22
- Coordinated the visit of JD (QC), MPEDA to Veraval Fishing harbour on 19.05.22
- Participated in the Harvest Mela cum Field Day Program organized by CMFRI, Veraval on 22.04.22
- Attended MPEDA Stall in the exhibition organized by NFDB on the occasion of World Fisheries Day

during 20th-21st Nov.2022 at Daman

- Attended online class on Plastic Waste Management organized by FICCI on 27.07.22
- Conducted trainings/meetings with HDCs with regard to collection of daily fish landing data, Marine Mammal & Sea Turtle bycatch survey data collection, fish quality management & conservation etc.
- Did the evaluation of performance of the HDCs at 4 locations
- Shared 226 awareness messages on a regular basis through the 13 Whatsapp groups at 10 harbours/LCs, each message reaching about 1400 stakeholders.

## 4.2 MAHARASHTRA - NORTH

Dr. Girija Saurabh Behere, State Coordinator, NETFISH has carried out 496 programs during the year, reaching

4166 beneficiaries along the coastal districts of Maharashtra North.

*Table: Programs conducted in Maharashtra North region during 2022-23*

Sl.No.	Type of program	No. of Programs	No: of Beneficiaries
1	Harbour based programs	80	1754
2	Awareness by HDCs	324	1344
3	Dryfish development programs	20	509
4	Coastal Cleanup program	1	150
5	Stakeholder Meetings	20	66
6	Seafood Unit Training program	8	278
7	Mangrove Foundation sponsored Value Addition Training program	2	42
8	Training to Marine Observers	3	-
9	Collaborative program with CIFNET	1	23
10	Training/Evaluation of HDCs	24	-
11	Participation in meetings/classes/activities organized by others	13	-
	<b>Total</b>	<b>496</b>	<b>4166</b>

### 4.2.1.HARBOUR BASED PROGRAMS

- Conducted 80 harbour/landing centre based programs, reaching 1754 beneficiaries including fishers, boat owners, crew members, fish and ice handlers, ice factory workers, fish sorters, fish suppliers, etc. All the programs were conducted utilizing the NETFISH general fund. Rubber

hand gloves, dotted gloves, gumboots, handwash, brush, plastic sheets, aprons, plastic baskets, first aid kit, liquid cleaner, pvc shovels and chlorine bottles were given as aid materials in the programs as an inspiration to adopt hygienic handling practices



Harbour/ LC	No. of Programs conducted	No. of beneficiaries
Arnala	26	640
Uttan	19	403
New Ferry Wharf	11	202
Alibaug	10	200
Satpati/Murbe	5	138
Vasai	4	69
Versova	2	43
Sassoon Dock	2	34
Dahanu	1	25
<b>Total</b>	<b>80</b>	<b>1754</b>

*Table: Harbourwise Programs conducted*

### Awareness by HDCs

- The Harbour Data Collectors at 10 landing sites have given regular awareness classes to Boat Owners, Boat Crew Members, Dry Fish Workers, Fish and Ice Handling Workers, etc. in their respective harbours, on topics such as hygienic handling onboard, importance of personal hygiene and sanitation, responsible fishing, icing, quick chilling, juvenile fishing, TED etc.

Harbour	No. of Programs	No. of Beneficiaries
Alibaug	37	127
Arnala	41	318
Dahanu	36	141
Satpati, Murbe	36	113
Sassoon Dock	25	78
New FerryWharf	38	173
Uttan	36	156
Vasai	36	131
Versova	39	107
<b>Total</b>	<b>324</b>	<b>1344</b>



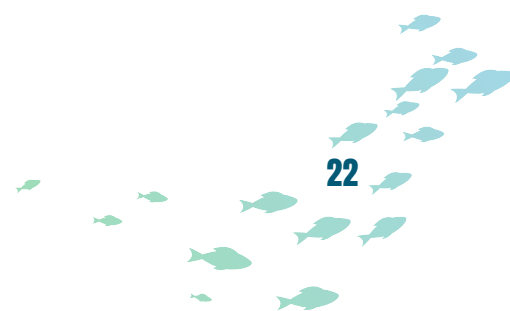


## OUTCOMES AFTER TRAINING

- During Feb.-Mar. 2023, around 68% of the total fishing vessels operated in the Sasson Dock harbour has opted precooling method.
- In Arnala and Versova the fishers use plastic sheets for keeping fish for sorting, avoiding floor contamination
- 50% fishers in Arnala, 35% in Satpati, 30% in Vasai, 20% in Versova, 50% in Uttan, 40% in Alibaug and 20% in Dahanu use cleaned and washed plastic baskets/ crates for keeping fish
- Nearly 5% vessels in New Ferry Wharf bring ribbon fish and squid in plastic crates filled with crushed ice (70 to 80%) and sea water (20-30%)
- 50% fishers in Satpati and 40% in Alibaug started proper icing of catch. Chutes are used to fill crushed ice directly into crates at Alibaug.
- 10-20% fishers in Uttan and 20% in Versova use hand gloves while handling fish. .
- Mumbai Port Authority regularly cleans the fish landing Jetty before loading and after unloading of fish. In Versova cleaning of harbour is taken up by Nakhawa Association.
- For the eradication of single use plastic, fishers bring back plastic wastes from sea to land for safe disposal. In Arnala, 30-40 boats bring back plastic from sea on a regular basis. Waste bins are kept onboard fishing vessels at Arnala. Beach clean-ups are done on a regular basis by Arnala Social Workers Welfare Association. Two NGOs collect these plastic wastes on every Sunday and dispose it off in proper manner.
- Fishers release sea turtles caught incidentally in their nets, back to sea

## IMPACT

- In New ferry wharf, the rate of squid has increased from 200-250/kg to 300 to 450/kg and that of ribbon fish from 50-80/kg to 120-160/ kg, for nearly 30 boats practicing precooling
- In Sassoon dock, adoption of precooling practice and use of plastic crates with ice and water inside has resulted in increased price of ribbon fish from 90-100/kg to 150-210/ kg
- Minimum fixed rates for pomfrets in Arnala, Uttan, Satpati and Vasai has increased to Rs. 1350 per kg for super grade, which were Rs. 1100-1200 per kg earlier.
- Gram panchayat, Arnala distributed 300 insulated fish boxes through Union Ministry Funding to fishers.





FISHERS USE PLASTIC SHEETS FOR KEEPING FISH & USE CHUTES TO FILL CRUSHED ICE DIRECTLY INTO CRATES



USE CLEAN AND WASHED PLASTIC BASKETS/PLASTIC CRATES FOR KEEPING FISH



USING HAND GLOVES FOR FISH HANDLING



FISHERS BRING BACK PLASTIC WASTES FROM SEA & USE OF WASTE BINS ONBOARD



#### 4.2.2. DRYFISH DEVELOPMENT PROGRAM

- Conducted 20 awareness programs to promote hygienic fish drying practices, benefitting 509 dry fish exporters, dry fish processing women, society members and workers in dry fish processing.

Rubber hand gloves, dotted gloves, gumboots, handwash, brush, plastic sheets, aprons, plastic baskets, first aid kit were provided to the trainees as a support to practice hygienic methods.

Location	No. of Programs conducted	No. of beneficiaries
Arnala	12	327
Satpati	3	78
Uttan	3	58
<b>Alibaug</b>	<b>1</b>	<b>16</b>
<b>Dahanu</b>	<b>1</b>	<b>30</b>
	<b>20</b>	<b>509</b>

Table. Areawise details of dryfish programs conducted



Awareness program at fish maws unit

#### OUTCOMES AFTER TRAINING

- >70% dryfish workers in Arnala have started using plastic sheets
- 30% fishers at Uttan, Alibaug, Arnala & Satpati, and 50% fishers at Dahanu have started using raised platforms covered with nets for fish drying
- In Arnala 50% women involved in fish drying business use plastic baskets instead of bamboo baskets
- Increased awareness among workers in 3 fish maws export units in Satpati. They use aprons and gloves during fish maws processing.
- 20-30% women in Arnala use hand gloves while fish preparation for drying



PICKING UP THE PLASTIC WASTES FROM THE BEACH AREA & STUDENT'S GROUP WITH THE COLLECTED WASTES

#### 4.2.3.COASTAL CLEAN-UP PROGRAM

- As a part of “Azadi ka Amrit Mahotsav”, MPEDA-NETFISH organized a Coastal Clean-up program commemorating International Coastal Cleanup Day 2022 at Arnala beach on 21st August, 2022 under the theme Swachha Sagar Surakshit Sagar. The program was conducted in association with Arnala Gram Panchayat, Arnala Social Work Welfare Association and Me Jagrut Bandarpadekar Group, Arnala. About 150 people including Officials of Indian Coast Guard, members of Arnala Gram Panchayat,

members of Arnala, Social Work Welfare Association, members of Me Jagrut Bandarpadekar Group, office bearers of fisherman cooperative societies, fishermen, boat owners, Harbour Data Collectors of NETFISH and many villagers had participated enthusiastically in the event. Fishers supported and responded positively for successful organization of this event. During the clean-up activity, five tractors of waste was collected and sorted through the Gram Panchayat.





**IMPACT**

- Fishers keep waste bins onboard fishing vessel at Arnala, Boats bring back plastic from the sea to land, Beach clean up by Arnala

**4.2.4. STAKEHOLDER MEETINGS**

- Had meetings with boat owners and state fisheries department officials at Sassoon Dock and State Fisheries Department Officials and Officials from Mumbai Port Authority at New Ferry Wharf on 27th May, 2022 regarding the objectives of NETFISH, changes required at harbour, data collection and marine mammal and bycatch survey.
- Held a meeting with the Licensing Officer from State Department of Fisheries and other officials, Members from Fisherman Cooperative Societies on 30th May, 2022 at Uttan, Thane regarding support from State Department of Fisheries for trainings of NETFISH.
- A meeting was held with the Secretaries from Fisherman Cooperative Societies at Versova, Mumbai Suburban on 3rd June 2022 regarding objectives of NETFISH, changes required at harbour, data collection and support required.
- Had a meeting with the newly elected Chairman, Arnala Fisherman Sarvoday Cooperative Society, Arnala and Board of Director Members regarding NETFISH activities and outcomes.
- Conducted a meeting on 15th September, 2022 with the Chairman, Manager, Dhi. Arnala Machhimar Vividh Karyakari Sahakari Sanstha and Board of Director Members regarding solar dryer project and impact of the training programs conducted by NETFISH MPEDA.
- On 13th October, 2022 a meeting was arranged with the Scientists and Technical Officers from CMFRI, Mumbai and Boat Owners from Arnala with the Clean Hedge team to discuss regarding possibility of collaboration and regarding finding beneficiaries for pilot scale project.
- Held a meeting with the Boat Owners and Fish Suppliers on 22nd November, 2022 at New Ferry Wharf, Mumbai in connection with Cholera issue faced by exporters. Cholera issue, sources of contamination, chances for cross contamination, washing of crates on regular basis by fish processors.
- A meeting was arranged on 24th November, 2022 with the Manager and employees of Arnala Machhimar Vividh Karyakari Sahakari Sanstha Maryadit, Arnala regarding solar drier project verification, installation and hygienic handling practices and impact assessment.

Social Workers Welfare Association on weekly basis and collection & recycling of wastes by Gram panchayat and NGOs in Arnala, Palghar.



- Held a meeting on 09th December, 2022 with the Me Jagrut Bandarpandekar social group regarding beach cleaning and plastic eradication and various issues of fishers at Arnala.

- On 14th December, 2022 a meeting was held with the Dry Fish Exporters from Uttan, Thane regarding exporting fish maws to various countries, unit price, efforts for more economic returns, hygienic handling of dry fish.

#### 4.2.5.SEAFOOD UNIT TRAINING PROGRAM

- Conducted 8 training programs on hygiene and sanitation in the seafood processing units, reaching 278 beneficiaries including managers, technologists, supervisors, Pre-processing workers, cold storage

workers & processing workers, cold storage workers, security staff, etc. An amount of Rs.80,000 was earned as training fees by these programs.

Sl. No.	Name of the Processing Unit	Location	Program Date	No. of Beneficiaries
1	Rizwan Ice and Cold Storage Pvt Ltd	Turbhe, Navi Mumbai	22.07.2022	40
2	Noor Ice and Cold Storages Pvt Ltd	Taloja, Navi Mumbai	25.07.2022	30
3	Sonia Marine Exports Pvt Ltd	Taloja, Navi Mumbai	27.07.2022	40
4	Castlerock Fisheries Pvt Ltd	Thane	30.07.2022	25
5	Gausia Cold Storage Private Limited	Taloja Taluka, Panvel, Raigad	5.08.2022	35
6	Seasaga Enterprises Pvt. Ltd. Unit 1	Rabale, Navi Mumbai	19.12.2022	36
7	Stellar Marine Food Processor India Pvt Ltd	Taloja District, Navi Mumbai	20.12.2022	35
8	Noor Ice and Cold Storages Pvt Ltd	Taloja District, Navi Mumbai	22.12.2022	37



Table. Details of seafood unit trainings conducted in Maharashtra North regions



**IMPACT**

- All seafood processing units suspended due to COVID-19 issue were revoked.
- Better sanitation and hygienic handling practices are adopted by processing unit staff.
- A few modifications in the unit has led to better hygienic conditions.

**4.2.6 VALUE ADDITION TRAINING-MANGROVE FOUNDATION FUNDED**

- Organized 2 training programs on 'Value added fishery product preparation and Hygienic handling' at Dive Kevani Village, Thane on 17th & 18th May 2022, with the financial assistance of Rs, 52,500/- received from Mangrove and Marine

Bio-Diversity Conservation Foundation of Maharashtra. A total of 42 participants, mostly the SHG members from Dive Kevni, Uttan, Tarodi, Chowk, Pimpalner and Vehele Villages from Thane District were benefitted by the training.

**IMPACT**

- Training led to improved skills of trainees and production of value-added fish products by hygienic handling for better livelihood income. One SHG from Dive and Kevni started production of value-added fish products and sale in domestic market.
- Mangrove Foundation of Maharashtra asked expert advice from the SCO for development of a new scheme for livelihood generation activity in the form of value addition in fish, for implementation in Maharashtra.

#### 4.2.7.MARINE MAMMAL PROJECT

- Carried out fishermen surveys twice during the year to understand on the by-catch of marine mammals and sea turtles. The phase 1 survey was conducted at 12 different landing sites, covering 497 fishers whereas in the second phase survey 471 fishers at 11 locations were interviewed.
- For collecting data on at sea sighting and fishery interaction of marine mammals and sea turtles, 3 fishers were engaged as Marine Observers in the state.
- For the marine observers 3 training programs were arranged, on identification of species and provided them with the Hand book consisted of pictures of various species of marine mammals and turtles. One of the Marine Observer had reported 5 fishery interactions of marine turtles.



BYCATCH SURVEYS



TRAINING TO MARINE OBSERVER



#### 4.2.8. COLLABORATIVE PROGRAM WITH CIFNET

- Coordinated in arranging 11 fishers from Satpati and 12 fishers from Satpati, Arnala and Uttan for the 6 days Training program on 'Monofilament longline and tuna



handling onboard' held at CIFNET Kochi during 25th-30th April, 2022 and 30th May to 4th June, 2022 respectively.



#### IMPACT

- Two fishers have applied for deep sea fishing vessel scheme under the

PMSSY with the state department of fisheries.

#### 4.2.9. OTHER ACTIVITIES

- Delivered an awareness talk on "Responsible Fishing and Quality Management" on the occasion of religious fishers' festival held at Arnala on 23rd April, 2022.
- Participated in the GloLitter Project National Task Force Workshop to develop final draft for IMO-Glolitter project, organized by Fishery Survey of India during 12-13 September, 2022 at Hotel Ambassador, Mumbai.
- Give an invited Talk on "Food Safety Act and Sanitation" in the One day PMMSY workshop on "Food Safety for Fisheries Enterprises" organized by College of Fisheries, Shirgaon, Ratnagiri and National Cooperative Development Corporation, Regional Office Pune at Ratnagiri on 24th January, 2023.

- Attended the International Seafood Show during 15th to 17th February, 2023 at Biswa Bangla Prangan, Kolkata, West Bengal.
- Attended MPEDA Stall Duty in the Swarajya Bhumi Global Konkan Festival held during 06th to 09th December, 2022 at Mumbai.
- Attended the Interagency Coordination Meeting on "Strengthening Wildlife Law Enforcement" in Western region organized by WCCB, New Delhi on 28th February, 2022 at Thane.
- Delivered an invited talk on "Fish Processing Technology with special reference to



Packaging” and attended MPEDA Stall Duty in the FISHTECH-2023 during 2nd and 3rd March, 2023 at Navi Mumbai.

- Delivered a talk on “Value added fish products” in the One day workshop organized by Blue Ocean Fish Cluster Palghar Foundation on 6th March, 2023 at Palghar.
- Given a talk and demonstration of Value-added fish products to ST beneficiaries in the One Day Workshop on Value Added Fish Products for ST Fishers and Farmer SHGs organized by MPEDA RD, Mumbai on 20th March, 2023.
- Coordinated the visit of Director, MPEDA, Secretary, MPEDA and Director, RGCA for the MPEDA Golden Jubilee Celebration at Mumbai.
- Conducted trainings/meetings with HDCs with regard to collection of daily fish landing data, Marine Mammal & Sea Turtle bycatch survey data collection, fish quality management & conservation etc.
- Did the evaluation of performance of the 9 HDCs engaged at the harbours/landing centres along Maharashtra North.
- Shared 292 awareness messages on a regular basis through the 11 Whatsapp groups at 10 harbours/LCs, each message reaching about 750 stakeholders.



BYCATCH SURVEYS



TRAINING TO MARINE OBSERVER



#### 4.2.10. PUBLICATIONS

Following papers and articles by Dr. Girija Saurabh Behere were published during the financial year 2022 23.

1. Impacts of nano/micro plastics on safety and quality of aquatic food products, Advances in Food and Nutrition Research, Academic Press, 2023, ISSN 1043 4526, <https://doi.org/10.1016/bs.afnr.2022.07.001>.

2. Secondary Raw Material and Low Cost Fish for Fish Meal Production and Its Implications in the Animal Feed Industry, Advances in Fish Processing Technologies, 1st Edition, Apple Academic Press, Pages 18, eBook ISBN 9781003300595, 10.1201/9781003300595 10

3. Matsya Prakriya. (Fish Processing) In: Krishi Kshetratil Prakriya Udyog Kosh (Marathi), (Encyclopedia on Agriculture Processing) Ed. U. D. Chavan, ISBN 978 81 94459 15 6

4. MPEDA NETFISH organizes awareness program on "Responsible fishing and quality management", In: MPEDA Newsletter, June 2022.

5. MPEDA NETFISH organized training programs on "Value added fish products preparation and hygienic handling", In: MPEDA Newsletter, June 2022.

6. MPEDA NETFISH conducted training program on "COVID 19 guidelines, hygiene and sanitation practices", In: MPEDA Newsletter, September 2022.

### 4.3 MAHARASHTRA –SOUTH & GOA

Sri. Santosh Kadam, State Coordinator, NETFISH has executed 271 programs,

benefitting 2708 fishery stakeholders in Maharashtra South & Goa.

*Table: Programs conducted in Maharashtra South & Goa during 2022-23*

Sl.No.	Type of program	Achieved	No. of Beneficiaries
1	Harbour based programs	64	1284
2	Awareness by HDCs	181	1027
3	Dryfish development programs	5	100
4	Coastal Cleanup program	2	168
5	Stakeholder Meetings	2	13
6	Seafood Unit Training program	3	116
7	Marine Observer Training	5	-
8	Training/Evaluation of HDCs	9	-
	<b>Total</b>	<b>271</b>	<b>2708</b>

#### 4.3.1 HARBOUR BASED PROGRAMS

- Conducted 64 harbour/landing centre based programs, reaching 1284 beneficiaries including fishers, boat owners, crew members, captains of fishing vessels, etc. All the programs were conducted utilizing the NETFISH general fund.

Rubber hand gloves, wooden brushes, liquid hand wash sachets, liquid soap dispensers and t-shirts were given as aid materials in the programs as an encouragement to adopt hygienic handling practices.



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Longitude: 73.279596  
Elevation: 55.12±12 m  
Accuracy: 10.7 m  
Azimuth: 40° (NE)  
Pitch: -12.7° (0.8°)

Table: Programs conducted in Maharashtra South & Goa during 2022-23

Harbour/LC	No: of Programs conducted	No: of beneficiaries
Mirkarwada	33	692
Devgad	19	355
Harnai	7	140
Chapora	5	97
<b>Total</b>	<b>64</b>	<b>1284</b>

#### Awareness by HDCs

- The Harbour Data Collectors at 10 landing sites have given regular awareness classes to fisher, boat owners, crew members/captains of fishing vessels in their respective

harbours to promote hygienic handling, reduction of post harvest loss, sustainable fishing and conservation of marine mammals and turtles





Table: Harbourwise programs conducted by HDCs during the year

Harbour	No: of Programs	No: of Beneficiaries
Harnai	14	76
Dabhol	21	110
Mirkarwada	21	125
Sakharinate	19	105
Devgad	19	102
Malvan	19	105
Chapora	13	76
Malim	20	129
Vasco	21	114
Cutbona	14	85
<b>Total</b>	<b>181</b>	<b>1027</b>

## OUTCOMES AFTER TRAINING

- About 350 fishers from 50 fishing vessels [16%] in Mirkarwada FH, 270 fishers from 45 fishing vessels [30%] in Devgad FH and 40 fishers from 8 fishing vessels in Chapora follow hygienic handling method by using rubber Hand gloves, liquid hand wash for maintaining hygiene and wooden brushes for deck cleaning.
- About 30 fishing vessels in Mirkarwada, 10 in Devgad, 30 in Harne and 30 in Chapora practice pre-cooling onboard
- Spreading fish on floor during auction has completely stopped in Harne, instead fishers are using plastic baskets.
- In Harne FH, About 50 fishing vessels use 40 mm square mesh cod end while catching Pomfret and Cuttle fish. In Chapora it is started using square mesh cod end in 2 fishing vessels.
- More number of fishing vessels in Harne started participating in plastic collection from sea to land

- In 80% of fishing vessels in Chapora, workers maintain hand hygiene and sanitation onboard.

### IMPACT

- Increase in the price of fish was observed. The squid rate has increased by about Rs. 40 per Kg. ie. from Rs.270/Kg to Rs. 310/Kg.
- Rejection rate of cuttle fish has decreased from 7 % to 3% by a voiding keeping the floor at Harne.



USING GLOVES, LIQUID HAND WASH AND WOODEN BRUSHES ONBOARD



PRE-COOLING PRACTICE ONBOARD FISHING VESSELS



USING SQUARE MESH COD END





FISHERS BRING BACK PLASTIC WASTES FROM SEA

#### 4.3.2 DRYFISH DEVELOPMENT PROGRAM

- Conducted 5 awareness programs to promote hygienic fish drying practices, benefitting 100 Dry fish processing fisherwomen.

Hand gloves, Liquid hand wash sachets, Liquid soap dispensers & Aprons were provided to the trainees as a support to practice hygienic methods.



Harbour/LC	No: of Programs conducted	No: of beneficiaries
Harnai	4	76
Devgad	1	24
<b>Total</b>	<b>5</b>	<b>100</b>

#### OUTCOMES AFTER TRAINING

- One Dryfish unit in Pajpandhari, Harne has surrounded the fish drying area by nets to prevent entry of pests, birds etc. and the ribbon fishes are hanged on bamboo stakes for drying.

#### IMPACT

- Rate of dried ribbon fish from the unit has increased from 220-250 to 250-300 rupees per kilogram.



#### 4.3.3 COASTAL CLEAN-UP PROGRAM

- On 8th September 2022, NETFISH in Association with Abhyankar Kulkarni Junior College, Ratnagiri had organized a beach cleanup program at Bhatye beach, Ratnagiri. Around 70 volunteers of NSS Wing, 6 Professors from A.K. Junior College, Ratnagiri, NETFISH HDCs & NETFISH SCo had participated in the program. A Rally was held from A. K. Junior College to Bhatye Beach with all the participants. Thereafter, the stretch of 1 Kilometer of the beach was cleaned by collecting about 1 Ton of plastic wastes. NETFISH distributed T shirts and Caps to all the participants. Oath was taken by all the participants not to throw plastic wastes in the nature; instead it will be discarded in dustbins.
- Another Coastal Cleanup program was conducted at Baina beach, Vasco, Goa on 10th September, 2022, with the support of Govt. Higher Secondary School, Baina-Vasco and Mormugao Municipality. Around 90 people including, 75 volunteers from N.S.S. wing of the School along with 5 Teachers, 7 Employees of Mormugao Municipality, Media reporters and NETFISH employees had taken part in the event. The program started with a rally from the Govt. Higher Secondary School to Baina beach. Afterwards all the participants had actively involved in cleaning the 1 km stretch of beach area. NETFISH distributed T-shirts and caps to 75 volunteers. An oath was taken by all the participants to drop plastic wastes only in dustbins to avoid polluting the nature.



*Beach cleaning at Bhatye*



*Clean-up event at Baina beach*



#### 4.3.4. STAKEHOLDER MEETINGS

- On 14.09.2022, held a discussion with Committee Members of Ratnagiri Jilha Machhimar Sangh, Pethkilla
- On 10.11.2022, had a meeting at Vasco with the members of Goa Fishing Boat Owner Association & Vasco Fishing Boat Owners -

-Marketing Cooperative Society Ltd. to introduce about NETFISH activities and to sensitize them about sustainable fishing practices and good handling practices.

#### 4.3.5. SEAFOOD UNIT TRAINING PROGRAM

- Conducted 3 training programs on hygiene and sanitation in the seafood processing units, reaching 116 beneficiaries including seafood

processing workers, supervisors and technologists. An amount of Rs.30,000 was earned as training fees by these programs.



Table: Details of Seafoodunit trainings conducted in Goa

S. No:	Name of the Processing Unit	Location	Program Date	No: of Beneficiaries
1	Corlim Marine Exports Pvt. Ltd.	Sancolem Industrial Estate, South Goa	09-12-2022	34
2	Quality Exports [Unit -II]	Cuncolim Industrial Estate, South Goa	04-02-2023	42
3	Quality Foods	Cuncolim Industrial Estate, South Goa	06-02-2023	40

#### IMPACT

- The factories have implemented checking raw material temperature at every stage of processing, proper icing to avoid loss of quality,-

-improved hand washing by workers at entry points and social distancing for workers.

#### 4.3.6. MARINE MAMMAL PROJECT

- Carried out fisher surveys to understand on the by-catch of marine mammals and turtles. The phase 1 survey was conducted at 7 different landing sites, covering 231 fishers whereas in the second phase survey 334 fishers at 10 locations were interviewed.
- For collecting data on at sea sighting and fishery interaction of

marine mammals and sea turtles, 5 fishers were engaged as Marine Observers in the state. For the marine observers 5 training programs were arranged, on identification of species and provided them with the Hand book consisted of pictures of various species of marine mammals and turtles.



#### 4.3.7. OTHER ACTIVITIES

- Delivered a presentation on the Topic “Role of NETFISH towards Maharashtra fishers & fish processing plant workers” in the Webinar organized by MPEDA RD Mumbai on 01.08.2022.
- Conducted trainings/meetings with HDCs with regard to collection of daily fish landing data, Marine Mammal & Sea Turtle by-catch -

-survey data collection, fish quality management & conservation etc.

- Did the evaluation of performance of the HDCs at the 10 locations.
- Shared 226 awareness messages on a regular basis through the 10 Whatsapp groups at 10 harbours/LCs, each message reaching about 665 stakeholders.





## 4.4 KARNATAKA

Sri. Narayana K.A., State Coordinator, NETFISH has arranged 195 outreach

programs in Karnataka, by which 3145 stakeholders were benefitted,

*Table: Programs conducted in Karnataka during 2022-23*

Sl.No.	Type of program	Achieved	No. of Beneficiaries
1	Harbour based programs	56	1235
2	Awareness classes/Meetings conducted by HDCs	38	396
3	Dryfish development programs	14	358
4	Coastal Cleanup programs	1	120
5	Stakeholder Meetings	1	31
6	MPEDA SC fund programs	20	400
7	CIFT SCSP fund programs	23	460
8	Seafood Unit Training programs	4	145
9	Marine Observers Trainings	5	-
10	Training/Evaluation of HDCs	17	-
11	Participation of SCO in meetings/classes organized by other agencies/departments (State Fisheries/Universities/ etc.)	14	-
12	Coordination of visit of officials from MPEDA & other Dept.	2	-
	<b>Total</b>	<b>195</b>	<b>3145</b>

### 4.4.1 HARBOUR BASED PROGRAM

- Conducted 56 harbour/landing centre based programs, reaching 1235 beneficiaries including fishers, boat owners, fishing crews, fish & ice handling workers, etc. All the programmes were conducted utilizing

the NETFISH general fund. Hand gloves were given as aid materials in the programs as an encouragement to adopt hygienic handling practices.



Harbour/LC	No. of Programs conducted	No: of beneficiaries
Malpe	32	701
Gangolli	9	192
Mangalore	4	92
Amdalii	3	71
Honnavar	3	68
Karwar	3	64
Bhatkal	2	47
<b>Total</b>	<b>56</b>	<b>1235</b>

*Table: Harbourwise programs conducted during the year*

### Awareness by HDCs

- The Harbour Data Collectors at 9 landing sites have given regular awareness classes to the various stakeholders in their respective harbours to promote hygienic

handling, reduction of post harvest loss, sustainable fishing and conservation of marine mammals and turtles.

Harbour	No: of Programs	No: of Beneficiaries
Mangalore	4	41
Malpe	4	38
Gangolli	4	45
Bhatkal	5	52
Honnavar	4	39
Tadri	5	53
Belekeri	4	41
Amdalli	4	47
Karwar	4	40
<b>Total</b>	<b>38</b>	<b>396</b>

*Table: Harbourwise details of awareness programs by HDCs*





## OUTCOMES AFTER TRAINING

- Pre-cooling being practiced by 10 fishing vessels in Honnavar, 20 vessels in Gangolli and 25 vessels in Malpe
- Adoption of pre-cooling practice along with regular monitoring of raw material temperature in FV & Harbour has Improved the raw material quality in Malpe and Gangolli FH
- Temperature of fish is maintained below 4°C even during auctioning
- Fish and ice handling done only in crates/ plastic baskets
- Observed improved storing, packing and quick transportation of the materials

- Unidirectional flow of the raw material observed
- Improvements seen in hand washing
- Cleaning and sanitation and usage of gloves improved
- Plastic collection from the sea and safe disposal observed in fishing harbours
- Daily washing of harbour improved

## IMPACT

- Observed about 5-10% increase in fish/shrimp price
- Black spot decreased in chill killed shrimps



RAW MATERIAL TEMPERATURE IS MAINTAINED BELOW 4°C



PLASTIC COLLECTION FROM THE SEA AND DISPOSAL INTO WASTE BINS AT HARBOURS

#### 4.4.2 DRYFISH DEVELOPMENT PROGRAM

- Conducted 14 awareness programs to promote hygienic fish drying practices, benefitting 358 Dry fish processing fisherwomen and SHG members.

Hand gloves, plastic sheets were provided to the trainees as a support to practice hygienic methods.



Location	No: of Programs conducted	No: of beneficiaries
Karwar	3	72
Honnavar	4	95
Malpe	3	77
Mangalore	4	114
Total	14	358

#### OUTCOMES AFTER TRAINING

- Handling of dry fish improved
- Workers Personalhygiene improved
- Drying fish on the plastic sheets/nets observed in Kumta and Suratkal area

#### IMPACT

- 2 to 5% increment in net profit is observed



FISH DRYING WITH PROPER COVER IN KUMTA & ON THE NETS ABOVE THE GROUND LEVEL NEAR GUDDEKOPLU SURATKAL



#### 4.4.3 COASTAL CLEAN-UP PROGRAM

- An awareness class on 'Plastic waste menace and its management measures' followed by a 'plastic waste clean-up program' was organized at Panambur Beach, Mangalore on 12th August 2022. More than 120 participants including officials from MPEDA & NETFISH and members of the Lions Club and Yuva Vahini ® associations, Mangalore had taken part in the event.

T-shirts and Caps with official logos were distributed to the participants. A procession was held to the beach and thereafter more than 100 volunteers have actively cleaned the beach area. About 30 bags full of plastic wastes were collected, which were safely disposed by the Panambur Beach Development Committee's waste disposal vehicle.



#### 4.4.4 VALUE ADDITION TRAINING

- 43 Hands on trainings on preparation of various value added fishery products were conducted benefitting 860 SC fishers, of which 23 programs were conducted utilizing the MPEDA SC fund and 23 programmes under

the CIFT SCSP program. Hands on training given for preparation of different items such as Fish cutlet, Fish ball, Fish finger, Fish / Prawn pickle, fish fry, Breaded products etc. using low value fishes.



Location	No: of Programs	No: of Beneficiaries
Ankola	4	80
Gangolli	8	160
Karwar	2	40
Mangalore	12	240
Udupi	17	340
	<b>43</b>	<b>860</b>

## OUTCOMES AFTER TRAINING



- Entrepreneurship observed among few SHGs and younger SC fishers
- A few SHGs started preparing value added fish products and marketed in local markets
- Mrs. Bharathi (house wife) opened a small food stall near Padu Thonse, near Udupi, which is a back water tourist area and sell products such as ready to eat fish fry, dried shrimp powder and shrimp pickle. Her daily income increased to Rs. 1500-2000 during holidays.
- Mrs. Sundari and her team (SHGs) in Nittur, near Udupi prepare dried shrimp powder and shrimp pickle and selling to local people.
- Mrs. Gowri, (house wife) in Kaipunjel, near Kapu, preparing dried shrimp powder and shrimp pickle and selling to local people. She is earnings Rs. 2000-3000 additional income per month.



#### 4.4.5 SEAFOOD UNIT TRAINING PROGRAM

- Conducted 4 training programs on hygiene and sanitation in the seafood processing units, reaching 78 beneficiaries including seafood

processing workers, supervisors, QC & purchase personnel. An amount of Rs.40,000 was earned as training fees by these programs.



Sl.No.	Name of the Processing Unit	Location	Program Date	No: of Beneficiaries
1	Malpefresh Marine Export Private	Devalkunda, Kundapura	19.7.2022	50
2	Tolar Ocean Prouducts Pvt. Ltd.	Manur Fisheries Road, Kota	20.7.2022	35
3	Everest Seafoods Pvt. Ltd	Baikampady, Mangalore	28.7.2022	35
4	Yashaswi Fish meal & Oil Company Ltd	Baikampady, Mangalore	29.12.2022	25

#### IMPACT

- Management from M/s Malpefresh Marine Export Private requested for more trainings.
- No export rejections during the period

#### 4.4.6. MARINE MAMMAL PROJECT

- Carried out fishermen surveys twice during the year to understand on the by-catch of marine mammals and sea turtles. The phase 1 survey was

conducted at 9 different landing sites, covering 634 fishers whereas in the second phase survey 570 fishers at 9 locations were interviewed.

For collecting data on at sea sighting and fishery interaction of marine mammals and sea turtles, 5 fishers were engaged as Marine Observers in the state. For the marine observers 5 training programs were arranged, on identification of species and provided them with the Hand book consisted of

pictures of various species of marine mammals and turtles. Two sightings of Humpback dolphins were reported by the Marine Observer at Karwar during March 2023.



BYCATCH SURVEYS



TRAINING TO MARINE OBSERVER &amp; SIGHTING OF HUMPBACK DOLPHINS OFF KARWAR

#### 4.4.7. OTHER ACTIVITIES

- Attended the CRZ related workshop organized by APU on 27.12.22
- Attended National webinar on 'WTO Fisheries- Agreement organized by fisheries department, Govt of India
- Attended Seminar on Preventing Marine Litter and Plastic by FICCI on 27.05.22
- Attended the program on "Save the whale shark" campaign launch program organized by The Wildlife Trust of India on 30.08.22
- Attended Workshop on "Governmental programs for small and traditional fishers, and the access rights to coastal resources available for them" organized by Snehakunja Trust on 03.03.23



- Participated in the ICCD-Coastal clean-up program organized by Dept. of Earth Science on 17.09.22
- Attended Export Training Program organized by VTPC at Fisheries college on 19.12.22
- Gave a talk on "Hygiene and Sanitation in fishing harbours" for newly appointed "Sagarmitra" staffs of fisheries department at KVK Mangalore on 17.05.22
- Inspected and issued Ornamental fish health certificate for four export consignments from Bangalore in March 2023
- Coordinated the visit of Director MPEDA to Malpe FH, Mangalore FH and a modern shrimp farm near Kundapur and also arranged a meeting with Fisheries officials.
- Conducted trainings/meetings with HDCs with regard to collection of daily fish landing data, Marine Mammal & Sea Turtle by-catch, survey data collection, fish quality management & conservation etc.
- Shared 310 awareness messages on a regular basis through the 18 Whatsapp groups at 9 harbours/LCs, each message reaching about 535 stakeholders.



TRAINING TO HDCS &amp; MONITORING OF BY-CATCH SURVEY

## 4.5 KERALA -NORTH

Sri. Santhosh N.K., State Coordinator, NETFISH has executed 377 programs,

reaching 3357 fishery stakeholders in Kerala North region.

*Table: Programs conducted in Kerala North during 2022-23*

Sl.No.	Type of program	No. of programs	No: of Beneficiaries
1	Harbour based Programs	100	2182
2	Awareness classes/Meetings conducted by HDCs	223	837
3	Coastal Clean-up program	1	100
4	Plastic eradication program	4	105
5	Stakeholder Meetings	8	60
6	Seafood Unit Training Program (Paid)	1	23
7	Munambam Fishing Harbour Management Society	2	50
8	Marine Observer Trainings	3	-
9	Training/Evaluation of HDCs	13	-
10	Participation in meetings/classes/activities organized by others	20	-
11	Coordination of visit of officials from MPEDA & other Dept.	2	-
	<b>Total</b>	<b>377</b>	<b>3357</b>

### 4.5.1 HARBOUR BASED PROGRAM

- Conducted 100 harbour / landing centre based programs, reaching 2182 beneficiaries including fishers, boat owners, fish handling workers, union leaders / members etc. All the programs were conducted utilizing

the NETFISH general fund. Uniforms, gloves, plastic crates / baskets and fibre shovels were given as aid materials in the programs as an encouragement to adopt hygienic handling practices.





Harbour/LC	No: of Programs conducted	No: of beneficiaries
Beypore	25	513
Vypin	9	200
Puthiyappa	6	118
Munambam	18	332
Chettuva	20	519
Ponnani	10	253
Munakkakadavu	12	247
<b>Total</b>	<b>100</b>	<b>2182</b>

*Table: Harbourwise Programs conducted*

### Awareness by HDCs

- The Harbour Data Collectors have given regular awareness classes to the various stakeholders at 12 landing sites to promote hygienic

handling, reduction of post harvest loss, sustainable fishing and conservation of marine mammals and turtles.

Harbour	No: of Programs	No: of Beneficiaries
Vypin	2	7
Munambam	25	140
Chettuva	8	50
Munakkakadavu	12	54
Ponnani	24	112
Beypore	28	87
Puthiyappa	19	58
Chombal	1	4
Koyilandy	28	76
Mopla bay	24	53
Azhikkal	30	96
Cheruvathur	22	100
<b>Total</b>	<b>223</b>	<b>837</b>

*Table: Harbourwise Awareness Programs by HDCs*



## OUTCOMES AFTER TRAINING

- 150 fish handling workers (90%) in Beypore harbour, 50 workers (80%) in Puthiyappa harbour, 135 workers (70%) in Chettuva landing centre, 34 workers in Vypin harbour (100 %) adopted using dress code at work
- Pre cooling of the catch was adopted by 40 fishing vessels (8 %) in Beypore harbour and 8 fishing vessels in Ponnani harbour.
- Implemented the use of rubber hand gloves among the workers (90%) in Munambam harbour
- Continued the practice of keeping fish in boxes for auction at Munakkakadavu
- Implemented DROP (Drive to Remove Ocean Plastics) project at Munambam harbour jointly with Fisheries Dept., Munambam Harbour Management Society, Plan@Earth and fishers. HCL Foundation approved a funding of 2.5 Cr to NGO for next 3 years for the project. More than 50 trawl boats has joined the project and collected more than 1200 kgs of plastics from sea during their fishing trips.

- Munambam fishing harbour Management Society has sanctioned Rs.2 Lakh to NETFISH for conducting awareness programs during the year 2023-24

## IMPACT

- Adoption of dress code increased the speed of work by appx. 10 %. The worker's personnel hygiene has improved and their social acceptance also improved. Sense of being recognized and self-esteem improved among workers. It enhanced unity among workers as well.
- Catch rate increased by Rs. 5 to 15 per kg due to pre-cooling practice
- Use of hand gloves has strengthened the good fish handling practice and considerably reduced the hand injury from spines
- No plastic waste is going to the sea from the harbour



WORKERS IN BEYPORE HARBOUR BEFORE AND AFTER  
ADOPTION OF DRESS CODE





WORKERS IN VYPIN HARBOUR BEFORE AND AFTER  
ADOPTION OF DRESS CODE



PRE COOLING OF THE CATCH ONBOARD FISHING VESSELS

#### 4.5.2 COASTAL CLEAN-UP PROGRAM

- MPEDA-NETFISH organized a coastal clean-up program at Fort Kochi beach on 29th August 2022 under the theme 'Swachh Sagar Surakshith Sagar', commemorating International Coastal Clean-up Day 2022. Coastal clean-up, awareness meeting, awareness flash mob and an awareness walk were conducted as part of the program. NSS unit No 51 and Swachh Bharath, The Cochin College Fort Kochi, Indian Coast Guard District Head Quarters No4 (Kerala & Mahe), Kerala Police and Coastal Police Fort Kochi, Cochin

Corporation Ward 1, Cochin Heritage zone Conservation Society and Plan@earth NGO were associated with this cleaning program. About 75 NSS volunteers and others totalling to 100 persons participated in the entire program. The collected plastic wastes were given to Kochi Corporation for processing. NETFISH provided T-shirts, caps, hand gloves, food and refreshments to the participants in the program.



AWARENESS RALLY &amp; BEACH CLEAN-UP



CLEAN FORT KOCHI BEACH AFTER THE PROGRAM

#### 4.5.3 PLASTIC AWARENESS PROGRAMS AT MUNAMBAM

- Awareness programs were arranged in order to create awareness among fishermen and stake holders of Munambam fishing harbour about the marine plastic pollution and to encourage fishers to bring back the marine plastics from sea. On 10th Nov. 2023 about 30 students from Kalamassery public school conducted an awareness walk in the harbour with placards about plastic pollution and gave net bags to fishermen for keeping the collected plastic from sea. On 15th Nov. 2023, about 30 students from Global public school and The Choice School held an

awareness rally and distributed net bags to fishermen for keeping the collected plastic from sea. On 30th Nov. 2023, the inauguration of the distribution of net bags for marine plastic collection sponsored by three associations from the fishing harbour was done by giving net bags to fishermen in fishing boats. To popularize and enhance the marine plastics removal project DROP, 20 students from the Rural Academy of Management Studies, Cherai conducted a flash mob in the harbour on 31st January 2023.





**PLASTIC AWARENESS CAMPAIGN AND DISTRIBUTION OF NET BAGS AT MUNAMBAM**

### IMPACT

- These awareness programs had helped in the popularization of the DROP project. The fishers started to bring back the plastic and almost 1300 kg of marine plastic were

brought back by the fishers at Munambam fishing harbour. These plastic wastes were taken from the harbour for recycling and further processing by the NGO Plan@earth.

#### 4.5.4 STAKEHOLDER MEETINGS

- Held a meeting with JD (F) & Planet earth officials on 7.7.2022 at JDF office regarding making plan for plastic collection from sea
- Arranged a meeting with Fishermen, Auctioneers and Harbour Manager at Vypin on 21.7.2022 regarding dress code for fish handlers and keeping fish in baskets for auction
- Conducted a meeting on 18.8.2022 with the container section workers at Munambam regarding new dress code
- Had a discussion on 30.9.2022 at Chettuva with the Panchayat President, councilors, HED, Coastal Police, Fisheries dept., labour unions, fishers and other stakeholders and a committee named Chettuva FH Paripalana

Samithi including officials and members from stake holder groups was formed for better management of the harbour.

- Held a meeting with the Trawl boat owners association leaders at Munambam on 13.10.2022 getting subsidy from Dept. of Fisheries for square mesh cod ends.
- Arranged a meeting with the Dept. of Fisheries, HCL Foundation officials, Planet Earth NGO, MFHMS and stakeholders at Munambam on 26.10.2022 regarding the plastic collection project.



#### 4.5.5 SEAFOOD UNIT TRAINING PROGRAM

- Associated in conducted two training programs on hygiene and sanitation in the seafood processing units in Kerala South region, and

handled classes with power point presentation, short video shows, and practical demonstrations.



#### 4.5.6 MUNAMBAM FISHING HARBOUR MANAGEMENT SOCIETY FUNDED ACTIVITIES

- Munambam Fishing Harbour Management society sanctioned Rs. 100,000 to NETFISH to conduct training programs to workers and promote the dress code to more workers in the harbour. The program was officially inaugurated on 29th July 2022 by the Vice President of Pallippuram Grama Panchayat in a function presided over by Joint Director, Fisheries Department. In the function 200 pairs of rubber

gloves were distributed to fish and ice handling workers. Children of fish and ice handling workers who secured full A+ in 10th or 12th classes in the year 2022 were also honoured in the function. An awareness class by CIFNET official was also arranged. Awareness classes were given by MPEDA-NETFISH State Coordinator on personal hygiene and cleaning of



fish contact surfaces to the workers in the harbour. Forty seven container section workers in the harbour adopted the dress code consisted of T-shirts and Track pants. A total of 270 pairs of

good quality imported rubber gloves were distributed to the fish handling workers under the program.



DISTRIBUTION OF RUBBER GLOVES TO THE HARBOUR WORKERS AND AWARENESS CLASS BY NETFISH



DISTRIBUTION OF UNIFORM & THE CONTAINER SECTION WORKERS IN UNIFORM

#### 4.5.7 MARINE MAMMAL PROJECT

- Carried out fishermen surveys twice during the year to understand on the by-catch of marine mammals and sea turtles. The phase 1 survey was conducted at 11 different landing sites, covering 345 fishers whereas in the second phase survey 318 fishers at 10 locations were interviewed.
- For collecting data on at sea sighting and fishery interaction of marine mammals and sea turtles, 3 fishers were engaged as Marine Observers in the state.

For the marine observers, 3 training programs were arranged, on identification of species and provided them with the Hand book consisted of pictures of various species of marine mammals and turtles. Incidental entanglement of a live olive ridley turtle in trawl was reported by one of the marine observers during February 2023. The turtle was released back to sea.



BYCATCH SURVEY & TRAINING TO MARINE OBSERVER

#### 4.5.8 OTHER ACTIVITIES

- Regularly attended the Munambam Harbour Management Society Meetings
- Attended the Suchitwa Saagaram-plastic eradication project meetings organized by Fisheries dept. at Thrissur and Vypin
- Attended the CMFRI organized Stakeholders workshop on recent unhealthy trends in marine fisheries sector
- Delivered awareness classes on sustainable fishing and impacts of juvenile fishing in the programs arranged by Fisheries Dept. in Thrissur & Ernakulam Districts
- Attended the two days' workshop by Coast Guard on Response to oil spills at sea
- Attended the two days Pollution response program organized by Coast Guard in Kochi and also did a presentation on the efforts by MPEDA-NETFISH for marine plastic removal
- Attended the Sagarmala workshop in Kochi and gave suggestions to improve the fisheries sector



- Delivered an awareness class on Deep sea fishing, Quality standards for Export of Marine products to fishers in the program arranged by NCDC at NIFAM, Aluva
- Attended the two days sanitation training program by USFDA held at Chennai during January 2023
- Coordinated the visit of two IAS officers from DoF as well as the visit of Shri. Keerthi Vasan IAS (Odisha cadre) to Munambam harbour and explained them on the activities of the harbour, role and activities of harbour management society and about the extension activities of MPEDA-NETFISH in fishing harbours



## 4.6 KERALA -SOUTH

Smt. Sangeetha N.R., State Coordinator, NETFISH has conducted 472 nos. of

extension activities in Kerala South region, benefitting 5058 stakeholders.



Table: Programs conducted in Kerala South during 2022-23

Sl.No.	Type of program	No. of programs	No: of Beneficiaries
1	Harbour based Programs	19	406
2	Awareness classes/Meetings conducted by HDCs	326	2614
3	Coastal Cleanup program	1	200
4	MPEDA SC fund programs	72	1668
5	CIFT SCSP fund programs	2	35
6	Seafood unit training programs	1	55
7	Marine observer Training	4	-
8	Stakeholder Meetings	12	80
9	Training / Evaluation of HDCs	10	-
10	Participation in meetings/classes/activities organized by others	24	-
11	Coordination of visit of officials from MPEDA & other Dept.	1	-
	<b>Total</b>	<b>472</b>	<b>5058</b>

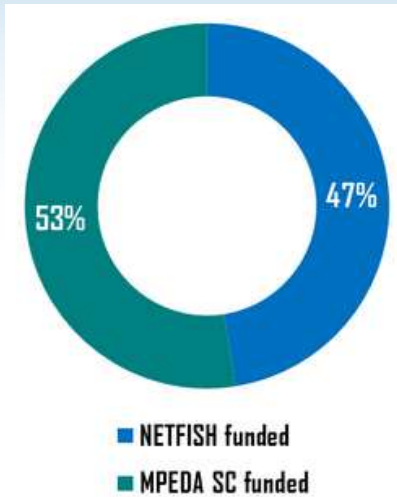
#### 4.6.1 HARBOUR BASED PROGRAM

- Conducted 40 harbour/landing centre based programs, reaching 393 beneficiaries including fishers, Boat owners, fish handling workers, auctioneers, middlemen, union leaders/members etc. The programs in Vaikom area were conducted for SC fishers utilizing the MPEDA SC fund whereas the other programmes were

conducted utilizing the NETFISH general fund. Plastic baskets, shovel, crates, gloves, rubber sheet, motor & hose were given as aid materials in the programs, as an encouragement to fishers for adopting hygienic practices.







Harbour/LC	No: of Programs conducted	No: of beneficiaries
Chellanam	3	60
Thottappally	2	40
Azheekkal Kayamkulam	7	155
Neendakara & Sakthikulangara	7	138
Vaikom area	21	639
<b>Total</b>	<b>40</b>	<b>1032</b>

Table: Harbourwise Programs conducted

### Awareness by HDCs

- The Harbour Data Collectors have given regular awareness classes to the various stakeholders at 8 landing sites to promote hygienic

handling, reduction of post harvest loss, sustainable fishing and conservation of marine mammals and turtles

Harbour	No: of Programs	No: of Beneficiaries
Thoppumpady	31	165
Thottapally	30	146
Azheekkal, Kayamkulam	27	149
Neendakara	117	1484
Sakthikulangara	25	140
Port Kollam	29	173
Muthalappozhi	33	172
Adimalathura	34	185
<b>TOTAL</b>	<b>326</b>	<b>2614</b>

Table: Harbourwise Awareness Programs by HDCs

### OUTCOMES AFTER TRAINING

- Pre-cooling/chill killing of the catch immediately after harvesting to reduce post-harvest loss has been adopted by 20 fishing vessels in Thoppumpady, 6 vessels in Azheekkal-Kayamkulam and 30 vessels in Neendakara during the year.
- 200 Long liner boats in Thoppumpady adopted wrapping of Yellow fin Tuna above 30 kg in plastic cover during storage in ice hold in order to regulate drip loss by no direct contact with ice.

- Fishers use plastic baskets instead of bamboo baskets in Chellanam & Kayamkulam harbours
- At Thottappally, the old country boats were shifted completely from the auction hall and now the auction hall is being fully utilized for auctioning.
- By the request of NETFISH, Torry Harries company sponsored 10 number of Rubber mat sheets at Azheekkal-Kayakulam harbour for sorting of export variety fishes, squids and Cuttle fishes and thus the practice of dumping of the materials on the floor is stopped.
- Regular cleaning of rubber mats & auction hall takes place at Kayamkulam harbour by the aid of motor & hose arranged by NETFISH. In Neendakara, regular cleaning of the auction hall, packing shed and parking area is done by using the new and modern pressurised cleaning vehicle procured.
- Empty boxes kept inside Sakthikulangara harbour were

removed and 92% of fish venders were evacuated from the auction hall.

- Harbour Engineering department provided hand washing facility, trolley ramps and side benches at Sakthikulagara FH and constructed a 500 LPH water ATM for the use of fishermen using the fund sponsored by NABARD
- CIFT sponsored 18 numbers of trolleys for the SC fishers at Neendakara.

### IMPACT

- The fishing vessels following pre-cooling practices are getting an average Rs. 30 more per kg.
- Appearance and quality of Tuna improved in the Long liner boats in Thoppumpady and thereby getting 30-40 rupees more per kg. Each boat is getting around 2 lakhs rupees more by adopting the method of wrapping of Yellow fin Tuna in plastic cover.



WRAPPING OF YELLOW FIN TUNA IN PLASTIC COVER BEFORE STORAGE IN ICE HOLD





FISHERS USING THE WATER ATM AT THOPPUMPADY

#### 4.6.2 COASTAL CLEAN-UP PROGRAM

- As part of the International Coastal Clean-up Day, the MPEDA-NETFISH in Kerala South Region conducted a coastal clean-up and awareness program on 7th August 2022 at Arthunkal beach in Alappuzha district. The Alappuzha Rupata Social Work Society, A Social Media companionship named 'Our Arthunkal Whatsapp Group', Arthunkal Basilica, Indian Coast Guard Kochi, Kerala University of Fisheries & Ocean Science (KUFOS) Kochi, Arthunkal Police Station and Arthungal Coastal Police, NSS unit of

Arthungal St. Sebastian's Higher Secondary School and local people had associated in the event. Around 300 people participated in the program. Various cultural programs including Vandhe Mataram dance performance and an awareness rally were also arranged. All the participants actively cleaned up the entire beach area. The plastic wastes collected were handed over to grama panchayath for shredding and recycling.



CULTURAL PROGRAM AND RALLY



BEACH CLEAN-UP &amp; THE PARTICIPANTS WITH THE WASTES COLLECTED

#### 4.6.3 SEAFOOD UNIT TRAINING PROGRAM

- Conducted two training programs on hygiene and sanitation in the seafood processing units, reaching 78 beneficiaries including factory

workers, supervisors, purchase officers, QC staff and Managers. An amount of Rs.20,000 was earned as training fees by these programs.



Table: Details of Processing unit trainings conducted in Kerala during the year

Sl.No:	Name of the Processing Unit	Location	Program Date
1	M/s. Silver star sea foods	Chandhiroor	20-12-2022
2	M/s. Aqua Genome Exports	Aroor	27-12-2022



#### 4.6.4 VALUE ADDITION OF FISHERY PRODUCTS

- Hands on training on the preparation of value added fish products such as cutlet, samosa, prawns parippuvada, momos, dried shrimp powder, dried shrimp roast, fish and prawns pickle, dried shark powder, kappa & fish curry etc. were conducted for the SC

fisherwomen in Vaikom area and nearby localities utilizing the MPEDA SC fund. Fishers were also taught how to maintain personal hygiene including hand washing procedure.

Location	No: of Programs	No: of Beneficiaries
Vaikom	2	49
Udayanapuram	6	120



#### OUTCOMES AFTER TRAINING

- After the training program one lady started a petty shop selling bajis, samosa, tapioca balls etc.
- A few ladies started to provide products to the 'Thozhilurappu workers' of their area and earning money.
- Two ladies from the SC community put up a stall selling value added fish products in a program in connection with the responsible tourism program organized by Udayanapuram Panchayath.



#### 4.6.5 BLACK CLAM TRAINING

- Fishers in Vaikom area and nearby localities in Kottayam, Kerala, engaged in black clam fishing and processing as their main source of livelihood were trained on hygienic handling and processing of black clam for the production of filth free black clam meat for export. The program included hands on training on hygienic handling, meat separation, cooking etc. of black clam for producing clam meats without soil and shell particles. Awareness on food and feeding of black clam, water quality, pollution, ways of

contamination in black clam and the necessity of keeping hygiene in black clam processing etc. were also given to the fishers. A total of 33 trainings were arranged benefitting 655 SC fishers, of which 33 programs were under the MPEDA SC fund and 2 were under the CIFT SCSP program. Utilizing the CIFT fund, black clam boiling aluminium vessels were also provided to the 35 SC Fishers women of Chempu Grama Panchayath in Vaikom area .

Location	No: of Programs	No: of Beneficiaries
Udayanapuram	9	180
Chemmanakary	3	60
Chempu	10	195
Thalayazham	3	60
TV puram	1	20
Alappuzha	2	40
Thykkattusery	5	100
<b>Total</b>	<b>33</b>	<b>655</b>







### OUTCOMES AFTER TRAINING

- The training was an eye-opener for the fishers and they have started handling the meat in a very hygienic manner which in turn can earn them better value for their products.
- By using the aluminum vessel the fishers could process more quantity of clam in less time. Time reduced by 50%. Energy consumption also reduced by 25%. The clam meat quality has improved.



### 4.6.6 MARINE MAMMAL PROJECT

- Carried out fishermen surveys twice during the year to understand on the by-catch of marine mammals and sea turtles. The phase 1 survey was conducted at 10 different landing sites, covering 604 fishers whereas in the second phase survey 428 fishers at 8 locations were interviewed. For collecting data on at sea sighting and fishery interaction of marine mammals and sea turtles, 4 fishers were engaged as Marine Observers in the state. For the marine observers 4 training programs were arranged, on identification of species and provided them with the Hand book consisted of pictures of various species of marine mammals and turtles.





BYCATCH SURVEY &amp; TRAINING TO MARINE OBSERVER

#### 4.6.7 STAKEHOLDERS MEETING

- To solve the issues regarding the renovation of the Thoppumpady harbour, a series of meetings were held with boat owners and all the union representatives, merchants and auctioneers. Finally it was decided to relocate the ice crushers to the area earmarked and the North side of this area was separated by providing a partition free of cost by M/s RDS Project Ltd as per the

request of ice dealers. It was decided to provide the area of auction hall from the 9th pillar to 17th pillar to the Fishing boats except Gill net boats. Net placed inside the auction hall was shifted and relocated the net mending workers to other place inside the harbour. All the problems are solved and started the renovation work.



#### 4.6.8 OTHER ACTIVITIES

- Delivered lectures on Fish Quality Management & Sustainable fishing in the awareness programs organized by Dept. of Fisheries at Chavara, Neendakara, Vaadi, Aalappad and Vettakkal in Alappuzha and Kollam districts.
- Coordinated the visit of Fisheries Department officials from Tamil Nadu to Thoppumpady fishing harbour.
- Evaluated the performance of the HDCs at 8 harbours/LCs
- Provided regular trainings to HDCs on collection of daily fish landing data and Marine Mammal & Sea Turtle bycatch survey data collection, fish quality management & conservation.
- Shared 234 awareness messages on a regular basis through the 9 Whatsapp groups at 9 harbours/LCs, each reaching around 650 stakeholders.



SCO ATTENDED THE SUCHITWA SAGARAM SUNDARA THEERAM STATE LEVEL  
INAUGURATION PROGRAM ON 8TH JUNE 2022



ATTENDING THE DEPARTMENT OF FISHERIES AWARENESS PROGRAMS AS RESOURCE PERSON

## 4.7 TAMILNADU -SOUTH

Dr. Vinoth S. Ravindran, State Coordinator, NETFISH has executed 447 extension programs along the coastal

districts of Tamilnadu South, reaching 3156 beneficiaries.

*Table: Programs conducted in Tamilnadu South regions during 2022-23*

Sl.No.	Type of program	No. of programs	No: of Beneficiaries
1	Harbour based programs	50	867
2	Awareness by HDCs	327	1534
3	Dry fish Development programs	22	435
4	Coastal Cleanup program	1	120
5	Stakeholder Meetings	5	20
6	Seafood Unit Training program	5	180
7	Marine Observer Training	4	-
8	Training/Evaluation of HDCs	26	-
9	Participation of SCO in meetings/classes organized by others	7	-
	<b>Total</b>	<b>447</b>	<b>3156</b>

### 4.7.1 HARBOUR BASED PROGRAM

- Conducted 50 harbour based programs, reaching 867 beneficiaries including mechanized/ traditional/ deep sea fishers, fish vendors/ boat owners, auctioneers, middlemen and union leaders/members. All the programs were conducted, utilizing

the NETFISH general fund. Plastic Basket, Shovel, Gloves, Gum Boots, Plastic Tubs, Squid Jigs, HDPE Tarpaulin sheets, were the various aid materials provided to the trainees during the programs.





Harbour/LC	No: of Programs	No: of beneficiaries
Thengapattinam	8	158
Tharuvaikulam	26	404
Tuticorin	8	145
Mallipattinam	8	160
<b>Total</b>	<b>50</b>	<b>867</b>

*Table: Harbourwise Programs conducted*

### Awareness by HDCs

- The Harbour data collectors at 9 selected harbours have carried out frequent awareness meetings and classes at their respective harbours to promote hygienic handling, reduction of post harvest loss, sustainable fishing and conservation of marine mammals and turtles.

*Table: Harbourwise Awareness Programs by HDCs*

Harbour	No: of Programs	No: of Beneficiaries
Thengaipattinam	53	315
Colachel	49	250
Chinnamuttom	12	53
Tuticorin	45	216
Tharuvaikulam	38	218
Mallipattinam	52	188
Kottaipattinam	13	39
Mandapam	31	123
Rameswaram	34	132
	<b>327</b>	<b>1534</b>



HDCS GIVING AWARENESS TO FISHERS

## OUTCOMES AFTER TRAINING

- Fishers use raised platform/poly sheets/plastic baskets for keeping fish for auctioning
- Around 75% of the Fishers and fish vendors at Tharuvaikulam have abstained from sorting the fishes with legs and slippers.
- Auction hall cleaning is done on a regular basis
- 30% deep sea fishers of Tharuvaikulam have adopted pre-cooling in their boats. The fishes are chill killed/slurry treated (2:1) and stored in good quality ice at 4 degree in the fish hold.
- Personal hygiene of the fishers and fish handling workers has improved.
- The practice of transporting fishes in plastic crates/plastic baskets has increased.
- Knowledge of Marine Mammal and Turtle conservation has improved and fishers release the protected animals caught incidentally in nets back into the sea in live condition
- Improved ice handling practices
- Pair trawling and IUU fishing is reduced
- Improved cleaning of fishing vessels and fish contact surfaces on regular basis

## IMPACT

- Less salmonella and vibrio contamination and fishers get extra Rs.5/kg due to good quality.
- Microbial contaminants and physical hazards in fishes have reduced considerably so that lesser rejections of consignments noticed.



FISHES KEPT IN PLASTIC BASKETS/ON SHEETS FOR AUCTION AT MANDAPAM & CHINNAMUTTOM

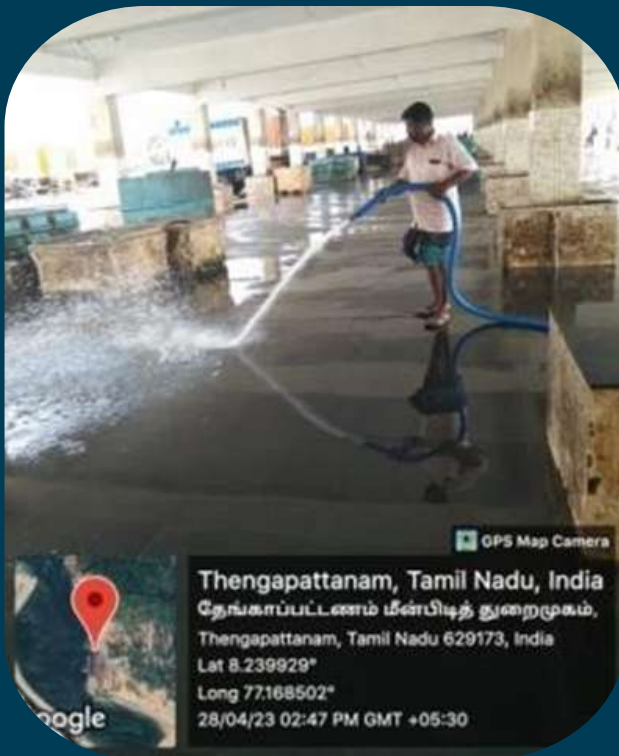




USE OF PLASTIC BASKET/BOXES FOR FISH STORAGE & TRANSPORTATION



TRANSPORTING LARGE FISHES BY COVERING WITH TARPAULIN TO PROTECT FROM SUN'S RAYS



REGULAR CLEANING OF AUCTION HALL AFTER WORK



USING CONVEYOR CRUSHERS TO REDUCE CONTAMINATION



#### 4.7.2. DRYFISH DEVELOPMENT PROGRAM

- Conducted 22 awareness programs to promote hygienic fish drying practices, benefitting 440 Dry fish processing fisherwomen, vendors,

SHG members and Merchants. Tarpaulins sheets were provided to the trainees as a support to practice hygienic methods.



Location	No: of Programs	No: of beneficiaries
Chinnamuttom FH -Region	6	120
Tuticorin FH -Region	10	200
Mallipattinam FH	6	120
<b>Total</b>	<b>22</b>	<b>440</b>

#### OUTCOMES AFTER TRAINING

- Fishers started fish drying on HDPE sheets instead of direct drying on floor.

#### IMPACT

- Hygienically dried fishes attract more dry-fish merchants and the dry-fish processors get enhanced revenue.





#### 4.7.3. COASTAL CLEAN-UP PROGRAM

- On 4th of August 2022, a Coastal clean-up event was organized at Roach Park and adjacent mangrove coastal area as part of the International Coastal Cleanup Day celebration 2022, in commemoration of the 75th year of Independence. Altogether 100 participants, including members from the Indian Coast Guard, faculties and NSS Students from the Fisheries College and Research Institute, NSS volunteers & Teachers from Subiah Vidyalayam Girls Hr. Sec School, Scientists from CMFRI, NGO Chevalier Victoria Roach Society,

Pearl City Nature Trust and Fishers from Therespuram & Inego nagar had participated in the event. Awareness was generated on the deleterious effects of plastics on the coastal and marine ecosystem. The participants were divided into different groups and engaged in cleaning up the coastal area around the Roach Park and the mangrove patches. About one ton of garbage including plastic sheets, bottles, nets slippers, thermocole were removed from the beaches.



#### 4.7.4 SEAFOOD UNIT TRAINING PROGRAM

- Conducted 5 nos. of training programs on hygiene and sanitation in the seafood processing units, reaching 180 beneficiaries including factory workers, supervisors, purchase officers, QC staff and Managers. An amount of Rs.50000/-

was earned as training fees by these programs. After the trainings, up-gradation in hygienic handling skills, personal hygiene protocols and machine maintenance etc. were observed.



Sl.No:	Name of the Processing Unit	Location	Program Date
1	M/s Asvini Fisheries Pvt Ltd	Palayakayal, Tuticorin	21-07-2022
2	M/s Ninans Pvt Ltd	SIPCOT, Tuticorin	22-07-2022
3	M/s Baby Marine (Eastern)Exports	Mandapam, Ramanadhapuram	20-08-2022
4	M/s VV Marine Pvt Ltd	Palayakayal, Tuticorin	10-03-2023
5	M/s Kader Exports Pvt Ltd	Keela arasaradi, Tuticorin	15-03-2023

Table: Details of Processing unit trainings conducted in Tamilnadu South during the year

#### 4.7.5 MARINE MAMMAL PROJECT

- Carried out fishermen surveys twice during the year to understand on the by-catch of marine mammals and sea turtles. The phase 1 survey was conducted at 22 different landing sites, covering 791 fishers whereas in the second phase survey 459 fishers at 10 locations were interviewed.
- For collecting data on at sea sighting and fishery interaction of marine

mammals and sea turtles, 4 fishers were engaged as Marine Observers in the state. For the marine observers 4 training programs were arranged, on identification of species and provided them with the Hand book consisted of pictures of various species of marine mammals and turtles.



TRAINING TO MARINE OBSERVERS



#### 4.7.6 STAKEHOLDER MEETINGS

- Held a discussion with ADF, Tuticorin regarding SC/ST beneficiary identification
- Had a meeting with CEO, SCFPCL, FPO regarding prospects of Fisher community development in the seafood sector
- Conducted a discussion with Deputy Director of Fisheries, Nagercoil regarding SC / ST fishermen

#### 4.7.7. OTHER ACTIVITIES

- Provided regular trainings to HDCs on collection of daily fish landing data and Marine Mammal & Sea Turtle by catch survey data
- Evaluated the performance of the 9 HDCs
- Delivered a lecture on onboard Handling of Shashmi grade Tuna in the "Online Awareness Program On Marine Product Exports" for the officials of A & N Islands Administration and stakeholders, organized by MPEDA, RD, Chennai
- Given an awareness lecture on PMMSY/FIDF in the Awareness

beneficiary identification in Kanyakumari District for MPEDA scheme

- Held a discussion with FPO members on Start-ups in Fish trade business/requirement of Dry fish and Value added seafood trade
- Had a meeting with stakeholders regarding improvement of quality in multiday hook & line traditional boat fish landings

training program organized by Dept. of Fisheries & Fishermen welfare on Hygienic handling and sustainable fishing

- Provided training to Board of Directors and members of NETFISH/NABARD Promoted FPO on capacity building trainings and Dry fish trade.
- Shared about 1000 awareness messages to 500 fishery stakeholders through the 9 Whatsapp groups formed at 9 harbours/LCs.

## 4.8 TAMILNADU -NORTH

Dr. M.P. Arulmoorthy, State Coordinator, NETFISH has conducted 532 programs along the Northern Tamilnadu, benefitting around 3652 stakeholders.



Table: Programs conducted in Tamilnadu North during 2022-23

Sl.No.	Type of program	No. of programs	No: of Beneficiaries
1	Harbour based Programs	39	710
2	Awareness by HDCs	428	1696
3	Dry fish Development programs	15	290
4	Coastal Cleanup program	2	240
5	MPEDA SC fund- Ornamental Fish Culture Training	1	25
6	Seafood Unit Training Program	4	90
7	Pondicherry FIMSUL programs	20	585
8	Stakeholder Meetings	4	16
9	Marine Observer Trainings	5	-
10	Training/Evaluation of HDCs	14	-
	<b>Total</b>	<b>532</b>	<b>3652</b>

#### 4.8.1 HARBOUR BASED PROGRAM

- Conducted 39 harbour based programs, reaching 710 beneficiaries including fishers, boat owners, crew members, association members and fish and ice handling workers. All the

programs were conducted, utilizing the NETFISH general fund. Gloves, plastic baskets and tarpaulin sheets were given as aid materials during the programs.



Harbour/LC	No: of Programs	No: of beneficiaries
Pazhayar	30	545
Nagapattinam	5	85
Cuddalore	3	60
Kodiyakarai	1	20
<b>Total</b>	<b>39</b>	<b>710</b>

Table: Harbourwise Programs conducted



### Awareness by HDCs

- The Harbour data collectors at 11 selected harbours have carried out frequent awareness meetings and/classes at their respective harbours to promote hygienic handling

reduction of post harvest loss, sustainable fishing and conservation of marine mammals and turtles.

Harbour	No. of programs	No. of beneficiaries
Chennai	62	338
Pulicat	52	160
Pondicherry	17	67
Cuddalore	47	237
Mudasaloodai	24	103
Pazhaiyar	56	175
Poombuhar	56	168
Karaikkal	30	184
Nagapattinam	45	125
Kodiyakkarai	34	125
Thengaithittu	5	14
<b>Total</b>	<b>428</b>	<b>1696</b>

Table: Harbourwise Awareness Programs by HDCs

### OUTCOMES AFTER TRAINING

- In Pazhayar & Nagapattinam fishing harbours, about 10% of trawlers going for shrimp catch started pre-cooling practices
- In Pazhayar, of the total 20 fish buyers, 10 company workers have started handling the ice hygienically.
- Total 11 square mesh cod ends were purchased by the fishers (Shrimp catch)

- Entangled turtles and mammals during fishing are released back to sea by the fishermen in proper way

### IMPACT

- Pre-cooled tiger shrimp rate has increased by Rs. 80 to 100 per Kg.





PRE-COOLING PRACTICED ONBOARD FISHING VESSELS

#### 4.8.2. DRYFISH DEVELOPMENT PROGRAM

- Conducted 15 awareness programs to promote hygienic fish drying practices, benefitting 290

dryfish workers. Tarpaulins sheets were provided to the trainees as a support to practice hygienic methods.

Location	No: of Programs	No: of beneficiaries
Pazhayaru	7	130
Nagapattinam	2	40
Arcotuthurai	3	60
Cuddalore	1	20
Chennai	1	20
Pulicat	1	20
	<b>15</b>	<b>290</b>



#### OUTCOMES AFTER TRAINING

- 20% fishers in Nagapattinam and Pazhayar have adopted Hygienic

handling and good fish drying practices.





#### 4.8.3 COASTAL CLEAN-UP PROGRAM

- A Coastal Cleanup program was arranged on 17th August 2022, at Devanampattinam Beach (Silver Beach), Cuddalore District, Tamil Nadu as part of the International Coastal Cleanup Day (ICCD) 2022. A total of 170 members including students from St. Joseph College-

and Sagar Mitra Staffs from State Fisheries had participated in the program. The participants were divided into fifteen groups and did the cleaning process. By the cleanup process the entire beach areas was cleaned and the wastes were collected in 35 nos. of gunny bags.



INAUGURAL SESSION & CLEAN-UP PROCESS



VIEW OF THE PARTICIPANTS ALONG WITH THE WASTES COLLECTED

- A Coastal cleanup program was arranged on 14th September 2022 at Veerampattinam Beach and Panithittu Coastal area, Pondicherry as part of the International Coastal Clean-up Day (ICCD) 2022. A total of 70 members including students from Veerampattinam Government Girls School, Members from Village Protection Committee, members from Fisher Women Self Help Groups and Fishers from Veerampattinam and Panithittu Villages participated in the

clean-up program. After the inaugural meeting, all the participants set out to collect wastes in the beach area. They were divided into ten groups for conducting the cleaning process. About 30 nos. of bags full of wastes were collected and transported to the municipal waste material handling place. The program had created awareness among the public and fishing communities about the importance of cleanliness of the coastal and beach areas.



CLEAN-UP AT VEERAMPATTINAM BEACH AND PANITHITTU COASTAL AREA

#### 4.8.4 SEAFOOD UNIT TRAINING PROGRAM

- Conducted 4 nos. of training programs on hygiene and sanitation in the seafood processing units, reaching 90 beneficiaries including

production, processing and QC staff. An amount of Rs.40000 was earned as training fees by these programs.





Sl.No:	Name of the Processing Unit	Location	Program Date
1	Abad overseas Pvt. Ltd.	Irungattukottai, Sipcot, Sriperumbadur	15.11.2022
2	Golden Marine Exports	Chindadripet, Chennai	30.11.2022
3	Britto Seafood Exports Pvt. Ltd.	Royapuram Chennai	30.11.2022
4	Aquaworld Exports Pvt. Ltd.	Royapuram Chennai	16.12.2022

#### 4.8.5 FISHERIES TRAINING PROGRAMS UNDER THE FIMSUL PROJECT

- Out of the grant received under the Fishery Management for Sustainable Livelihood (FIMSUL) project from the Department of Fisheries and Fishermen Welfare, Pondicherry, 18 onsite training programs and 2 ornamental fish culture programs were conducted by MPEDA-NETFISH during 2022-23. Totally, 585 fishers in

Pondicherry took part in the training programs and acquired the knowledge about responsible fishing, conservation of marine resources, fish quality management, occupational safety, government schemes, food safety and ornamental fish culture etc.

Sl.No:	Type of program	No. of programs	No. of beneficiaries
1	Code of Conduct for responsible fishing	10	300
2	Marine Regulation Acts and Rules	5	150
3	Food Safety with reference to Fish and dry fish	3	90
4	Ornamental Fish Culture Training Program	1	30
5	Ornamental Fish Culture Training Program – Field Visit	1	15
	<b>Total</b>	<b>20</b>	<b>585</b>



#### 4.8.6 MARINE MAMMAL PROJECT

- Carried out fishermen surveys twice during the year to understand on the by-catch of marine mammals and sea turtles. The phase 1 survey was conducted at 19 different landing sites, covering 926 fishers whereas in the second phase survey 594 fishers at 10 locations were interviewed.
- For collecting data on at sea sighting and fishery interaction of marine mammals and sea turtles, 5 fishers were engaged as Marine Observers

in the state. For the marine observers 5 training programs were arranged, on identification of species and provided them with the Hand book consisted of pictures of various species of marine mammals and turtles. They have reported 5 sightings of spinner dolphins, bottlenose dolphin and olive ridley. Also 9 fishery interactions of olive redley turtles & green turtle were reported.



BYCATCH SURVEY & TRAINING TO MARINE OBSERVERS



SIGHTINGS & FISHERY INTERACTIONS REPORTED BY MARINE OBSERVERS



#### 4.8.7 ORNAMENTAL FISH CULTURE TRAINING FOR SC FISHERS

- On the special request from Pondicherry Fisheries Department, a 2 days Ornamental fish training program was arranged on 27th–28th March 2023 using the MPEDA SC fund. The program benefitted 25 SC fishers in Pondicherry. The day 1 program consisted of inaugural sessions and lectures on Ornamental

fish Culture Techniques. On the 2nd day the participants were taken to Chennai Madavaram Aquatic Rainbow park, TN fisheries Department and did a demonstration program about Ornamental fish culture techniques. After that, the participants were taken to Kolathur for Ornamental fish farm visit.



#### 4.8.8 OTHER ACTIVITIES

- Conducted a stakeholder's meeting on 23rd September 2022 and distributed square mesh cod ends
- Carried out inspections of ornamental fish consignments and issued the certificate
- Conducted 5 meetings with HDCs with regard to data collection and accompanied the HDCs during some of the by-catch surveys
- Evaluation of HDCs at 9 harbours/LCs were also conducted
- Shared awareness messages to 5769 fishery stakeholders on a regular basis through the 35 Whatsapp groups formed at 10 harbours/LCs.



DISTRIBUTION OF SQUARE MESH COD ENDS

## 4.9 ANDHRA PRADESH- SOUTH

Dr. Murali Mohan, State Coordinator, NETFISH has executed 169 programs

benefitting 2085 stakeholders in Andhra Pradesh South.

*Table: Programs conducted in Andhra Pradesh South during 2022-23*

Sl.No.	Type of program	No. of programs	No: of Beneficiaries
1	Harbour based Programs	75	1097
2	Awareness by HDCs	73	532
3	Dryfish Development programs	7	154
4	ICCD Cleanup program	1	120
5	Seafood Unit Training Program	6	182
6	Marine Observer Trainings	3	-
7	Participation of SCO in meetings/classes organized by other agencies/departments	3	-
8	Coordination of visit of officials from MPEDA & other Dept.	1	-
	<b>Total</b>	<b>169</b>	<b>2085</b>

### 4.9.1 HARBOUR BASED PROGRAM

- Conducted 75 harbour based programs comprising the fishing vessel programs, reaching 1097 beneficiaries including fishers, boat owners, crew members, traders and

fish and ice handling workers. Programs were conducted, utilizing the NETFISH general fund. Tarpaulins, gloves and gum boots were provided as aid materials to fishers.

Harbour/LC	No: of Programs	No: of beneficiaries
Nizampatnam	29	399
Machilipatnam	28	371
Vadarevu	18	327
<b>Total</b>	<b>75</b>	<b>1097</b>

*Table: Harbourwise Programs conducted*





### Awareness by HDCs

- The Harbour Data Collectors at 3 selected harbours have carried out frequent awareness meetings / classes at their respective harbours to promote hygienic handling, -

- reduction of post harvest loss, sustainable fishing and conservation of marine mammals and turtles.

Harbour	No: of Programs	No: of Beneficiaries
Nizampatnam	18	124
Machilipatnam	23	186
Vodarevu	32	222
<b>Total</b>	<b>73</b>	<b>532</b>

*Table: Harbourwise Awareness Programs by HDCs*

### OUTCOMES AFTER TRAINING

- More fishers adopted hygienic practices such as use of tarpaulins sheets for keeping fish, use trolleys for transportation, regular cleaning of auction area etc.
- 35 boats in Nizampatnam, 40 boats in Machilipatnam and a few boats in Vadarevu practice chill killing/pre-cooling onboard, especially for high value fishes and shrimps.
- 4 nos. of portable ice loading machines are introduced in Nizampatnam harbour, by which the vessels need not have to wait for conveyor belt ice supply. They can get the ice immediately from this portable ice loading machines.
- In Machilipatnam, 30% boats adopted the practice of crushing ice directly in to crates and loading into fishing vessels

### IMPACT

- The quality of fish has improved, and blackening in shrimp has been

reduced and the raw materials are getting about Rs. 10-15 extra per Kg.





#### 4.9.2. DRYFISH DEVELOPMENT PROGRAM

- Conducted 7 awareness programs to promote hygienic fish drying practices in Vodarevu, benefitting 154 dryfish workers and traders. Reusable rubber gloves (91 nos.) & HDPE Tarpaulins

sheets (93 nos.) were provided to the trainees as a support to practice hygienic methods.

#### OUTCOMES AFTER TRAINING

- Fishers use gloves while cleaning and washing the raw material
- 30% fishers use tarpaulin sheets for fish drying

#### IMPACT

- Fishers improved the dry fish packaging method and improved their marketing skill. Some of them have established small shops and household market points for selling dryfish and 20% market size and turnover has increased from last year.
- Hygienically dried fishes are attracting more customers / tourists / wholesale buyers to Vodarevu Dryfish Market area.
- Fisher women groups are planning to export dry fish products





#### 4.9.3. COASTAL CLEAN-UP PROGRAM

- Commemorating the International Coastal Clean-up Day 2022 a coastal cleanup program was organized on 7th September 2022 at Vadarevu beach landing center, Prakasam Dist., under the theme 'Swachh Sagar, Surakshith Sagar'. The program was arranged in association with the 23-

NCC Andhra Battalion, Marine Police, NSS unit of VRS & YRN College, Chirala and State Fisheries Department. Awareness talks, rally and beach cleanup were carried out with around 160 participants. T-shirts, caps, gloves and waste collection bags were provided to them.



AWARENESS MEETING & RALLY



VIEW OF CLEAN-UP EVENT

#### 4.9.4 SEAFOOD UNIT TRAINING PROGRAM

- Conducted 6 nos. of training programs on hygiene and sanitation in the seafood processing units, reaching 182 beneficiaries including

production, processing and QC staff. An amount of Rs.60,000 was earned as training fees by these programs.



Sl.No:	Name of the Processing Unit	Location	Program Date
1	Aishwarya Impex	Eluru	10-08-2022
2	Milesh Marine Exports Pvt. Ltd.	Krishna	19-08-2022
3	Royale Marine Impex Pvt. Ltd.	Bapatla	19-11-2022
4	Devi Sea Foods Ltd	Prakasam	22-11-2022
5	Nekkanti Mega Food Park Private Limited	Nellore	07-12-2022
6	Crystal Sea Foods (P) Ltd	Chirala	16-12-2022

#### 4.9.5 MARINE MAMMAL PROJECT

- Carried out fishermen surveys twice during the year to understand on the by-catch of marine mammals and sea turtles. The phase 1 survey was conducted at 4 different landing sites, covering 153 fishermen whereas in the second phase survey 118 fishermen at 3 locations were interviewed.

For collecting data on at sea sighting and fishery interaction of marine mammals and sea turtles, 3 fishermen were engaged as Marine Observers in the state. They were trained on identification of species and provided with the Hand book with colour pictures of various species for easy identification.



BY-CATCH SURVEY & TRAINING TO MARINE OBSERVERS



#### 4.9.6 OTHER ACTIVITIES

- Attended the meeting convened by Honorable Minister Dr. L. Murugan, Ministry of Fisheries, Animal Husbandry and Dairying, Govt. of India at Machilipatnam harbour on 29th April 2022 in connection with the expansion of the Machilipatnam fishing Development
- Attended the Seminar on Indo-Pacific Partnerships on Marine Ecology on 27th May 2022
- Attended the stakeholder meeting at MPEDA SRD Vijayawada on 26th Sep. 2022
- Shared awareness messages on a regular basis through the 3 Whatsapp groups among the 550 members, including stakeholders and officials, covering 3 major landing sites.



#### 4.10 ANDHRA PRADESH-NORTH

Sri. Hanumantha Rao, State Coordinator, NETFISH has arranged 178 extension programs in Andhra Pradesh North region, which were benefitted by 3036 fishers / fishery stakeholders.



Table: Programs conducted during 2022-23

Sl.No.	Type of program	No. of programs	No: of Beneficiaries
1	Harbour based Programs	61	1384
2	Awareness by HDCs	50	596
3	Dry fish Development programs	12	258
4	Coastal Cleanup program	1	106
5	Seafood Unit Training Program	21	672
6	Stakeholder Meetings	4	20
7	No: of Trainings for Marine Observers	3	-
8	Training/Evaluation of HDCs	5	-
9	Participation of SCO in meetings/classes organized by other agencies/departments (State Fisheries/Universities/ etc.)	18	-
10	Coordination of visit of officials from MPEDA & other Dept.	3	-
	<b>Total</b>	<b>178</b>	<b>3036</b>

#### 4.10.1 HARBOUR BASED PROGRAM

- Conducted 61 harbour based programs comprising the fishing vessel programs, reaching 1384 beneficiaries including fishers, boat owners, crew members, traders, auctioneers and fish and ice handling workers. All the programs were -

conducted, utilizing the NETFISH general fund. Hand gloves, insulated tubs, tarpolin sheets, dust bins and aprons were provided to the trainees as an encouragement to adopt hygienic practices.





Harbour/LC	No. of programs	No. of Beneficiaries
Visakhapatnam	31	709
Kakinada	23	499
Pudimadaka	7	176
	61	1384

*Table: Harbourwise Programs conducted*

### Awareness by HDCs

- The Harbour data collectors at 3 selected harbours have carried out frequent awareness meetings /classes at their respective harbours to promote hygienic handling, reduction of post harvest loss, sustainable fishing and conservation of marine mammals and turtles.

Harbour	No: of Programs	No: of Beneficiaries
Visakhapatnam	17	204
Kakinada	14	149
Pudimadaka	19	243
	50	596

*Table: Harbourwise Awareness Programs by HDCs*



### OUTCOMES AFTER TRAINING

- In Kakinada, 20 boats have arranged insulated fish boxes and started practicing pre-cooling method. In Vizag, 40 boats and in Pudimadaka, 20 boats are following pre-cooling practice.
- 122 local sellers are shifted to newly constructed modern fish market at Vizag.
- At Visakhapatnam & Kakinada, the fishers attach a tarpaulin to the ice crusher and transfer the ice directly in to the fish hold of fishing vessel to avoid contamination by floor contact.

**IMPACT**

- Shrimp quality improved due to pre-cooling method. Also, fishers are using enough ice to maintain the

quality and thus getting Rs.5-10 extra per kg. Quality of Tuna fish improved at Pudimadaka landing centre.



IFB IN BOAT



PRE-COOLED TUNA



ICE TRANSFERRED DIRECTLY TO FISH HOLD BY ATTACHING A TARPAULIN SHEET TO CRUSHER AT KAKINADA HARBOUR



MODERN FISH MARKET AT VIZAG



#### 4.10.2. DRYFISH DEVELOPMENT PROGRAM

- Conducted 7 awareness programs to promote hygienic fish drying practices in Vodarevu, benefitting 154 dryfish workers and traders. Reusable rubber gloves (91 nos.) &

HDPE Tarpaulins sheets (93 nos.) were provided to the trainees as a support to practice hygienic methods.

Location	No: of Programs	No: of beneficiaries
Visakhapatnam	9	193
Kakinada	3	65
<b>Total</b>	<b>12</b>	<b>258</b>



#### OUTCOMES AFTER TRAINING

- 25% fish drying people in Visakhapatnam and 20 % in Kakinada use tarpaulin sheets/cement platforms for keeping fish for drying to reduce contamination.

#### IMPACT

- Getting Rs.15 to 20 extra per Kg in Vizag due to the good colour
- Getting Rs.5 to 8 extra per Kg in Kakinada



ANCHOVY DRYING IN VIZAG- EARLIER ON FLOOR AND NOW ON SHEETS



FISH DRYING IN KAKINADA- BEFORE AND AFTER PHOTOS

#### 4.10.3. COASTAL CLEAN-UP PROGRAM

- A coastal clean-up program was organized on 12th August, 2022 at NTR Beach in Kakinada, with 106 participants from Coast Guard, State Fisheries, Coastal Security, Marine Police, District Health Office, SIFT, Suryaraopeta Gram Panchayath, Mandal Praja Parishad High School and Fishery stakeholder groups. Mass awareness meeting followed by coastal clean-up with active participation of fishers, students and officials were carried out. Caps, T-shirts and cleaning materials were

given to the participants. The difference from unclean to cleaned premises was shown to the villagers and urged them to maintain it by doing regular cleaning. The Panchayath has promised to arrange dustbins for collection of waste and to identify and demark a new mass dumping land for safe disposal of waste. Now, the local Village Panchayat cleans the beach once in 15 days, maintaining cleanliness and thus 10% revenue has increased as visitors increased.





#### 4.10.4 SEAFOOD UNIT TRAINING PROGRAM

- Conducted 21 nos. of training programs on hygiene and sanitation in the seafood processing units, reaching 672 beneficiaries including

production, processing and QC staff. An amount of Rs.2.1 lakh was earned as training fees by these programs.



Sl.No:	Name of the Processing Unit	Location	Program Date
1	M/S.Nekkanti Seafoods Limited	Visakhapatnam	27.05.2022
2	M/S.Arya Seafoods Pvt Ltd.,	Bhimavaram	25.07.2022
3	M/s. Kader Exports Pvt Ltd, Vizag	Visakhapatnam	11.10.2022
4	M/s. Veerabhadra Exports,	Kakinada	15.11.2022
5	M/s. Fresh Catch Exports, Kakinada	Kakinada	16.11.2022
6	M/s. Sree Seenivasa Cold storage	Hyderabad	17.11.2022
7	M/s. Asvini Fisheries Pvt Ltd	Bhimavaram	22.11.2022
8	M/s. RVR Marine Products Pvt Ltd	Bhimavaram	23.11.2022
9	M/s. AVR Marines Pvt Ltd	Bhimavaram	25.11.2022
10	M/s. Jayalakshmi Seafoods Pvt Ltd	Bhimavaram	26.11.2022
11	M/s.Devi Fisheries Limited	Kakinada	05.12.2022
12	M/s. Welcome Fisheries Limited	Bhimavaram	14.12.2022
13	M/s. Sandhya Marines	Palakollu	16.12.2022
14	M/s. Igloo Frozen Foods Pvt Ltd	Visakhapatnam	20.12.2022
15	M/s. Coastal Corporation Limited	Visakhapatnam	21.12.2022
16	M/s. Naga Hanuman Fish Packers Unit II	Visakhapatnam	22.12.2022
17	M/s. Naga Hanuman Fish Packers Pvt Ltd(Unit-I)	Visakhapatnam	27.12.2022
18	M/s. Royal Imports& Exports Private Limited	Annavaram	28.12.2022
19	M/s. Jagadeesh Marine Exports Private Limited	Bhimavaram	29.12.2022
20	M/s. Suryamitra Exim (P) Limited	Bhimavaram	30.12.2022
21	M/s. RDR Exports	Bhimavaram	12.01.2023

Table: Details of Processing unit trainings conducted in Andhra Pradesh North during the year

#### 4.10.5 STAKEHOLDER MEETINGS

- Met the President of Dolphin Mechanized boat owners association on 24.05.22 at Vizag and discussed on harbour issues and NETFISH programs
- Met the President of AP Mechanized boat owners association on 30.05.22 at Vizag and discussed on harbour issues and introduction of square mesh code end
- Held a discussion with JD Fisheries along with the Solar Dryer manufacturer on 11.07.22 at Vizag
- Had a discussion with AP Mechanized boat owners association president on 06.09.22 at Vizag regarding the self-sustain system for fishing harbour
- More meetings were conducted along with awareness programs.



#### 4.10.6 MARINE MAMMAL PROJECT

- Carried out fisher surveys twice during the year to understand on the by-catch of marine mammals and sea turtles. The phase 1 survey was conducted at 5 different landing sites, covering 171 fishers whereas in the second phase survey 241 fishers at 3 locations were interviewed.
- For collecting data on at sea sighting and fishery interaction of marine

mammals and sea turtles, 3 fishers were engaged as Marine Observers in the state. They were well trained in identification of species and provided with the Hand book with colour pictures of various species for easy identification. They have reported 6 sightings of bottlenose dolphin, spinner dolphin and olive ridley turtle and 2 fishery interactions of olive ridley turtle.





BY-CATCH SURVEY



TRAINING TO MARINE OBSERVER &amp; DOLPHIN SIGHTINGS REPORTED BY MARINE OBSERVERS

#### 4.10.7 OTHER ACTIVITIES

- Participated and coordinated with the harbour fishermen and associations along with the Dept. of Fisheries in the Coastal clean-up program organized on occasion of International Coastal cleanup day (ICCD) by Indian Coast Guard Services (ICGS) on 17th Sep. 2022.
- On 14.11.2022 NETFISH coordinated with SRD MPEDA Vizag and conducted beach clean-up program at Peda Jalipeta near Fishing harbour Visakhapatnam on occasion of Swachhta Pakhwada celebrations during November, 2022.
- Participated in the Gear selectivity workshop and fisher stakeholders' awareness program and On-board demonstration on Square mesh cod end organized by WWF at Vizag during 22-23 September 2022.

Again in 15-16 March 2023, attended the awareness program and onboard trial on Square mesh cod end organized by WWF at Kakinada.

- Provided refresher trainings to HDCs on data collection
- Attended the "Workshop on Climate Resilient practices and value chain in small scale fishery" organized by Institute for Motivating Self Employment (IMSE) Kolkata & DFYWA NGO Vizag on 12.7.22 at Vizag and delivered a lecture on Control of Post-harvest loss in Fisheries and on Value added fishery products, for the Small scale fishers from Srikakulam, Vizianagaram and Visakha districts.

- Shared 142 awareness messages through 3 Whatsapp groups with a total of 350 members, including

stakeholders and officials, covering 3 major landing sites. The messages were shared once in 3 days.



**PARTICIPATION IN CLEAN-UP EVENT ORGANIZED BY COAST GUARD**



**AWARENESS PROGRAM AND ON-BOARD DEMONSTRATION ON SQUARE MESH COD END ORGANIZED BY WWF**

## 4.11 ODISHA

Sri. Subhrakanta Mohapatra, State Coordinator, NETFISH has carried out 215 extension activities in Odisha

during the year, reaching about 5051 fishery stakeholders.

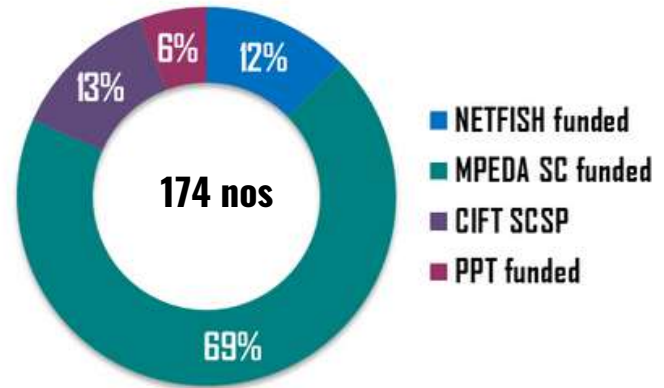
*Table: Programs conducted in Odisha during 2022-23*

Sl.No.	Type of program	No. of programs	No: of Beneficiaries
1	NETFISH funded awareness programs	23	523
2	Awareness by HDCs	11	220
3	MPEDA SC	139	3155
4	CIFT SCSP	22	610
5	Paradeep Port Trust funded	10	300
6	Seafood Unit Training Program (Paid)	6	240
7	Training to Marine Observers	1	3
8	Training/Evaluation of HDCs	3	-
	<b>Total</b>	<b>215</b>	<b>5051</b>



#### 4.11.1 HARBOUR BASED PROGRAM

- Conducted 174 harbour based programs comprising the fishing vessel programs, reaching 4518 beneficiaries including fishers, traders, fishing crew, skippers and boat owners. Almost 82% of the programs were for the SC fishers, utilizing the MPEDA and CIFT SC funds. Square mesh cod ends, cleaning materials, t-shirt and caps were given during the programs.



Harbour/LC	No. of programs	No. of Beneficiaries
Chilka	143	3,795
Paradeep	27	628
Dhamara	3	65
Balaramgadi	1	30
<b>Total</b>	<b>174</b>	<b>4518</b>

Table: Harbourwise Programs conducted

#### Awareness by HDCs

- In Balaramgadi landing centre, 11 awareness classes were conducted

through the Harbour data collector, benefitting 220 fishers.

#### OUTCOMES AFTER TRAINING

- 101 nos. of boats In Paradeep, 15 nos. in Balaramgadi and 5 nos. in Dhamara use square mesh cod ends
- In Paradeep 15 nos. of boats adopted practicing chill killing/pre-cooling

- In Paradeep 15 nos. of boats have the inbuilt toilet facility
- All fishing vessels use plastic baskets for handling of catch and plastic shovels for handling of ice

- Regular cleaning of fishing vessels, other equipment's, utensils ,etc.
- Sanitary and hygienic condition of fishing harbour are very good
- Fishers use sufficient quantity if ice by which raw material quality and appearance have improved and is getting better price for catch
- No price monopoly for Middle man
- The management society is active and looks after the day to day activity of the harbour

- Developed 10 nos. of trained trainers for conducting awareness programs in Paradeep
- In Chilka, 50% of trained fishers regularly use insulated fish box to reduce post-harvest loss

### IMPACT

- Reduced post-harvest loss by 10 %
- Traders purchased the raw material with better price



**1.USING INSULATED FISH BOX FOR FISH PRESERVATION WITH SUFFICIENT ICE.**



**2.REGULAR CLEANING OF FISHING VESSELS**



**3.ADOPTION OF PLASTIC BASKETS**



**4. USING SQUAREMESH COD ENDS IN TRAWLS**



**5. ADOPTION OF PLASTIC SHOVELS**



#### 4.11.2. COASTAL CLEAN-UP PROGRAM

- A clean up event was arranged on 31st July 2022 at Arakhakuda in Chilka, Odisha. The event started with an inaugural meeting. Dignitaries and 60 fishers from Arakhakuda were present on the occasion. Awareness was spread among the fishers to keep the marine environment, fish landing centre and coastal areas always clean.



The inaugural session was followed by an awareness rally by the fishers. Thereafter all the participants had actively involved in cleaning the entire Arakhakuda Fish Landing Centre and the adjacent coastline. The participants were provided with t-shirts, caps, masks, hand gloves, hand sanitizer and refreshments.

#### 4.11.3 SEAFOOD UNIT TRAINING PROGRAM



- Conducted 6 nos. of seafood unit training programs in the processing plants, reaching 240 beneficiaries including technologists, supervisors,

graders, packers, security, vehicle driver, plant room staff etc. An amount of Rs.60000 was earned as training fees by these programs.



Sl.No:	Name of the Processing Unit	Location	Program Date	No: of Beneficiaries
1	M/S-Padmashree Export Pvt. Ltd.,	Malipada,Khurda	26.4.22	40
2	M/S-Bhubaneswari Export Pvt. Ltd.,	Balasore	23.5.22	40
3	M/S-Siva Export	Patia	10.6.22	40
4	M/S- Saisurya Export Ltd.	Mancheswar	06.9.22	40
5	M/S-Laxmi Narayana Export	Paradeep	03.11.22	40
6	M/S-T. K. Marine Export	Patia	21.11.22	40

## IMPACT

- Hygienic condition of the units has improved
- The workers are maintaining good personal hygiene and covid-19 guidelines
- M/s-Falcon Marine came forward to sign a MOU with NETFISH for 50 nos. of paid training programs for the year 2023-24.

### 4.11.4 ONE WEEK SKILL DEVELOPMENT TRAINING





- Conducted 19 nos. of 'One week skill development training' programs benefitting 501 SC fishers. The program included class room lectures, group discussions, group presentation,

practical session, field visits etc. As part of the program, about 501 insulated fish boxes were provided to SC fishers in Chilka area.



### IMPACT

- More fishing boats have started using Insulated fish box for preservation of fishery product,

thereby raw material quality has improved and the fishers are getting better price.

#### 4.11.5 MARINE MAMMAL PROJECT

- Carried out fishermen surveys twice during the year to understand on the bycatch of marine mammals and sea turtles. The phase 1 survey was conducted at 5 different landing sites, covering 196 fishers whereas in the second phase survey 145 fishers at 3 locations were interviewed.

- For collecting data on at sea sighting and fishery interaction of marine mammals and sea turtles, 4 fishers were engaged as Marine Observers in the state.

#### 4.11.6 OTHER ACTIVITIES

- Arranged 3 trainings to the Harbour Data Collectors on identification and by-catch data collection of marine mammal and sea turtle
- Disseminated about 100 awareness messages / videos to the stakeholders through the 3 Whatsapp groups formed at Paradeep, Dhamara & Balramgadi, each message reaching nearly 500 members.

- Submitted a proposal to Paradeep Port Trust, Paradeep for getting CSR fund for conducting capacity building programs for the fishers and an amount of Rs. 10 lakh was sanctioned to NETFISH Odisha.

## 4.12 WEST BENGAL

Sri. Atanu Ray, State Coordinator, NETFISH has executed 755 programs in

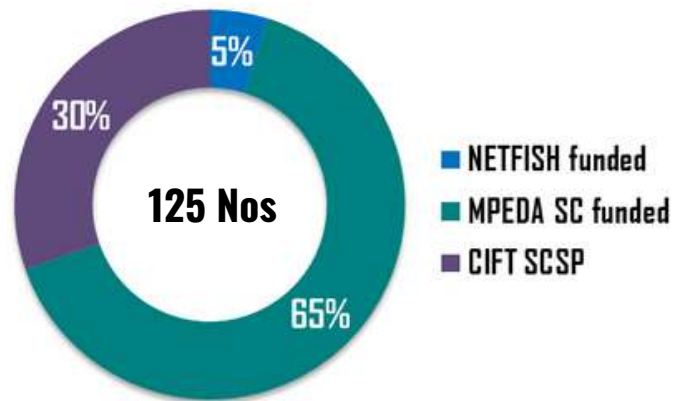
West Bengal during the year, reaching 9269 beneficiaries in fisheries sector.

Table: Programs conducted in West Bengal during 2022-23

Sl.No.	Type of program	No. of programs	No: of Beneficiaries
1	NETFISH funded awareness programs	7	201
2	Awareness by HDCs	516	4094
3	MPEDA SC	117	3084
4	CIFT SCSP	58	1421
5	Seafood Unit Training Program (Paid)	14	469
6	Stakeholder Meetings	13	-
7	Training to Marine Observers	4	-
8	Others	26	-
	<b>Total</b>	<b>755</b>	<b>9269</b>

### 4.12.1 HARBOUR BASED PROGRAM

- Conducted 125 harbour based programs comprising the fishing vessel programs, reaching 2909 fishers, skippers and boat owners. Almost 95% of the programs were for the SC fishers, utilizing the MPEDA and CIFT SC funds. Gloves, mask, sanitizer, t shirt, life jackets, life buoy, and shovels were the various aid materials given to the trainees during the programs.





Harbour/LC	No. of programs	No. of Beneficiaries
Freserganj	36	794
Deshapran /Sankarpur	27	763
Kakdwip	16	426
Namkhana	14	330
Sutanpur/ Hanra/ Mukundapur	14	190
Patharpratima	8	200
Sagar	5	150
Kulpi	3	20
Jharkhali	1	6
Raidighi LC	1	30
<b>Total</b>	<b>125</b>	<b>2909</b>

*Table: Harbourwise Programs conducted*

### Awareness by HDCs

- The 7 HDCs deployed at 7 different harbours/landing sites in West Bengal had given regular awareness to fishers and fishing vessel skippers at their corresponding locations, on

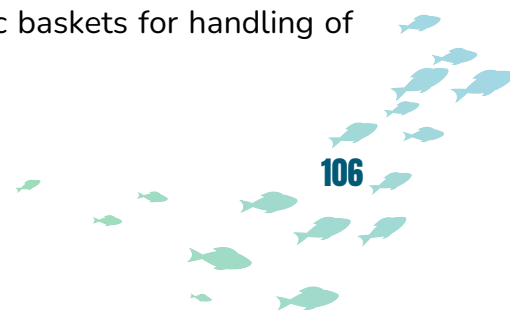
the topics such as post-harvest loss, Proper icing of catch, chilling of catch, marine mammals & sea turtles, plastic pollution, sea safety etc.

Harbour	No: of Programs	No: of Beneficiaries
Deshapran FH	68	349
Sankarpur FH	57	298
Kakdwip FH	53	373
Freserganj FH	114	1187
Namkhana LC	98	1107
Raidighi LC	82	542
Shoula LC	44	243
<b>Total</b>	<b>516</b>	<b>4099</b>

*Table: Harbourwise Awareness Programs by HDCs*

### OUTCOMES AFTER TRAINING

- After the program 45% of total boats have started using good quality ice in adequate quantity for fish preservation and they are also practicing chilling of catch on board which leads to reduction in post-harvest loss and fetching better price for the catch.
- About 75% of fishing vessels are using plastic baskets for handling of their catch



- Plastic sheets are being used by 45% of fishing boats for proper sorting of their catch in the jetties and landing centres.
- About 50% fishers are now handling ice in hygienic manner, without dragging on bare jetty.
- 25% of fishing vessels are using PVC shovels for hygienic handling of catch.
- 60% of catch are now transported in crates covered with plastic sheet to avoid contamination.
- 45% of catches are now transported to auction markets and processing unit through IFB to reduce post-harvest loss.
- More than 30% of fishermen are aware about the role of marine mammals & sea turtles in eco system and therefore release back these animals to sea, if caught incidentally in their nets.

### IMPACT

- Fishermen practicing chilling of catch onboard are fetching Rs. 15-25/- extra per kg. of catch
- A total of 30 boats engaged in fishing of Pomfret have availed IFBs using the MPEDA-NETFISH scheme. Out of this, 10 boats have taken 1 no. of IFB of 100 L capacity and 20 boats have taken 2 nos. of IFB of 70 L and 100 L capacity. These vessels capture about 400-500 kgs of Pomfret in every trip. After adopting chill killing/chilling practices they are able to sell their catch to Nagendra bazaar fish auction market, Diamond harbour and are fetching Rs.100-120/- extra per kg. of pomfret. They have developed their own brand as Narayanpur Pomfret in the auction markets and getting lucrative price for their products.



**USING INSULATED BOXES FOR CHILLING OF CATCH AND ITS PRESERVATION**



**HYGIENIC HANDLING AND INCREASED USAGE OF ICE**





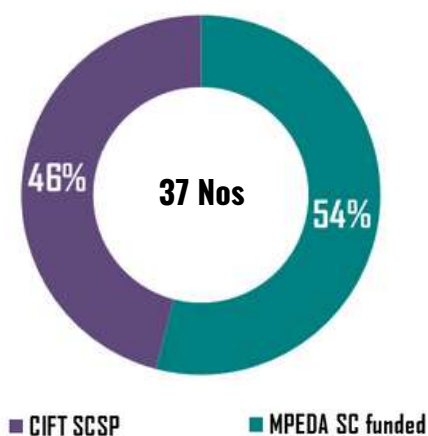


USING POLYTHENE SHEETS FOR KEEPING FISH FOR SORTING &  
CATCH TRANSPORTED FROM HARBOUR TO AUCTION MARKET IN PLASTIC CRATES

#### 4.12.2. DRYFISH DEVELOPMENT PROGRAM

- Conducted 37 dryfish development programs, reaching 1110 SC fishers involved in dryfish production.

T-shirts and hand sanitizers were provided to the trainees during the programs.



Harbour / LC	No. of programs	No. of Beneficiaries
Freserganj	13	390
Namkhana	3	90
Sagar	8	240
Contai	3	90
Ramnagar	6	180
Khejuri	4	120
<b>Total</b>	<b>37</b>	<b>1110</b>



## OUTCOMES AFTER TRAINING

- 40% fishers now use ice during transportation of the raw material to dry fish yard.
- 45% fishers have adopted hygienic drying practices such as drying on.



scaffolds, racks and straw & net bed.

- 35% dry fish yards are covered with fencing to avoid entry of pets and animals.

## IMPACT

- 15 fishers have set up stalls near the beach area for selling the dryfish products in consumer packs to local people as well as tourist towards upliftment of their livelihood.

- Exporters are also sourcing the quality dry fish from different dry fish yard of Freserganj area meant for export

### 4.12.3. COASTAL CLEAN-UP PROGRAM

- Commemorating the International Coastal Clean-up Day 2022, NETFISH Kolkata organized a Coastal Cleanup Program on 27th August 2022 at Bakkhali Sea Beach, Freserganj, South 24 Parganas in association with Narayanitala Dhaneswar Siksha Sadan (H.S.), Freserganj, Indian Coast Guard, Freserganj, Freserganj Gram panchayat, Freserganj Coastal Police, Freserganj Fisherman Association, Kaylaghata Fisherman Association, Kakdwip Fisherman Association, Secretary of Dakshin Banga Matsyajibi Forum, Kakdwip and Kulpi division etc. Officials of Indian Coast Guard, school students, fishers, Secretaries of

fisherman association, MPEDA, NETFISH & NaCSA officials, HDCs and general public etc. had actively participated in the coastal clean-up program.

The program created awareness about reducing the marine litters, minimal use of plastic, segregation at source and waste management through an awareness meeting and a rally to the beach. Plastic wastes, marine litters, garbage at sea beach were collected and handed over to the Gram Panchayat for proper disposal. About 75 volunteers had participated in the program. T-shirt, cap, mouth mask, hand gloves, sanitizer etc. were provided to the participants.





#### 4.12.4.VALUE ADDITION OF FISHERY PRODUCTS

- 8 Hands on trainings on preparation of various value added fishery products were conducted benefitting 160 SC fishers. They were taught on hygienic preparation of Fish Ball, Fish Pickle, Prawn Pickle, Fish Pakora, Fish cutlet, Fish fry, Fish finger, Fish momo, Fish samosa etc.

Training kits and product recipes were distributed to all the participants. The programs were conducted in Kakdwip, Freserganj, Diamond Harbour, Bakkhali, Akshaynagar, Bidyapith-Khejuri, Narharipur-Sagar & Nandabhanga-Namkhana



#### OUTCOMES AFTER TRAINING

- Fisher women of SHG are now getting order for selling of value added products in ceremony and festival as well as in a stall at the Bakkhali beach
- Two beneficiaries had setup a stall at Namkhana, South 24 Parganas

for selling of different value added fishery products such as fish momo, fish cutlet etc. for the local people

#### IMPACT

- Fisher women are earning better price and this has improved their livelihood

#### 4.12.5. SEA SAFETY TRAINING

- Conducted 5 no. of sea safety programs, benefitting 150 Boat owners, Skippers, Drivers and Fishers belonging to SC category. The programs included interaction with Coast Guard officers, Coastal police and State Fishers Officers regarding

various rules and acts of fishing, uses of sea safety devises and navigational equipment. Hands on training of different life saving equipment and navigational equipment and discussion on ROR were also carried out during the program.

Location	No.of Programs	No. of beneficiaries
Kakdwip	2	60
Contai	2	60
Ramnagar	1	30



#### OUTCOMES AFTER TRAINING

- Now at least 25% fishermen are properly aware on this safety equipment & known about its uses. Fishermen in the motorized sector are now using navigational equipment in their boat.
- Fishers understand the importance of life jackets on-board vessels to save their life during adverse climatic

condition as well as they are aware about the way of using life jackets.

#### IMPACT

- During adverse climatic condition fishers use lifesaving equipment and communicate with the line dept. for help, search & rescue, resulting minimized death toll during fishing.

#### 4.12.6. DISTRIBUTION OF INSULATED FISH BOXES





- Distributed 511 insulated fish boxes including 248 nos. of 70 L, 200 nos. of 100 L and 52 nos. of 310 L capacities to 262 fishing vessels, benefitting 222 SC boat owners of

Area	No. of fishing boat	70 L	100 L	310 L	Total No. of IFBs
Raidighi	14	28	0	0	28
Freserganj	28	15	27	10	52
Kultali	83	106	52	7	165
Kakdwip	137	99	132	35	266

### OUTCOMES AFTER TRAINING

- 262 motorized and traditional fishing vessels were benefited with 551 IFBs to carry sufficient ice and to preserve their catch for reducing post-harvest loss through chilling practices
- Fishermen now preserve their catch in IFBs, with proper ice during lean market(2-3 days) and sell their catch once market will high and fetch better price.
- IFB are being used for transportation from the remote landing centre to auction market and reduce the post-harvest loss.
- Exportable fishes are preserved in the IFB to reduce post-harvest loss and better quality fishes are reaching to the exporter's door step.

### IMPACT

- Fishers are getting Rs.15-25/- more per Kg. due to improved quality and appearance of their catch.
- Enhanced the economic condition of fishers.

#### 4.12.7 EXPOSURE VISIT FOR SC FISHERS

- A group of 50 SC fishers were taken for an exposure visit to Biswa Bangla Mela Prangan, Kolkata on 15th February 2023 to attend the 'IISS 2023'. They got opportunity to listen to the valuable speeches of dignitaries and to visit all the stalls in the 'IISS 2023' and discuss with the people concerned in the field of capture fisheries. All the participants were happy to be a part of 'IISS 2023' at Kolkata. They

appreciated MPEDA for organizing the grant event and thanked NETFSH for giving them opportunity for attending such international fair. Fishers had an idea about the various fish and fisheries end products which are being exported from India, its quality, packing and the different machineries involved in these activities They also gathered knowledge about the significance of maintaining hygiene and sanitation while handling fishes meant for export.





SC FISHERS FROM WEST BENGAL VISITING THE STALLS AT IISS 2023

#### 4.12.8 SEAFOOD UNIT TRAINING PROGRAM

- Conducted 14 nos. of training programs in the processing plants, reaching 469 beneficiaries including Managers, Supervisors, Technologist

and Processing Workers. An amount of Rs.1,40,000 was earned by NETFISH as training fees by these programs.

Sl. No:	Name of the Processing Unit	Location	Program Date	No: of Beneficiaries
1	M/s. Aquatech Feed & Seafoods Pvt. Ltd.	Jay Hanuman Complex, Howrah	21.05.2022	41
2	M/s.Sahada Exports	Unit No. 8, Chakgaria, Kolkata	07.06.2022	34
3	M/s. A S Enterprise	Digha, Purba Medinipur	16.06.2022	36
4	M/s. Ma Tara Aquaculture West Bengal Pvt. Ltd	Narghat, Purba Medinipur	17.06.2022	33
5	M/s.Rupsha Fish Pvt. Ltd.	Khardah, North 24 Parganas	04.07.2022	34
6	M/s. CRPL Infra Pvt. Ltd.	Dhulagarh, Howrah	21.10.2022	22
7	M/s. Elque Venture Pvt. Ltd.	Udayrajpur, Kolkata	01.11.2022	35
8	M/s. N C Das & Co,	Unit-II, Haroa, North 24 Parganas	10.11.2022	47
9	M/s. Global Aqua	Nawpala, Howrah	26.11.2022	30
10	M/s. Shankhadeep Exports	Kanchantala, Kolkata	21.12.2022	37
11	M/s Essex Marine Pvt. Ltd.	Sankarpur, Purba Medinipur	28.12.2022	37
12	M/s. Milsha Sea Products,	Unit no. 1, Chakgaria, Kolkata	05.01.2023	23
13	M/s. Sreeragam Exports Pvt. Ltd	Chakgaria, Panchasayar, Kolkata	07.01.2023	30
14	M/s. Pasupati Aquatic Pvt. Ltd.	Henria, urba Medinipur	10.03.2023	30

Table: Details of Processing unit trainings conducted in West Bengal during the year



### OUTCOMES AFTER TRAINING

- Exporters well appreciated the training modules of NETFISH as it covered all the aspects which were helpful to implement COVID-19 protocols in the processing plant to meet the requirement as per GACC.
- Workers follow high degree of hygiene and sanitation practices and proper use of change room.
- Diverted the export of the products from China to EU countries.
- Unit value has been increased from 2.25 to 3.16
- Cephalopod raw material price has increased by more than Rs.200 per kg in Digha mohana. Thus the primary producers are getting benefit and the fishing boats are venturing into the sea for fishing.

### IMPACT

- 7 Exporters have started export of value added cephalopods to EU countries.

### 4.12.9 STAKEHOLDER MEETINGS



- Held a meeting on 04.08.22 at Deshapran FH with Harbour officer & fishers regarding harbour development & related issues.
- On 20.10.22, a meeting was held at Deshapran FH with Harbour officer & staff for harbour upgradation, MPEDA & EIA regulation etc.
- Arranged a meeting on 23.06.22 with Harbour officer Deshapran FH regarding harbour development & related issues with fishers.
- On 09.09.22, had meetings at Deshapran & Contai with harbour officials and exporters for utilization of sea caught materials specially shrimps and cephalopods

- A meeting with live fish exporters was held at RD MPEDA, Kolkata on 23.12.22 and discussed on various issues on exports
- Had a meeting with M/s. Imperial Sea food, exporter on 25.05.22 for processing of Cephalopods for export to EU.
- Arranged a meeting with Secretary of Fisherman association & boat owners regarding NETFISH-MPEDA financial assistance scheme at Sultanpur on 10.09.22
- A Meeting was conducted with Secretary, Kakdwip Fisherman Association on 12.10.22 regarding MPEDA NETFISH financial assistance scheme

- Had a meeting on 27.09.22 with the Secretary, Sunderban Sunder & NGO regarding NETFISH-MPEDA financial assistance schemes, collaborative capacity building programs on VAFP in North Bengal etc.
- Held a meeting with the Chairman, Secretaries of fisherman associations, boat owners on 23.01.23 at Digha mohana Purba Medinipur on juvenile fishing, up-gradation of FH, SC/ST scheme etc.

#### 4.12.10 MARINE MAMMAL PROJECT

- Carried out fisher surveys twice during the year to understand on the bycatch of marine mammals and sea turtles. The phase 1 survey was conducted at 22 different landing sites, covering 385 fishers whereas in the second phase survey 280 fishers at 7 locations were interviewed
- For collecting data on at sea sighting and fishery interaction of marine mammals and sea turtles, 5 fishers

were engaged as Marine Observers in the state. Sufficient trainings were given to them for identification and data collection. One of the Marine Observers has reported the sighting of 2 nos. of Irrawaddy dolphins in the month of March 2023. A report on incidental catch of an olive ridley turtle was also reported by a marine observer during the period.



TRAINING TO MARINE OBSERVERS





IRRAWADDY DOLPHIN SIGHTED OFF KAKDWIP, WEST BENGAL

#### 4.12.11 OTHER ACTIVITIES

- Carried out physical evaluation of the performance of all the 7 HDCs
- Conducted various training programs for the HDCs both physical and online modes on topics such as Marine Mammals & Sea Turtle, Post-Harvest Loss, data collection etc.
- Carried out inspection at various units along with DD MPEDA
- Delivered a talk on “Role of MPEDA-NETFISH in Export Promotion and Aquaculture in West Bengal” on the occasion of Golden Jubilee Celebration of MPEDA
- Delivered a talk on "Application of Standard Operating Procedures (SOP) on Post Harvest Care and value addition of different fish items” in the Three days training program on WBCADC funded project of West Bengal University of Animal and Fishery Science, Belgachia
- Delivered a talk on “Value Added Fishery products and its Exports” for the Students of WBUAFS Faculty of Fishery Sciences, West Bengal University of Animal & Fishery Science, Chakgaria.
- Coordinated various activities in connection with India International Seafood Show held from 15th to 17th February 2023 at Biswa Bangla Milan Mela Prangan, Kolkata.
- Attended the MPEDA stall in the Acharya Prafulla Chandra Roy Smarak Vigyan Mela O Pradarshani at Belgachia Campus of WBUAFS. MPEDA received the first prize in the exhibition for best stall.
- Shared about 297 messages through Whatsapp groups, each message reaching nearly 1500 fishery stakeholders
- Data on Marine landing was collected from 7 harbours/landing centres



TRAINING TO HDCS



PARTICIPATION IN IISS 2023

## EXPOSURE VISIT FOR FISHERS FROM LAKSHADWEEP

MPEDA-NETFISH facilitated for an exposure visit of fishers from Lakshadweep to Kolkata, West Bengal to participate in the India International Seafood Show (IISS) 2023 at Biswa Bengala Mela Prangan, Kolkata during 15 to 17 February 2023, to visit a Seafood factory and also to interact with Japanese buyers with regard to the very need of hygiene and sanitation while doing tuna fishing. The team of 19 participants including two officials in which one from Department of Fisheries, Lakshadweep and other from MPEDA office at Kavaratti had participated in the visit. The fishers consisted of Boat owners, Fishermen & Fish collection entrepreneurs from Kavaratti and Agatti islands were selected for the visit.



INTERACTION WITH EXPORTERS AT IISS 2023



TEAM VISITED SHANKHADEEP EXPORTS PVT. LTD. IN KOLKATA



LAKSHADWEEP TEAM MEETS JAPANESE EXPORT AGENT, NISHIANO SAN



## CIFNET & MPEDA-NETFISH JOIN HANDS FOR BETTER DEVELOPMENT IN CAPTURE FISHERIES



The Central Institute of Fisheries Nautical and Engineering Training (CIFNET), functioning under the Department of Fisheries, Govt. of India and Network for Fish Quality Management and Sustainable Fishing (NETFISH), the extension wing of The Marine Products Export Development Authority (MPEDA) under the Department of Commerce, Govt. of India, signed a memorandum of understanding (MOU) to conduct training programmes jointly for fisher community in all coastal states and union territories in India. This initiative has been taken in the best interest of fisher community and aims at welfare and socio-economic upliftment of the fisher community, as well as resource conservation and post harvest quality management by imparting adequate skill development training programmes under Pradhan Mantri Matsya Sampada Yojana (PMMSY) scheme. The MoU was signed by Shri. A.K. Choudhury, Director CIFNET and Dr. Joice V. Thomas, Chief Executive MPEDA-NETFISH in a function organised in MPEDA head quarters Kochi on 13th April 2022 in the presence of Dr. K.N. Raghavan, IRS, Chairman MPEDA/President NETFISH, Dr. M. Karthikeyan, Director, MPEDA, Shri. K.S. Pradeep, IFS, Secretary, MPEDA, Shri Anil Kumar P. Joint Director (Marketing), MPEDA, Shri. M.G. Makwana, Chief Instructor (ME)/Head of Office, CIFNET, HQs, Kochi, Shri. A. Ravichandran, Deputy Director, CIFNET unit Chennai, Shri. Hrusikesh Bisoyi, Deputy Director, CIFNET unit, Visakhapatnam and many other senior officials from MPEDA, CIFNET and NETFISH.



## 5. FINANCIAL STATEMENTS FOR THE YEAR 2022-23



### ROSHAN THOMAS & CO.

#### CHARTERED ACCOUNTANTS

2ND FLOOR, DUBAI TOWER  
DASAMI LANE, NEAR VENNALA SERVICE CO-OPERATIVE BANK  
ALINCHUVADU VENNALA P.O  
ERNAKULAM 682028



#### Independent Auditors' Report

To the members of  
**NETWORK FOR FISHQUALITY MANAGEMENT AND SUSTAINABLE FISHING**

#### Report on the Financial Statements

##### Opinion

We have audited the accompanying financial statements of **NETWORK FOR FISH QUALITY MANAGEMENT AND SUSTAINABLE FISHING (NETFISH)**, which comprise the Balance Sheet of NETFISH as at **March 31, 2023** and the Income And Expenditure Account for the year ended 31<sup>st</sup> March 2023 and notes to the financial statements, including a summary of significant accounting policies and other explanatory information.

In our opinion the accompanying financial statement give a true and fair view of the financial position of the entity as at 31<sup>st</sup> March 2023 and the financial performance for the year then ended is in conformity with Accounting standards issued by the Institute of Chartered Accountants of India.

##### Basis for Opinion

We conducted our audit of the financial statement in accordance with the Standards on Auditing (SAs) issued by ICAI. Our responsibilities under those standards are further described in the Auditors Responsibilities for the Audit of Financial Statements section of our report. We are independent of the entity in accordance with the Code of Ethics issued by ICAI together with the independence requirements that are relevant to our audit of the financial statements and we have fulfilled our other ethical responsibilities in accordance with these requirements and the ICAI's code of ethics. We believe that the audit evidence we have obtained is sufficient and appropriate to provide a basis for our opinion on the financial statements.

##### Responsibilities of Management and Those Charged with Governance for the Financial Statements

Management is responsible for the preparation and fair presentation of the financial statements in accordance with the aforesaid Accounting Standards, and for such internal control as management determines is necessary to enable the preparation of financial statements that are free from material misstatement, whether due to fraud or error.



**Contact Us :** Tel: 0484-4055485 Mob: 91-9497325485 Email: partner@rtnco.in

**Branch Office :** Panampilly Nagar, Ernakulam | Amalagiri, Kottayam





going concern basis of accounting unless management either intends to liquidate the entity or to cease operations, or has no realistic alternative but to do so.

Those charged with governance are responsible for overseeing the entity's financial reporting process.

#### **Auditor's Responsibilities for the Audit of Financial Statements**

Our objectives are to obtain reasonable assurance about whether the financial statements as a whole are free from material misstatement, whether due to fraud or error, and to issue an auditor's report that includes our opinion. Reasonable assurance is a high level of assurance but is not a guarantee that an audit conducted in accordance with SAs will always detect a material misstatement when it exists. Misstatements can arise from fraud or error and are considered material if, individually or in the aggregate, they could reasonably be expected to influence the economic decisions of users taken on the basis of these financial statements.

As part of an audit in accordance with SAs, we exercise professional judgment and maintain professional scepticism throughout the audit. We also:

- Identify and assess the risks of material misstatement of the financial statements, whether due to fraud or error, design and perform audit procedures responsive to those risks, and obtain audit evidence that is sufficient and appropriate to provide a basis for our opinion. The risk of not detecting a material misstatement resulting from fraud is higher than for one resulting from error, as fraud may involve collusion, forgery, intentional omissions, misrepresentations, or the override of internal control.
- Obtain an understanding of internal control relevant to the audit in order to design audit procedures that are appropriate in the circumstances but not for the purpose of expressing an opinion on whether the entity has in place an adequate internal financial control system over financial reporting and the operating effectiveness of such control.
- Evaluate the appropriateness of accounting policies used and the reasonableness of accounting estimates and related disclosures made by Management.
- Conclude on the appropriateness of the Management's use of the going concern basis of accounting in preparation of financial statements and, based on the audit evidence obtained, whether a material uncertainty exists related to events or conditions that may cast significant doubt on the Entity's ability to continue as a going concern. If we conclude that a material uncertainty exists, we are required to draw attention in our auditor's report to the related disclosures in the financial statements or, if such disclosures are inadequate, to modify our opinion. Our conclusions are based on the audit evidence obtained up to the date of our auditor's report. However, future events or conditions may cause the Entity to cease to continue as a going concern.
- Evaluate the overall presentation, structure and content of the financial statements, including the disclosures, and whether the financial statements represent the underlying transactions and events in a manner that achieves fair presentation.



Materiality is the magnitude of misstatement in the financial statements, that, individually or in aggregate, makes it probable that economic decision of a reasonably knowledgeable user of the financial statement may be influenced. We consider quantitative materiality and qualitative factors in (i) planning the scope of our audit work and in evaluating the results of our work; and (ii) to evaluate the effect of any identified misstatements in the financial statements.

We communicate with those charged with governance regarding, among other matters, the planned scope and timing of the audit and significant audit findings, including any significant deficiencies in internal control that we identify during our audit.

We also provide those charged with governance with a statement that we have complied with relevant ethical requirements regarding independence, and to communicate with them all relationships and other matters that may reasonably be thought to bear on our independence, and where applicable, related safeguards.

Place : KOCHI

Date : 12-09-2023

UDIN: 23228912BGUDGQ5986

For ROSHAN THOMAS & Co.  
CHARTERED ACCOUNTANTS  
FRN - 0136115

*to shw*  
CA. ROSHAN THOMAS, FCA, DISA, (ICA)  
Membership No: 228912





## NOTES FORMING PART OF FINANCIAL STATEMENT FOR THE YEAR ENDED 31<sup>ST</sup> MARCH 2023

### Nature of Business

NETWORK FOR FISHQUALITY MANAGEMENT AND SUSTAINABLE FISHING was formed in **2006** under the aegis of Marine Products Export Development Authority (MPEDA), Kochi, registered under the Travancore-Cochin Literary, Scientific and Charitable Societies Registration Act, 1955 and under section 12AA of the Income Tax Act 1962 wide order of the commissioner of Income Tax Kochi dated 21.07.2008. The financial statement represent the transactions for the year ended 31<sup>st</sup> March 2023.

The major objectives of NETIFSH is to empower fisheries sector by imparting knowledge to fishermen, fisherwomen, processing workers, technicians, other fishery stakeholders etc. on fish quality management, conservation of fish resources and sustainable fishing.

### Significant Accounting Policies

#### 1.1 Basis of Accounting and Preparation of Financial Statements

The Financial statements are prepared under the historical cost convention on accrual basis in accordance with applicable Accounting Standards issued by the Institute of Chartered Accountants of India .

The preparation of financial statements in conformity with GAAP requires the Management to make estimates and assumptions that affect the reported balances of assets and liabilities and disclosures relating to contingent liabilities as at the date of financial statement and reported amounts of income and expense during the year. Accounting estimates could change from period to period. Actual results could differ from those estimates. Appropriate changes are made in the estimates as the Management becomes aware of the changes in the circumstances surrounding the estimates.

#### 1.2 Revenue Recognition

SEAFOOD INDIA STALL derives revenue primarily from sale of seafood related goods. Arrangement with customer for sale of goods are on a fixed price basis. Revenue is recognized when the risk and rewards of ownership are transferred to the buyer.



Fund Received from Government towards various projects and programs of the Trust are recognized as revenue in the year of receipt and where there is reasonable assurance that the all attached conditions will be complied with.

### 1.3 Capital Fund

Fund received from MPDEA (founder of the Society) is credited to capital fund. Excess of Income over Expenditure or Excess of Expenditure over Income as the case may be before the year ended is also added or deducted to/from the capital fund.

### 1.4 Property Plant and Equipment

Tangible fixed assets are stated at cost less accumulated depreciation / impairment.

The cost of a tangible fixed asset comprises of its purchase price, including any import duties and other taxes (other than those subsequently recoverable from the taxing authorities), and any directly attributable expenditure on making the asset ready for its intended use and net of any trade discounts and rebates. When parts of an item of Property, Plant and Equipment have different useful lives, they are accounted for as separate items (major components).

### 1.5 Depreciation

Depreciation is provided as per the rates prescribed in the Income Tax Rules 1962. In case of assets put to use for more than 180 days, full depreciation is charged whereas for assets put to use for less than 180 days, 50% of the normal depreciation rate is applied.

### 1.6 Employee Benefits

Short term employee benefits in respect of service rendered during a period is accounted at the undiscounted value expected to be paid in exchange for the service.

### 1.7 Provisions and Contingencies

Provisions are recognized when the entity has a present obligation as a result of a past event, for which it is probable that a cash outflow will be required to settle it and a reliable estimate can be made of the amount of the obligation. These are reviewed at each Balance Sheet date and adjusted to reflect the correct management estimates. Contingent Liabilities are disclosed when the entity has a possible obligation, or a present obligation and it is probable that a cash flow will not be required to settle the obligation. Contingent assets are neither recognized nor disclosed in the accounts.





### 1.8 Inventory

Inventory is valued at cost or net realizable value whichever is lower. Cost includes all duties, taxes (other than refundable) freight, octroi etc. related to bringing the goods to the location of the entity. Inventory is valued using FIFO method.

### 2. NOTES FORMING PART OF ACCOUNTS

a).SEA FOOD INDIA STALL was setup by MPDEA for creation more awareness with in the seafood industry and to thereby fuel interest in capture fisheries and value added fishing products being exported abroad. SEAFOOD INDIA STALL was being been operated by NETFISH as a trading unit under an agreement dated 12th February 2019 with Marine Product Export Development Authority(MPDEA). The Financial statements of NETFISH includes the operation of SEA FOOD INDIA STALL.

b).During the year 2022-23, an amount of Rs.1,57,00,000 was received from MPDEA towards the objectives of the trust and the same was credited to the Capital Fund.

c).The details of utilization of Specific Funds received is given below:

Particular	Opening Balance as at 01/04/2022	Fund Received During 2022-23	Expenses of the Year 2022-23	Closing Balance as at 31/03/2023
SC/ST Welfare fund	2,79,74,900	50,00,000	94,70,657	2,35,04,243
Mangrove Crab Project Payable	10,93,448	0	649	10,92,799

During the FY 2022-23 an Amount of Rs.50,00,000 was received from MPDEA for ST Welfare Scheme for purchase of insulated fish boxes and solar dryers. During FY 2022-23 an amount of 94,70,657 has been reimbursed to the beneficiaries. The balance amount of Rs.2,35,04,243 has been reflected in the liabilities side of the Balance sheet.



The Mangrove Crab Project, Mumbai conducted on behalf of UNDP has been completed. The balance amount of Rs.10,92,799, is refundable to UNDP. The same has been shown under the head of current liabilities.

d) Confirmation of balances

The amount receivable from MPEDA in respect of SEAFOOD INDIA stall Rs 105179 is subject to confirmation. The amount of Sundry debtors of SEAFOOD INDIA stall Rs 8069/- is subject to confirmation. The effect of reconciliation if any is not expected to be material.

The value of Sundry Creditors appearing in SEAFOOD INDIA stall accounts amounting to Rs 619542 is subject to confirmation from individual creditors.

e) Previous year figures have been regrouped wherever necessary.

*The audit report for The year 2022-23 has been approved by the Annual General Body Meeting on 15<sup>th</sup> September 2023*





**NETWORK FOR FISH QUALITY MANAGEMENT & SUSTAINABLE FISHING  
(NETFISH)**

KOCHI ( REG.NO.ER 509/06)

**BALANCE SHEET AS AT 31-03-2023**

	LIABILITIES	Sch	As on 31.03.23	As on 31.03.2022
<b>A</b>	<b><u>CAPITAL FUND</u></b>			
	Opening Balance		91 12 494	65 43 780
	Add: Fund from MPEDA during the year		1 57 00 000	1 50 00 000
	Less: Excess of expenditure over income		-1 89 85 034	-1 23 79 498
	Less: Loss of SEAFOOD India stall		6 531	- 51 788
			<b>58 20 929</b>	<b>91 12 494</b>
<b>B</b>	<b>MPEDA SC Welfare Project Fund</b>		2 35 04 243	2 79 74 900
	<b>TOTAL (A+B)</b>		<b>2 93 25 172</b>	<b>3 70 87 394</b>
	<b><u>ASSETS</u></b>			
<b>C</b>	<b><u>PROPERTY PLANT &amp; EQUIPMENT</u></b>			
	Written Down Value	1	4 92 539	14 01 961
	Less: Depreciation		1 52 591	3 30 114
	Closing WDV		<b>3 39 948</b>	<b>10 71 847</b>
<b>D</b>	<b><u>CURRENT ASSETS, LOANS AND ADVANCES</u></b>			
	Inventory	2		6 566
	Cash & Bank Balance	3	3 30 51 035	4 09 73 943
	Loans & Advances	4	18 42 623	1 55 427
	Sundry Debtors	5	8 069	6 126
			<b>3 49 01 726</b>	<b>4 11 42 062</b>
<b>E</b>	<b><u>LESS: CURRENT LIABILITIES AND PROVISIONS</u></b>			
	Salary Payable	6	10 70 850	9 20 987
	Expense Payable	7	30 46 784	23 43 650
	Other current liabilities	7	11 62 702	12 00 448
	Sundry Creditors	7	6 36 166	6 61 430
			<b>59 16 502</b>	<b>51 26 515</b>
<b>F</b>	<b>NET CURRENT ASSETS (D-E)</b>		<b>2 89 85 224</b>	<b>3 60 15 547</b>
	<b>TOTAL (C+F)</b>		<b>2 93 25 172</b>	<b>3 70 87 394</b>

Subject to notes forming part of accounts and my report of even date

Approved by Annual General Body Meeting dtd. 15-9-2023

Place : KOCHI

Date : 12-09-2023

UDIN: 23228912BGUDGQ5986

**For ROSHAN THOMAS & Co.**  
**CHARTERED ACCOUNTANTS**  
FRN - 0136115

CA. ROSHAN THOMAS, FCA, DISA, (ICA)  
Membership No: 228912



(Chief Executive Officer)

**Dr. Joice V. Thomas** **अनिल कुमार.पी./Anil Kumar. P**

Chief Executive

NETFISH-MPEDA

Vallarpadam (P. O.)

Kochi-682 504, Kerala



(Treasurer)

संयुक्त निदेशक / Joint Director

समुद्री उत्पाद निर्यात विकास प्राधिकरण

Marine Products Export Development Authority

(वाणिज्य एवं उद्योग मंत्रालय, भारत सरकार)

(Ministry of Commerce & Industry, Govt. of India)

पनमिल्ली नगर Panampilly Nagar

कोच्ची Kochi-36.



(Director)

**डॉ. एम. कार्तिकेयन/Dr. M. KARTHIKEYAN**

संयुक्त निदेशक / Joint Director

समुद्री उत्पाद निर्यात विकास प्राधिकरण

Marine Products Export Development Authority

(वाणिज्य एवं उद्योग मंत्रालय, भारत सरकार)

(Ministry of Commerce & Industry, Govt. of India)

कोच्ची / Kochi-682 036



CA. ROSHAN THOMAS, FCA, DISA, (ICA)

Membership No: 228912

(Auditor)

**NETWORK FOR FISH QUALITY MANAGEMENT & SUSTAINABLE FISHING  
(NETFISH)**

KOCHI ( REG.NO.ER 509/06)

**INCOME AND EXPENDITURE ACCOUNT FOR THE YEAR ENDED 31.03.2023**

In Rs.

Particulars		2022-23	2021-22
Fund received for Extension Activities	8	2,75,43,478	1,10,25,983
Other Income	8A	2,71,304	34,002
<b>TOTAL</b>		<b>2,78,14,782</b>	<b>1,10,59,985</b>
<b>EXPENDITURE</b>			
Depreciation	1	1,52,591	3,30,114
Extension Activities	9	3,12,70,003	1,06,43,792
Employee Cost	10	1,38,81,897	1,13,34,491
Administrative Expenses	11	14,95,325	11,31,086
<b>TOTAL</b>		<b>4,67,99,815</b>	<b>2,34,39,483</b>
<b>Excess of Expenditure over Income</b>		<b>-1,89,85,034</b>	<b>-1,23,79,498</b>

Subject to notes forming part of accounts and my report of even date

*Approved by Annual General Body Meeting dtd 27-9-2022*

Place : KOCHI

Date : 12-09-2023

UDIN: 23228912BGUDGQ5986

**For ROSHAN THOMAS & Co.  
CHARTERED ACCOUNTANTS  
FRN - 0136115**

*Roshan*  
**CA. ROSHAN THOMAS, FCA, DISA, (ICA)  
Membership No: 228912**

*[Signature]*

(Chief Executive Officer)

**Dr. Joice V. Thomas**  
Chief Executive  
NETFISH-MPEDA  
Vallarpadam (P. O.)  
Kochi-682 504, Kerala

*[Signature]*

(Treasurer)

**अनिल कुमार.पी./Anil Kumar. P**  
संयुक्त निदेशक / Joint Director

समुद्री उत्पाद निर्यात विकास प्राधिकरण  
Marine Products Export Development Authority

(वाणिज्य एवं उद्योग मंत्रालय, भारत सरकार)  
(Ministry of Commerce & Industry, Govt. of India)

पनम्पिल्ली नगर/Panampilly Nagar

कोच्ची/Kochi-36.

*[Signature]*

(Director)

**डा. एम. कार्थिकेयन/Dr. M.KARTHIKEYAN**  
निदेशक/Director

समुद्री उत्पाद निर्यात विकास प्राधिकरण  
The Marine Products Export Development Authority

(वाणिज्य एवं उद्योग मंत्रालय, भारत सरकार)  
(Ministry of Commerce & Industry, Govt. of India)

कोच्ची / Kochi-682 504

(Auditor)





SEAFOOD INDIA				
Profit and Loss account for the year ended 31-3-2023				
	31-03-2023	31-03-2022	31-03-2023	31-03-2022
Opening Stock		2 40 314		15 73 360
Purchases	6 566	9 57 345	6 566	
		Loss of Stock (damage)		
		Closing stock		6 566
Gross profit c/d	6 566	3 82 267	6 566	15 79 926
		15 79 926		
Indirect Expenses	5 665	5 10 997		3 82 267
Loss by damage	6 566		5 700	25 154
		Gross profit b/d		
		Indirect income		
		Net Loss transferred to balance sheet	6 531	1 03 576
	12 231	5 10 997	12 231	5 10 997

Subject to notes forming part of accounts and my report of even date

Place : KOCHI

Date : 12-09-2023

UDIN: 23228912BGUDGQ5986

Approved by Annual General Body Meeting dtd 15-9-2023

*(Signature)*

(Chief Executive Officer)

Dr. Joice V. Thomas  
Chief Executive  
NETFISH-MPEDA  
Vallarpadam (P. O.)  
Kochi-682 504, Kerala

(Treasurer)

अनिल कुमार.पी./Anil Kumar. P  
संयुक्त निदेशक / Joint Director  
समुद्री उत्पाद निर्यात विकास प्राधिकरण  
Marine Products Export Development Authority,  
(सांघिज्य एवं उद्योग मंत्रालय, भारत सरकार)  
(Ministry of Commerce & Industries Govt. of India)

(Director)

डॉ. एम. कार्तिकेयन/Dr. M. KARTHIKEYAN  
निदेशक / Director  
समुद्री उत्पाद निर्यात विकास प्राधिकरण  
The Marine Products Export Development Authority  
(सांघिज्य एवं उद्योग मंत्रालय,  
भारत सरकार / Govt. of India)

For ROSHAN THOMAS & Co.  
CHARTERED ACCOUNTANTS  
FRN - 0136115

CA. ROSHAN THOMAS, FCA, DISA, (ICA)  
Membership No: 228912

(Auditor)



## OFFICE BEARERS 2022-23

**Sri. D.V. Swamy IAS**, President NETFISH & Chairman, MPEDA

**Dr. Joice V. Thomas**, Chief Executive, MPEDA-NETFISH

**Sri. Anilkumar P.**, Treasurer NETFISH & JD(Mktg) MPEDA

**Sri. Atanu Ray**, State Coordinator, West Bengal, MPEDA-NETFISH

**Sri. Subhrakanta Mohapatra**, State Coordinator, Odisha, MPEDA-NETFISH

**Sri. P. Hanumantha Rao**, State Coordinator, Andhra Pradesh North, MPEDA-NETFISH

**Dr. Murali Mohan Matturti**, State Coordinator, Andhra Pradesh South, MPEDA-NETFISH

**Dr. Arulmoorthy M.P.**, State Coordinator, Tamil Nadu North, MPEDA-NETFISH

**Dr. Vinoth S. Ravindran**, State Coordinator, Tamil Nadu South, MPEDA-NETFISH

**Smt. Sangeetha N. R.**, State Coordinator, Kerala South, MPEDA-NETFISH

**Sri. Santhosh N. K.**, State Coordinator, Kerala North, MPEDA-NETFISH

**Sri. Narayana K.A.**, State Coordinator, Karnataka, MPEDA-NETFISH

**Sri. Santosh Kadam**, State Coordinator, Maharashtra South & Goa, MPEDA-NETFISH

**Dr. Girija Saurabh Behere**, State Coordinator, Maharashtra North, MPEDA-NETFISH

**Sri. Jignesh M. Visavadia**, State Coordinator, Gujarat, MPEDA-NETFISH

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**Smt. Neethu N. J.**, Research Assistant, MPEDA-NETFISH

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