



# MPEDA

Newsletter

Vol.VI/No.11/ FEBRUARY 2019



PAGE 05

## Bengal Fish Fest-2019

PAGE 17

## Buyer-Seller Meet on Quality Aquaculture Produces

PAGE 22

## Popularization of MPEDA schemes for Capture Fisheries

[www.mpeda.gov.in](http://www.mpeda.gov.in)







# CPF-TURBO PROGRAM

The shrimp industry has seen major developments and tasted success over the years, And not only are we proud to be part of it, but also take pride in pioneering it. To ensure the success and profitability of the Indian Shrimp Industry, our highly determined team with committed Aquaculture specialists constantly provide the shrimp farmers with access to the latest and updated technology.

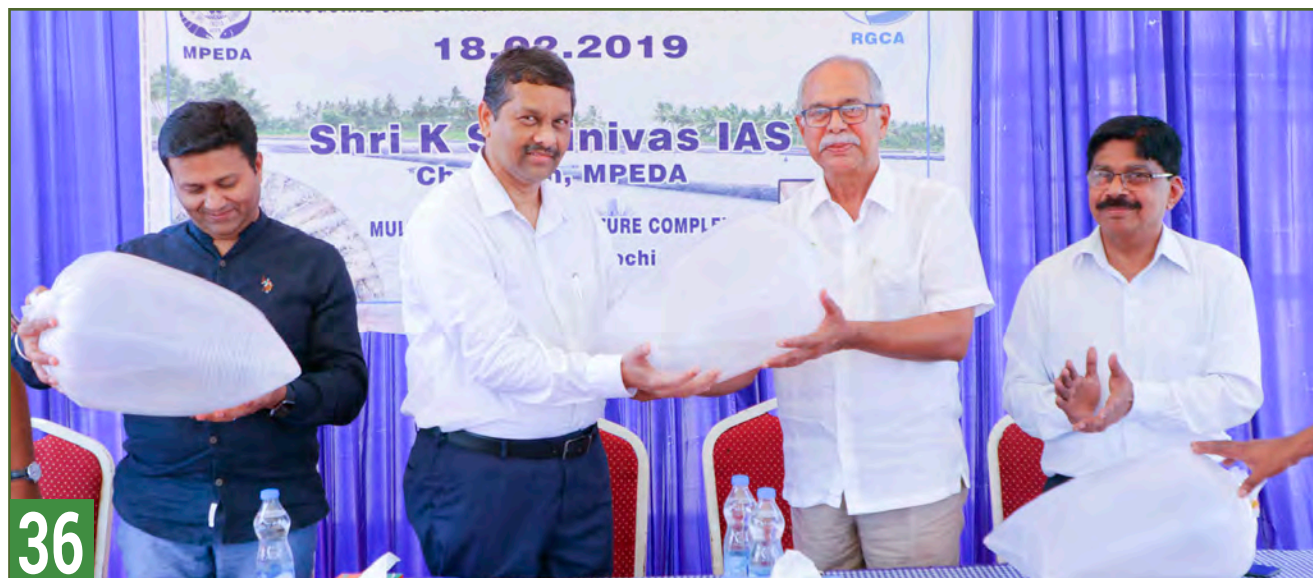


**CPF-TURBO PROGRAM -**  
**Pioneering Successful and Profitable Shrimp Aquaculture**



# CONTENTS

Volume VI, No.11, February 2019



36

**MPEDA – MAC starts supply of high-health Black tiger shrimp seeds**



11

**Highlights of marine fish landings**



17

**Buyer-Seller Meet on Quality Aquaculture Produces**



19

**Harbour Clean-ups by NETFISH**



22

**Popularization of MPEDA schemes for Capture Fisheries**



26

**Awareness programmes for School Children**



45

**India is top exporter of shrimp to US for fourth straight year**

The views expressed in the scholarly articles of this publication are the views of the authors and do not constitute the views of MPEDA. The responsibility for the accuracy of information in the scholarly articles of this publication is vested with the authors themselves and neither MPEDA nor the editorial board holds responsibility for the same.



## 25 Years of perfecting the science of aquaculture to help you dream bigger.

We are not just celebrating a milestone. We are celebrating India's rise as a powerhouse in shrimp production as we watch the Vannamei shrimp, that we fought to introduce, change the industry. We are celebrating countless seafood platters that our farmers brought to dinner tables all over the world. We are celebrating the success saga of our farmers, dealers, employees and partners. Join us, as we set our eyes on scaling newer heights.



**The  
Waterbase  
Limited**

Thapar House, 37 Montieth Road  
Egmore, Chennai - 600 008  
Tamil Nadu, India  
T : +91 44 3012 7000  
[www.waterbaseindia.com](http://www.waterbaseindia.com)



Mr. Penemetsa Bhima Raju, Shrimp farmer from Bhimavaram uses Waterbase Baywhite Enriched feed

» Shrimp Feed » Farm Care » Processing » Exports » Hatchery



## EDITORIAL BOARD

**Mr. T. Dola Sankar IOFS**  
DIRECTOR (M)

**Mr. B. Sreekumar**  
SECRETARY

**Mr. P. Anil Kumar**  
JOINT DIRECTOR (AQUA)

**Mr. K. V. Premdev**  
DEPUTY DIRECTOR (MP)

**Dr. T. R. Gibinkumar**  
DEPUTY DIRECTOR (MPEDA RATNAGIRI)

EDITOR  
**Dr. M. K. Ram Mohan**  
JOINT DIRECTOR (M)

ASST. EDITOR  
**Mrs. K. M. Divya Mohanan**  
SENIOR CLERK

EDITORIAL SUPPORT  
**Bworld Corporate Solutions Pvt Ltd**  
166, Jawahar Nagar, Kadavanthra  
Kochi, Kerala, India 682 020  
Phone: 0484 2206666, 2205544  
www.bworld.in, life@bworld.in

LAYOUT  
**Robi Ambady**

COVER PHOTO  
**Dr. T. R. Gibinkumar**  
DEPUTY DIRECTOR



[www.mpeda.gov.in](http://www.mpeda.gov.in)  
[support@mpeda.gov.in](mailto:support@mpeda.gov.in)

Printed and Published by  
Mr. B. Sreekumar, Secretary  
on behalf of The Marine Products  
Export Development Authority  
(Ministry of Commerce & Industry, Govt. of India)  
MPEDA House, Panampilly Avenue  
Kochi - 682 036, Tel: +91 484 2311979

Published by  
MPEDA House  
Panampilly Avenue  
Kochi - 682 036

Printed at  
Print Express  
44/1469A, Asoka Road  
Kaloor, Kochi - 682 017

## In the Platter



**K. S. Srinivas IAS**  
Chairman

Dear friends,

**M**PEDA has organized a stakeholder meeting to identify the first mile connectivity gaps in the capture fisheries in December 2018. Further to that MPEDA did one to one consultation with the coastal states to discuss the state specific action plan to identify and upgrade at least one fishing harbour in every State to the world class standards. The consultations with the State Departments were very fruitful and the states have assured whole hearted support for the initiative. The harbours to be upgraded have already been identified. Within a short time, MPEDA will be preparing detailed project reports.

The Black Tiger hatchery of Multi Species Aquaculture Complex of MPEDA – RGCA at Vallarpadam, Kochi began the supply of High Health seeds of Black Tiger seeds during the month. The step will definitely revive the farming of the species which enjoys niche market abroad. In a move to harness the distant water resources such as tuna, the first batch of four fishing vessels built by the Cochin Shipyard has been handed over to the State Department of Fisheries, Tamil Nadu, which is also aimed to replace the trawlers operated in Gulf of Mannar and Palk Bay region.

MPEDA has also done a consultative meeting with the officials of four airports in Kerala to have a way forward to boost the export of live and chilled marine products from the State to the Middle East market. With good air connectivity from Kerala and a sizeable ethnic Indian population, the Middle East countries hold immense potential for the export of fresh seafood from the State. MPEDA will be taking a series of stakeholder consultations to move ahead on this.

In a move to encourage the value addition and to up skill the workforce towards production of value added marine products, MPEDA has started four hands on training programmes on value addition of seafood at Mumbai, Veraval, Tuticorin and Bhimavaram during the month. These programmes are being guided by processing experts from Vietnam, which will be helpful to create enough trainers on value addition of seafood in processing units.

Thank you.

**Disclaimer:** Readers are requested to verify & make appropriate enquiries to satisfy themselves about the veracity of an advertisement before responding to any published in this magazine. The Marine Products Export Development Authority, the Publisher & Owner of this magazine, does not vouch for the authenticity of any advertisement or advertiser or for any of the advertiser's products and/or services. In no event can the Owner, Publisher, Printer, Editor, Director/s, Employees of this magazine/organization be held responsible/liable in any manner whatsoever for any claims and/or damages for advertisement in this.

MPEDA is not responsible for the content of external Internet sites.



## **Looking to Export to the U.S.?**

Let our dedicated team with decades of experience assist you



**Full Service, Inter-Modal  
& LTL Trucking**



**FCL/LCL  
Ocean Freight**



**Domestic and International  
Air Freight**



**Full Service FDA Security &  
Compliance Consulting**

## **\*NEW FOR 2019\***

# **Seafood Import Monitoring Program**



Now offering 2019  
record keeping  
for NOAA Compliance

Have FBGS be your  
U.S. team to keep  
your imports covered  
for all monitoring  
requirements

**LET'S GET STARTED!**

**Call: 718.471.1299**

**Email: [Info@FreightBrokersGlobal.com](mailto:Info@FreightBrokersGlobal.com)**

# Bengal Fish Fest-2019

The Bengal Fish Fest 2019 got off to a colourful start on 11<sup>th</sup> January 2019 at Nalban Food Park, Salt Lake, Kolkata in the presence of a host of dignitaries. Those present at the inauguration of the Fest included Mr. Subrata Mukherjee, Minister of Panchayat and Rural Development, Mr. Chandra Nath Sinha, Minister of Fisheries, Mr. Swapan Debnath, Minister of ARD & MSME, Mr. Sadhan Pande, Minister of Consumer Affairs and Self Help Group and Self Employment, Mr. Indranil Sen, Minister of State, Tourism from Government of West Bengal, Mr. Sabyasachi Dutta, Mayor of Bidhannagar, Mr. Sumanta Chaudhuri, Managing Director, SFAC, Ministry of Agriculture, Government of India, Mr. P.K. Mazumdar, Adviser – Agriculture and Allied Sector to Chief Minister, Government of West Bengal. Company representatives, business houses, Fisheries University, Fishery institutes, fishers and other stake holders from West Bengal and other states participated in this event. Country representations were made by Japan, Vietnam, Cambodia, Thailand, Myanmar, Bangladesh and UAE. The Department of Fisheries, Government



*Dr. D. Roy, JTO, MPEDA and Mr. Atanu Roy, NETFISH with Dr. B. K. Mahapatra, Sr. Scientist, CIFE*

Kolkata attended the inauguration function. On the second day, a conference on business opportunities was organised. The focus areas of the conference were (i) Prevention of the Use of Antibiotics in Aquaculture, (ii) Increased Regulatory Regime in Importing Countries and (iii) Challenges and opportunities for Bengal seafood exports and Export certification.



*Inaugural function of Bengal Fish Fest 2019*

of West Bengal had organized the 4<sup>th</sup> Bengal Fish Fest 2019 jointly with Indian Chamber of Commerce with an aim to explore domestic and international market linkages, investments with promotion of new and advanced technologies and knowledge dissemination to all the key stake holders in the fisheries and marine sectors of West Bengal.

Those performed well in different fields of fisheries sector from among fish farmers, fishermen cooperative societies and CFCS in 2016 were felicitated and given awards at the Fest. M/s. Magnum Exports Kolkata won the award for highest export turnover from Kolkata. Mr. Archiman Lahiri, Deputy Director and Mr. Johnson D' Cruz, Assistant Director, MPEDA, Regional Division,

The conference was co-chaired by Secretary, Department of Fisheries, Additional Director, Department of Fisheries, Deputy Director, MPEDA, Deputy Director, EIA, Kolkata, President and Secretary, SEAI, Kolkata. Around 110 stakeholder attended the session and had detailed discussions with the officials.

Representatives of different departments and agencies under the Government of West Bengal, feed manufactures, feed dealers and Cooperative societies attended the Fest. MPEDA's presence at the Fourth edition of the Bengal Fish Fest 2019 was recorded with an exhibition stall and through sponsorship.

BMP on culture practices, Diversification in aquaculture, Value addition in seafood were the main themes at the exhibition stall. The messages were presented through screening of video films and display of MPEDA publications and charts. Printed material was available for visitors to the stall for sale and reference. Around 70 serious interactions were held during the three days of the event, apart from other visitors and students. MPEDA activities were appreciated by the fish farmers, casual visitors and officials.

There was a separate section for the food stalls, where ready-to-eat fish items were sold by some 30 different vendors like Bawarchi from Jadavpur, Poush



## MARKETING NEWS

Parban, The All Fish Restaurant Digba Food Corporation, IFB Fresh Catch, Posto Patuli, C/o Bangali, Benfish, Nom Nom etc. This segment attracted a good crowd.

The main participants for the event were WBCADC, State Fisheries Development Corporation, Central Institute of Fisheries Education (ICAR) West Bengal State Rural Livelihoods Mission, Bankura Zila Mach Dimpona Utpadak Welfare Samity, Department of Tourism Government of West Bengal, Rashmoni Marine Mohila Co- operative Society Limited, Agrawal Trading Co., Department of Micro Small and

Medium Enterprises and Textiles, Mudiali Fisherman Co-operative Society Limited, Magnum Exports, CPF (India) Private Limited, Kasturi Aqualife Products Pvt. Ltd., Pasupati Aquatics Pvt. Ltd., Glaucus Group, Tarohé Formulations, The Growel Group, Nippai Shalimar Feeds Pvt. Ltd., Naturo Virgin, Ornamental Fish Aquarists Welfare Association, Karavali Group of Companies, Anmol Feeds Pvt Ltd, Howrah District Ornamental Fisherman's Co- Operative Society Limited and some other



*Dr. Debasish Roy, JTO, MPEDA interact with the visitors*

self help groups.

The Bengal Fish Fest 2019 ended on 13<sup>th</sup> January 2019.



# Living Jewels

A Handbook on Freshwater Ornamental Fish

₹150



## MARKETING NEWS

# Chairman, MPEDA attends India-EU Joint Working Group meeting on SPS/TBT issues

**M**r. K. S. Srinivas, Chairman, MPEDA visited Brussels on 18 January 2019 to attend the 12<sup>th</sup> Joint Working Group (JWG) on SPS/TBT issues. Mr. Santhosh Kumar Sarangi, Joint Secretary, Department of Commerce (DoC), Mr. N. Ramesh, Director, DoC and Mr. R.M. Mandik, Deputy Director, EIC, were present along with him.

The meeting was held under the co-chairmanship of Mr Sarangi and Mr. Peter Berz, Head of Unit, DG (Trade), European Union. Mr. R.P. Singh, Advisor, and Dr. Smitha Sirohi, Advisor, Embassy of India in Brussels, too attended the JWG.

The JWG took up three issues related to seafood trade between India and EU. The issue of suspension of authorisation of Ethoxyquin as feed additive for all animal species and categories was the first subject to be taken up at the meeting. The EU had issued SPS notification (G/SPS/N/EU/190/Add.1) on June 13, 2017.

Another point taken up for discussion was the delisting

of 14 Indian processing establishments by the EU, after banned antibiotics was detected in their products. The EU was briefed that after delisting these companies put enough precautions in place to ensure that such instances are not repeated. The request was placed to reconsider the decision to delist these companies.

The EU had increased the sample size of aquaculture products imported from India, tested at border customs for presence of banned antibiotics, from 10 to 50 per cent. This was done on the basis of EU Commission Decision Number 2016/1774 issued on October 4, 2016. The EU was requested to revert to the original sample size of 10 per cent to improve trade situation between India and the EU.

On their part, the EU agreed to send a delegation of technical experts to India soon to analyse and review the situation. Decision on delisting of Indian companies and reverting the sample size will be taken after that visit, the Indian team was told.

Copyright 2017 © MPEDA. All Rights Reserved

MPEDA Contact details  
Commercial Fishes of India - Chart

Marine Product Exporters Directory  
www.mpeda.gov.in

Copies Now Available!  
₹50

**Exporters Directory Digital CD**

THE MARINE PRODUCTS EXPORT DEVELOPMENT AUTHORITY (Ministry of Commerce & Industry, Government of India)  
Head Office, MPEDA House, Building No: 27/1162, PB No:4272, Panampilly Avenue, Panampilly Nagar PO, KOCHI-682 036,

# Capacity building programmes by NETFISH, MPEDA

**NIKITA GOPAL, ARATHY ASHOK\*, R. RAGHU PRAKASH, U. PARVATHY, K.K.PRAJITH, V. RENUKA, JESMI DEBBARMA AND JOICE V THOMAS\*\***

An evaluation of the programmes conducted by the Network for Fish Quality Management and Sustainable Fishing (NETFISH), a registered society under the Marine Products Export Development Authority (MPEDA), was taken up as part of a Consultancy Agreement between NETFISH-MPEDA and ICAR-CIFT during 2015-16.

The focus of the grassroots level capacity building programmes of NETFISH are fish quality management, conservation of fish resources as well as sustainable fishing and the target stakeholders are basically the fishermen and fisherwomen; workers in the fish landing centres and harbours; processing workers and technicians; etc. Regular and special programmes are organised to improve the value chain so that the seafood products produced and exported from India meet the quality standards as desired by the importing countries.

Programmes organised at harbours and landing centres in four states, Kerala, Maharashtra, Gujarat and Andhra Pradesh, were assessed. Activities at 18 harbours and landing centres were surveyed and 217 persons were interviewed for this purpose and information or data gaps were augmented with Focus Group Discussions (FGDs) in most places.

Over the period 2008-09 to 2014-15, the number of programmes conducted by NETFISH averaged around 2721 programmes annually (inclusive of all programmes). This is about 272 programmes per major centre.

The NETFISH has a yearly action plan in which targets are fixed for the number of training programmes to be organized per centre. Each state (centre) has a Coordinator. Since the focus of the programmes is on quality improvement, the programmes are generally based in harbours and landing centres, on-board fishing

vessels, pre-processing and processing centres; as well as centres engaged in drying fish.

The programmes included Landing Centre – Quality; Landing Centre – Conservation; On board quality; Pre-processing – quality and safety aspects; Processing – quality and safety aspects and Dry-fish – quality and safety aspects. It is observed that 69.98 per cent of all programmes conducted were at landing centres and harbours.

This is the most crucial link in the seafood value chain and required major attention. It has been proven that the issues of quality of fish arises because of poor infrastructural facilities in the landing centres and harbours which is further multiplied by unhygienic handling practices. Some of the special programmes organised included street plays, medical camps, clean up drives, rallies, programmes in schools and door-to-door campaigns.

The average age of the beneficiaries varied from 33.26 in Gujarat to 43.28 in Kerala. The average age overall was 33 years. It is clear that the beneficiaries of the NETFISH training programmes at various centres were in the active working age group. It is also an age group with responsive faculties and so any teaching or learning process should show results. About 86 per cent of the respondents were literate. The percentage of literates was maximum in Kerala followed by Gujarat, Maharashtra and Andhra Pradesh.

The evaluation study focused on harbour-based programmes on *Quality* and *Conservation*. The evaluation was conducted using a survey tool, which consisted of three broad sections – dealing with the pedagogy of the training, impact measured by levels of awareness and the application of the information passed on to the beneficiaries.

---

ICAR-Central Institute of Fisheries Technology, Cochin \*ICAR- National Institute of Agricultural Economics and Policy Research (NIAP), New Delhi / \*\*NETFISH, MPEDA, Cochin



## FOCUS AREA

### General satisfaction regarding training programme

The harbours and landing centres are the first point of fish sale and it is this fish that enters into the domestic markets as well as goes for processing in the seafood factories catering to the export markets for the country. As such it is very important that hygiene and sanitation are maintained in the harbours and landing centres so that the quality of the highly-perishable commodity like fish is maintained. The hygiene and sanitation training is conducted both onboard for crew of fishing vessels and in harbours and landing centres for workers in these centres. The overall rating (pooled data) of the harbour-based programmes on quality was 'Very Good' for 46.58 per cent of the respondents and 'Good' for 34.60 per cent of the respondents. Out of the total sampling, 81.18 per cent of the respondents were of opinion that the training programme on quality aspects in the harbours and landing centres was good.

PROGRAMMES ON CONSERVATION WERE INTRODUCED AS A MEASURE TO CREATE AWARENESS AMONG FISHERS AND FISH WORKERS ON THE HARMFUL EFFECTS OF DESTRUCTIVE GEAR, ON THE IMPROVEMENTS THAT CAN BE MADE IN GEAR TO REDUCE ENVIRONMENTAL IMPACTS, ON JUVENILE FISHING AND OTHER IMPACTS ON THE RESOURCE BASE THAT SUSTAINS THE FISHERIES OF THE COUNTRY.

As far as the pedagogy of the training is concerned, more than 95 per cent of the beneficiaries agreed that the topics and content were relevant to their area of operation.

They were also satisfied with the timing of the training and the methods used and facilities provided. About 97.22 per cent of them felt that the training materials were useful. The coordinators got high scores of more than 97 per cent on effectiveness and they also went on record that they were encouraged to participate in the discussions and in the whole training process.

Programmes on conservation were introduced as a measure to create awareness among fishers and fish

workers on the harmful effects of destructive gear, on the improvements that can be made in gear to reduce environmental impacts, on juvenile fishing and other impacts on the resource base that sustains the fisheries of the country.

Pooled data revealed that 48.32 per cent of the respondents felt that the training was 'Very Good' and 35.51 per cent felt it was 'Good'. About 15 per cent had no opinion on the training and were indifferent to the same. Results similar to the programme on Quality were observed as far as the pedagogy was concerned, with more than 95 per cent giving good scores for the parameters for satisfaction of the training programme.

### Awareness related to fish quality management

The awareness levels of harbour/landing centre workers ranged from 77-99 per cent for different parameters selected. Adoption of these practices is what would make the training programmes effective. The stress of the programmes on quality has been on personal hygiene and sanitation as well as that of the premises of work. This requires the practice of several specific activities like use of clean boots, gloves and mouth pieces; avoiding spitting and chewing tobacco and other intoxicants and smoking; maintaining the auction hall and harbour in clean and hygienic condition etc.

The application of the 'learnt' or 'acquired' information is the crux of the training. This is what actually gives a picture of whether the training has been effective or not. As per the respondent responses, basic practices like hygienic handling of fish and ice, use of plastic shovels, maintenance of personal hygiene, avoidance of cutting, cleaning and processing of fish in harbour etc. are adopted in the harbours that have been assessed in this study. However, observation of the survey team has found that the adoption rates are not as high as perceived by the respondents. This indicates that there is a disconnect between the awareness of the beneficiaries and on-the-ground reality. It was observed that there is lack of basic infrastructural facilities in the harbour like sufficient potable water and ice, roads and transportation facilities, availability of auction hall and raised platforms, suitable implements like plastic crates, shovels etc. which hamper the implementation of standard protocols to ensure quality. Lack of sufficient toilets in the harbours, and if present in inconvenient locations making access difficult, force the workers to spoil the immediate surroundings. These are common issue in almost all the 18 harbours or landing centres surveyed in Kerala, Andhra Pradesh, Gujarat and Maharashtra.

## FOCUS AREA

On the whole, the training activities of NETFISH have had a positive impact on the levels of awareness on hygienic handling of fish and in the need to maintain cleanliness in the harbours. However, most harbours and landing centres were found to be having infrastructural and operational problems, which make the adoption of some of the practices difficult. The multiplicity of stakeholder organizations involved in the management of the harbours and their lack of convergence in activities make the issues very serious.

The awareness levels on the topics covered under the programme on conservation at the harbour and landing centre ranged from 60-99 per cent for different

parameters selected.

The awareness level on use of Turtle Excluder Devices (TEDs) was least, whereas that on the trawl ban was the maximum with 99 per cent of the respondents aware about it. During the evaluation study, it was observed that the fishers had complete compliance to trawl ban, as it is legally binding on them. They were also positive towards adopting eco-friendly fishing methods and controlling marine pollution and protecting marine areas. NETFISH has been propagating and supplying square mesh cod end and also stressing on the need to use the CIFT-TED. But of the adoption levels were low at 33 per cent and 8 per cent respectively.



**Handbook on Aquafarming**  
**Diseases of Cultured Shrimp and Prawn in India**

**Copies Now Available!**  
**₹100**

# Diseases of Cultured Shrimp and Prawn in India

THE MARINE PRODUCTS EXPORT DEVELOPMENT AUTHORITY (Ministry of Commerce & Industry, Government of India)  
Head Office, MPEDA House, Building No: 27/1162, PB No:4272, Panampilly Avenue, Panampilly Nagar PO, KOCHI-682 036,



# Highlights of marine fish landings in selected harbours of India during December 2018

AFSAL V.V., N.J. NEETHU AND JOICE V. THOMAS, NETFISH-MPEDA  
NETFISH-MPEDA

The landings of major fish varieties and the details of fishing vessels landing the catch are recorded by NETFISH, on a daily basis, from the major harbours of India to facilitate the Catch Certification System of MPEDA. This report describes the analysis results of harbour data attained during December 2018.

## Data Collection & Analysis

The fish catch and boat arrival data were obtained on every day basis; both from the primary and secondary sources, by the Harbour Data Collectors stationed at selected harbours of India along the 9 coastal States (see Table 1). The approximate quantity of major fish species that are landed in a day at the harbour was obtained by eye estimation. The name, registration number and type of fishing vessels arrived at the harbour were also recorded. The data were further analysed using online applications and MS office (Excel) tools to arrive at species-wise, region-wise, state-wise and harbour-wise estimations. During December 2019, data from 44 harbours belonging to 9 maritime states were obtained which were analysed for this report.

**Table 1. List of landing sites selected for data collection**

Sl. No.	State	Fishing harbour
1	West Bengal	Deshapran
2		Namkhana
3		Raidighi
4		Digha (Sankarpur)
5	Odisha	Paradeep
6		Balaramgadi
7		Bahabalapur
8		Dhamara

9	Andhra Pradesh	Visakhapatnam
10		Nizampatnam
11		Machilipatnam
12		Kakinada
13	Tamil Nadu	Nagapattinam
14		Karaikal
15		Chennai
16		Pazhaiyar
17		Cuddalore
18		Pondicherry
19		Chinnamuttom
20		Mandapam
21		Tuticorin
22		Colachel
23	Kerala	Thoppumpady
24		Vizhinjam
25		Thottappally
26		Kayamkulam
27		Beyport
28		Sakthikulangara
29		Munambam
30		Puthiyappa
31	Karnataka	Tadri
32		Karwar
33		Mangalore
34		Honnavar
35		Malpe
36		Gangoli

## FOCUS AREA

37	Goa	Cutbona
38		Malim
39	Maharashtra	Ratnagiri (Mirkarwada)
40		Sasson Dock

41	Maharashtra	Harne
42	Gujarat	Veraval
43		Mangrol
44		Porbandar

### Estimations on fish landings

A total of 80378.18 tons of marine fish landings was recorded from 44 landing sites during December 2018, which were comprised of 33592.50 tons (42%) of Pelagic finfish resources, 25111.14 tons (31%) of Demersal finfishes and 21674.54 tons (27%) of Shellfishes (Fig. 1). The shellfish landing was composed of 13274.38 tons of Molluscs and 8400.16 tons of Crustaceans.

The total catch was comprised of 103 varieties of marine fishery items, among which the top five contributors were Ribbon fish, Indian Mackerel, Cuttlefish, Red-toothed Filefish and Squid (Fig. 2). These 5 fishery items together formed 43% of the total catch. The other major contributors to the catch were Horse Mackerel, Bull's

eye and Japanese thread fin bream, each recording more than 3500 tons. The species which registered least landing during the month was the Vermiculated Spine-foot, with a quantity of 0.25 tons.

Table 2 enlists the quantity of various fishery items recorded during December 2018.

Among the Pelagic finfish resources, Ribbon fish and Indian mackerel were the major contributors and in the case of demersal finfishes, it was Red-toothed Filefish, Bull's eyes and Japanese threadfin bream which contributed more. Major items among Shellfish resources were Penaeid Shrimps, Cuttlefish and Squid. Among the Penaeid shrimps, the *Karikkadi* shrimp registered the highest catch.

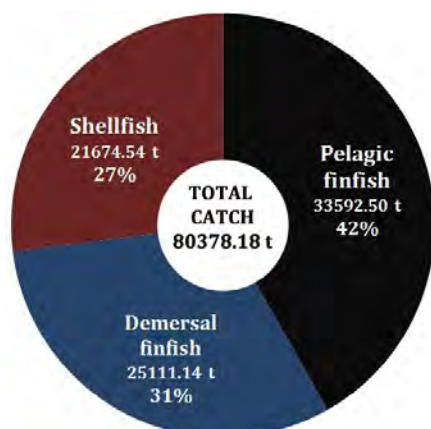


Fig. 1. Category-wise fish landings during December 2018

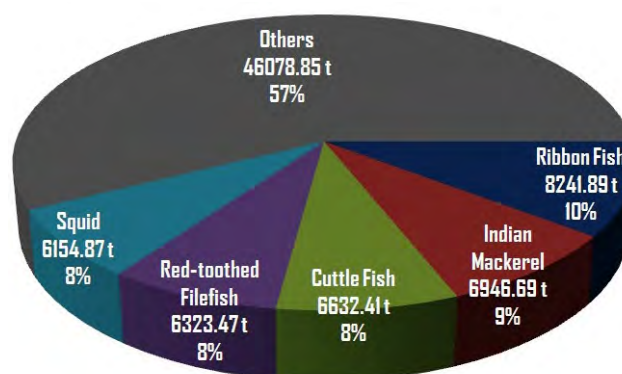


Fig. 2. Major fishery items landed during December 2018

Table 2. Category-wise landing of various fishery items during December 2018

Fish item	Quantity in tons	% of total catch
<b>Pelagic Finfish</b>		
Ribbon Fish	8241.89	10.25
Indian Mackerel	6946.69	8.64
Horse Mackerel	3877.15	4.82
Indian Oil Sardine	2701.77	3.36
Tunas	2285.95	2.84
Seer Fish	1618.77	2.01

Trevally	1512.43	1.88
Anchovies	1406.68	1.75
Dolphin Fish	919.41	1.14
Barracudas	758.87	0.94
Scads	700.40	0.87
Bombay Duck	588.64	0.73
Lesser Sardines	436.21	0.54
Herrings	434.92	0.54
Queen Fishes	296.49	0.37



## FOCUS AREA

Leather Jacket	231.63	0.29
Sail Fish	166.02	0.21
Oriental Bonito	158.70	0.20
Mullet	87.33	0.11
Hilsa	57.99	0.07
Marlins	55.42	0.07
Indian Ilisha	40.51	0.05
Indian Salmon	30.40	0.04
Cobia	22.05	0.03
Sea Bass	7.89	0.01
Silver Sillago	6.20	0.01
Indian Thread Fish	0.90	0.00
Needle Fish	0.71	0.00
Rainbow Runner	0.50	0.00
<b>Total</b>	<b>33592.50</b>	<b>41.79</b>
<b>Demersal Finfish</b>		
Red-Toothed Filefish	6323.47	7.87
Bull's Eye	3632.82	4.52
Japanese Thread Fin Bream	3519.14	4.38
Croakers	3222.80	4.01
Reef Cods	1890.95	2.35
Cat Fish	1868.88	2.33
Sole Fish	1212.03	1.51
Lizard Fish	1078.23	1.34
Pomfrets	877.97	1.09
Moon Fish	309.97	0.39
Eel	279.38	0.35
Snapper	231.40	0.29
Pony Fishes	224.76	0.28
Goat Fish	169.75	0.21
Rays	124.31	0.15
Perch	36.30	0.05
Ghol	34.52	0.04
Indian Halibut	22.70	0.03
Whip Fin Silver Biddy	20.25	0.03
Emperor Bream	18.52	0.02

Parrot Fish	8.25	0.01
Spine Foot	4.75	0.01
<b>Total</b>	<b>25111.14</b>	<b>31.24</b>
<b>Shellfish</b>		
<b>Crustaceans</b>		
Penaeid shrimps	7457.65	9.28
Non-penaeid shrimps	169.31	0.21
Sea Crab	751.54	0.94
Mud Crab	3.90	0.00
Lobsters	17.76	0.02
<b>Total Crustaceans</b>	<b>8400.16</b>	<b>10.45</b>
<b>Molluscs</b>		
Squid	6154.87	7.66
Cuttlefish	6632.41	8.25
Octopus	487.11	0.61
<b>Total Molluscs</b>	<b>13274.38</b>	<b>16.51</b>
<b>Total Shellfish</b>	<b>21674.54</b>	<b>26.97</b>
<b>Grand Total</b>	<b>80378.18</b>	<b>100.00</b>

### Region-wise landings

In December 2018, the maximum quantity of fish landings was recorded from the North West coast, where a total of 36500.87 tons (46% of total catch) of fish catch was reported from the selected harbours of Maharashtra and Gujarat. The South West coast comprised of Kerala, Karnataka and Goa had contributed 29238.23 tons (36%) to the total catch, holding the second position. In South East coast, landings recorded from the selected harbours in Tamil Nadu and Andhra Pradesh were totalled to 5098.50 tons (6%), whereas along the North East coast 9540.57 tons (12%) of fish catch was recorded altogether from the 8 harbours of West Bengal and Odisha (Fig. 3).

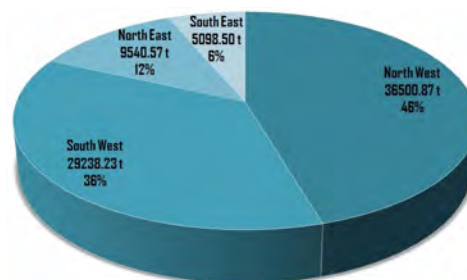


Fig. 3. Region-wise landings recorded during December 2018

## FOCUS AREA

### State-wise landings

The maximum landing during the month was recorded from Gujarat, which was to the tune of 29886.16 tons, forming more than 37% of total catch (Fig. 4). This was followed by Karnataka with 20192.44 tons (25%) and then by West Bengal with a contribution of 6743.17 tons (8%). The State which reported least landing during the period was Andhra Pradesh, where only 1690.06 tons (2%) of marine fish catch was recorded. The West coast States together formed nearly 82% of the total catch.

The major five fishery items which had contributed significantly to the landings in each state during December are given in Table 3.



Fig. 4. State-wise fish landings (in tons) during December 2018

Table 3. Major items landed in various states during December 2018

Item	Quantity in tons	% of total landings of the state
<b>Kerala</b>		
Ribbon Fish	928.42	17.06
Indian Oil Sardine	743.12	13.66
Squid	507.86	9.33
Indian Mackerel	474.87	8.73
Cuttlefish	417.41	7.67
<b>Karnataka</b>		
Red-Toothed Filefish	6322.37	31.31
Indian Mackerel	3669.11	18.17
Trevally	1194.46	5.92
Squid	1081.55	5.36
Indian Oil Sardine	1046.85	5.18
<b>Goa</b>		
Indian Mackerel	904.70	25.10
Horse Mackerel	774.52	21.49
Ribbon Fish	323.00	8.96
Bull's Eye- Blood Coloured	299.30	8.30
Moon Fish	209.90	5.82
<b>Maharashtra</b>		
Horse Mackerel	1862.42	28.16
Squid	686.74	10.38
Cuttlefish	686.01	10.37
Ribbon Fish	585.22	8.85



## FOCUS AREA

Indian Mackerel	412.57	6.24
<b>Gujarat</b>		
Ribbon Fish	4812.00	16.10
Cuttlefish	4412.00	14.76
Squid	3150.50	10.54
Japanese Thread Fin Bream	2762.00	9.24
Bull's Eye- Dusky Finned	1984.70	6.64
<b>Tamil Nadu</b>		
Cuttlefish	646.60	18.97
Squid	226.99	6.66
Tuna	190.87	5.60
Indian Scad	174.37	5.12
Sea Crab	155.27	4.56
<b>Andhra Pradesh</b>		
Tuna	248.51	14.70
Marine Shrimp ( <i>Karikkadi</i> )	143.07	8.47
Brown Shrimp	139.14	8.23
Ribbon Fish	111.94	6.62
Squid	108.71	6.43
Odisha		
Croaker	688.65	24.62
Marine Shrimp ( <i>Karikkadi</i> )	258.38	9.24
Ribbon Fish	244.95	8.76
Golden Anchovy	144.28	5.16
Cat Fish	144.03	5.15
<b>West Bengal</b>		
Indian Oil Sardine	563.96	8.36
Croaker	555.48	8.24
Ribbon Fish	483.85	7.18
Bombay Duck	400.83	5.94
Indian Mackerel	383.26	5.68

### Harbour-wise landings

Figures 5 and 6 represent the fish landings recorded during the month at the selected harbours of West coast and East coast respectively. Of the 44 harbours, Veraval harbour in Gujarat registered the maximum landing of 12738.00 tons (16%) and it was followed by Mangrol harbour with a contribution of 9429 tons (12%).

The Sankarpur harbour, the harbour along East coast that registered the maximum landing, recorded a quantity of 2746.53 tons (3%), thereby attaining the seventh position. During the month, 17 out of the 44 harbours registered more than 1000 tons of fish catch which consisted of 12 harbours of West coast and 5 harbours of East coast. The least quantity of marine fish catch was recorded from Chinnamuttom harbour in Tamil Nadu (34.10 tons).

## FOCUS AREA

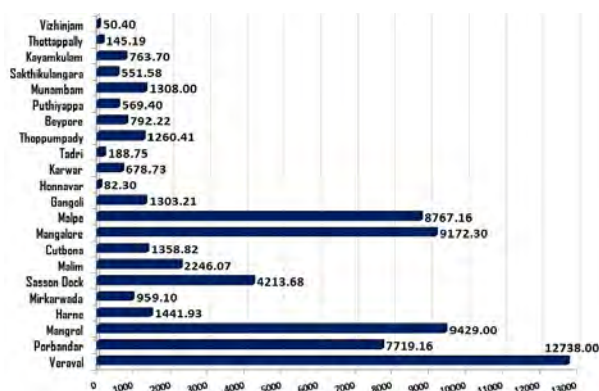


Fig. 5. Landings (in tons) recorded at harbours in west coast during December 2018

### Estimations on boat arrivals

A total of 30849 boat arrivals were recorded during December 2018, of which the highest number of boats was recorded from Veraval harbour (4098). The Mangrol harbour with 3339 boat arrivals held the next position. About 78% of the fishing vessels which landed their catch at the harbours belonged to the category of Trawlers and the remaining landings were by Purse seiners, Gill netters, Long liners and Traditional crafts.

### Comparative Analysis

Table 4 presents the comparison of data of December 2018 with that of previous months.

Table 4. Comparative analysis of the data

	October 2018	November 2018	December 2018
Total Catch	83264.15 t	86132.22 t	80378.18 t
Landing of Pelagic finfishes	38139.34 t (46%)	41079.77 t (48%)	33592.50 t (42%)
Landing of Demersal finfishes	22024.97 t (26%)	24008.92 t (28%)	25111.14 t (31%)
Landing of Shellfishes	23099.84 t (28%)	21043.52 t (24%)	21674.54 t (27%)
Species recorded highest landing	Ribbon fish (9%)	Ribbon fish (10%)	Ribbon fish (10%)
State recorded highest landing	Gujarat (39%)	Gujarat (37%)	Gujarat (37%)
Harbour recorded highest landing	Veraval (21%)	Veraval (18%)	Veraval (16%)
Total Boat Arrivals	30126	28483	30849

### Summary

In December 2018, a total landing of 80378.18 tons of marine fishery resources were recorded from the 44 major fishing harbours of India, where in Pelagic finfish contributed the major quantity than the demersal finfish and shellfish stocks. Considering the fishery item-wise landings, the Ribbon fish was the major contributor during the month and the Indian mackerel stood in the

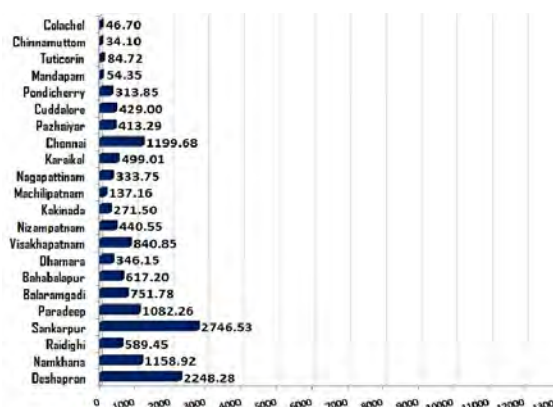


Fig. 6. Landings (in tons) recorded at harbours in east coast during December 2018

The total fish catch had decreased by around 6000 tons during December in comparison with that of November. Though Pelagic finfishes continued as the highest contributor, about 6% reduction in the percentage share was observed, which was reflected as 3% increase each in the percentage share of demersal finfishes and shellfishes.

Ribbon fish continued as the topmost contributor among the various fishery items landed during the period. Gujarat and the Veraval harbour in the State remained in the top position in terms of quantity of fish landed, as in previous months. The total number of boat arrivals recorded had increased in December when compared to that of November.

\*Percentage of total catch

second place. About 82% of the total catch recorded during December was from the West coast and the maximum catch was recorded from the North West region. Among the maritime States, Gujarat recorded maximum landing during the period and the Veraval harbour had registered the highest landing as well as the maximum number of boat arrivals. In all, the catch trend during December 2018 was found fairly similar to that obtained during the previous months.



# Buyer-Seller Meet on Quality Aquaculture Produces



*Inaugural session of the Buyer Seller Meet*

India's seafood export is increasing exponentially with contribution of cultured shrimp rising from 3.02 lakh MT in 2013-'14 to 5.66 lakh MT in 2017-'18. Though there is an increase in export of shrimp from India during last 3-4 years, rejection of farm-raised shrimp products also increased, resulting in imposition of more stringent laws and trade barriers by our conventional markets like EU, Japan and USA.

The rejection and stringent barriers resulted in drop in import of shrimp into developed market, which resulted drop in farm gate prices of cultured shrimp *L. vannamei*. With the aim to overcome the menace of antibiotic residue in cultured shrimps, a buyer-seller meeting was organised at Taloja, Navi Mumbai on January 29, to find out best possible corrective measures and bring suitable decision to enhance our seafood export and reduce the rejection through self-disciplinary action by both exporters and farmers.

The buyer seller meet was designed in such a way that it was included technical session at the morning, where in the advanced culture technique of *L. Vannamei* was presented by aquaculture experts, then farmers

representatives were given opportunities to discuss issues like development of strategies for improvement in traceability on seafood products, establishment of Strong Quality Regime and Assurance, aquaculture land lease policy, and diversification of aquaculture. This was followed by the representative from Seafood Exporters Association of India giving a brief on the export trade, quality standards requirements, competitions and technical and non technical barriers to trade.

The meet also provided space for one-to-one interaction and enter into long term contract for their further business.

The meet got off with Mr. Rajakumar S. Naik, Deputy Director, MPEDA, welcoming those present and giving an overview about the meeting. He explained the need for Shrimp Farm Enrolment to comply with traceability requirements. The challenges and issues created due to exponential production of *L. Vannamei* was also explained.

He also advised the farmers to adopt new technologies to increase the productivity similar to countries like

## FOCUS AREA

Ecuador. He also requested Department of Fisheries, Government of Maharashtra to give full support to the farmers to add more aquaculture area in Maharashtra.

Mr. Ashok Jawale, Assistant Commissioner of Fisheries (Brackish Water), Government of Maharashtra, inaugurated the meeting. In his inaugural address, Mr. Ashok said that there is lot of land available in Maharashtra and these land segments like salt land, Khar land and mangrove land under different departments, including the Revenue Department, which can be effectively developed for aquaculture by allocating those potential lands to farmers.

Mr. Kashinath Tari, Secretary, Maharashtra Aquaculture Farmers' Association (MAFA), said that farmers and exporters are two sides of the same coin. He thanked the MPEDA Maharashtra for taking the initiative to organise the first ever buyer-seller meet here.

Appreciating the work that MPEDA is doing in the development of aquaculture in Andhra Pradesh, Odisha, West Bengal, Tamil Nadu and Gujarat, Mr. Kashinath requested MPEDA to evolve a strategy for Maharashtra, similar to that it had done in Gujarat.

The request was to prepare Master Plan for Development of Aquaculture in Maharashtra (Brackish water as well as Saline Water Affected Lands in Maharashtra and Inland Pond and Reservoir culture). He also observed that the immense development of aquaculture in Andhra Pradesh and Tamil Nadu were results of MPEDA activities like OSSPARC, TASPAC, RGCA.



*Interactive session with Exporters and Farmers during the Buyer Seller Meet at Taloja, Navi Mumbai*

Most of salt pan lands remain unproductive in Maharashtra, which can be effectively used for shrimp farming, he said, pointing out that MPEDA was the

moving force for Coastal Aquaculture Development in India.

Mr. Rustom Irani, President, Seafood Exporters Association of India (SEAI), Maharashtra congratulated MPEDA for convening the meet for the first time, to discuss Quality Aquaculture Produces for Export - Issues and Challenges in Maharashtra. Observing that aquaculture development in Maharashtra is lagging behind other states like Gujarat and Andhra Pradesh, Mr. Rustom said that only combined efforts of farmers and exporters can bring changes and development.

Since seafood is global business and the prices are governed by international policies, bilateral relations, production of competitor countries, quality standards etc. and so, the prices of shrimps cannot be discussed on the floor and fixed, he said.

Dr. Rajendra Damale given a presentation on "Prospects of Sustainable *L. vannamei* culture in Maharashtra". He explained in details about pond seasoning, water exchange, molting, seed selection, research on benefit of probiotics, various culture techniques in *L. vannamei* in Maharashtra.

Dr. Ajitsinh Patil, President, Maharashtra Aquaculture Farmers' Association (MAFA) Maharashtra, explained various reasons for slow growth of aquaculture in Maharashtra and asked all farmers and exporters to come together to bring about the change.

Mr. Abhishek Pawar and Mr. Sandip Dongare, President, Taloja Manufacturer's Association, Taloja, presented the issues faced from exporters/ buyer side. He assured farmers that they would get good prices for quality products. Citing an example, he said that due to the brown heads, shrimp getting less prices in China.

He then demonstrated different colour grades, methods to achieve such colours and its importance in marketing. This session was followed by opportunity for farmers and exporters to have one-to-one meetings to enter the future business contacts.

A committee was formed with representatives from buyer and seller sides, Assistant Commissioner of Fisheries, Government of Maharashtra and MPEDA officials. The meeting was concluded with Mr. Sandeep Dongare, General Secretary, SEAI, Maharashtra Chapter, proposing the vote of thanks.





# Harbour Clean-ups by NETFISH



*Hygiene kit distribution to fishers at Thegingundi*

**N**ETFISH organised two clean-up programmes on 19<sup>th</sup> and 28<sup>th</sup> January 2019 at Belekeri and Thengingundi fishing harbours in Uttara Kannada district respectively in Karnataka, with the aim to sensitise the fishers and harbour workers about harbour sanitation. Both the clean-up drives had active participation from fishermen, harbour workers and officials from the State Fisheries Department. The NETFISH member NGO SCODWES provided their support in organizing the events successfully.



*Fisher youths actively participating in the Clean up at Belekeri*

Inaugurating the programme in Belekeri, Mr. Krishna Banavalikar, President of Fisher Union in Belekeri, said that the fishers should cooperate with the Fisheries Department in cleaning the harbour premises. Mr. Narayana K. A. gave a talk on objectives of the harbour clean-up programme and NETFISH activities in Karnataka with respect to quality management and sustainable fisheries. He also advised the fishers to practice hygienic fish handling aboard as well as in harbour. As part of the harbour clean-up programme, 45 hygiene kits were distributed among the fishers selected from different boats. Each hygiene kit consisted of liquid hand wash, hair oil, comb, tooth paste and brush. A demonstration on proper way of cleaning fishing harbour and auction hall was organised for the participants. The auction hall, wharf and harbour premises were cleaned jointly by all the participants to wind up the programme.

The clean-up event at Thengingundi was inaugurated by Mr. Krishna V. Mogera, member of Fisher Union in Teningundi. A brief talk on harbour sanitation, distribution of leaflets, distribution of hygiene kits and demonstrations followed. The entire harbour including auction halls, wharf areas etc. were cleaned and sanitized by the team. Reports on the clean-up event were published in local newspaper dailies.



# Awareness meeting on safety of the fishermen and sustainable fisheries



*Fishing boat owners at the awareness programme*

An awareness meeting on the A&I Schemes for the safety of the fishermen and sustainable fisheries was conducted by MPEDA Regional Division, Kochi in association with NETFISH at Anchor House, Chullikkal, Kochi on 07<sup>th</sup> January 2019. Out of the 28 participants who attended, 21 were fishing boat owners. Mr. Prince S.X., Deputy Director and Mr. Sreejith P.T., Assistant Director represented Regional Division of MPEDA, Kochi. Mrs. Sangeetha SCO-Kerala South represented NETFISH and Mr. Joice Abraham, Assistant Director, represented the State Fisheries Department.

Detailed presentations were made on the various schemes beneficial to the fishing community. The participants were made aware about the need of sustainability and the measures to be adopted to attain the same. The need for the safety of fishermen was also explained to them.

Officials from M/s. Marine Electricals India and M/s. Electronik Lab gave talks on the product specification and use. Fishermen asked for a live onboard demo

and the same may be arranged by the OEM shortly. It was decided that the fishing boat owner would take a decision on financial support after the onboard demonstration of the equipment. One application for certification of fishery, five applications for VMS and ten application for BRD/TED/Square Mesh cod end were received at the end of the programme.



*Mr. Sreejith P. T., Assistant Director and Mr. S. X. Prince, Deputy Director, MPEDA along with Equipment vendors*



# Meeting held to popularize new SFC Scheme



*A view of the programme*

**M**PEDA Regional Division, Chennai conducted meeting with State Fisheries officials and members of fishermen associations at Karaikkal on 05<sup>th</sup> January 2019 and at Nagapattinam and Nambiar Nagar on 06<sup>th</sup> January 2019. Empanelled suppliers of SBVMS and BRD were invited for the meeting. M/s. Elektroniklab India Pvt Ltd, Chennai attended the meeting and demonstrated their equipment for the fisherman at all three locations.

### Karaikkal

Meeting started with the Deputy Director, Regional Division of MPEDA, Chennai explaining to those present about the scheme to the fishermen. He stressed the need for keeping satellite-based VMS on board during fishing. He also suggested to fishermen to purchase square mesh code end for sustainable fishing. Official of M/s. Elektroniklab India Pvt Ltd, Chennai explained the advantage of SBVMS.

The details of electronic equipment, including prices, were given to fishermen along with a leaflet on SBVMS. The price chart was pasted on the notice board of the Association and copy of the same was given to Karaikkal Fisheries Department officials. Since there was no fishermen association in Karaikkal, 29 village

panchayat members and fishermen attended the meeting.

### Nagapattinam

Deputy Director, Regional Division of MPEDA, Chennai explained about the scheme and benefits of SBVMS and square mesh cod end to 45 fishermen who came for the meeting. M/s. Elektroniklab India Pvt Ltd, Chennai attended the meeting and explained about the advantage of SBVMS (phone and text type).

Fishermen were told that the Department of Fisheries is in the process of giving one or two SBVMS to group of 10 boats across Tamil Nadu coast. The fishermen association suggested waiving of renewal and recharge amounts. Regarding square mesh code end, the fishermen pointed out the need for training on attaching the webbing.

### Nambiar Nagar, Nagai

As requested by the fishermen of Nambiar Nagar, a separate meeting for 24 fishermen was organised by the Regional Division of MPEDA, Chennai on the same day. Those present raised similar suggestions like their counterparts in Nagapattinam.



# Meeting held for Popularization of MPEDA schemes for Capture Fisheries



*Mr. A. Lahiri, Deputy Director, MPEDA addressing the audience*

A meeting was convened by West Bengal United Fishermen Association (WBUFA) in the presence of Deputy Director, MPEDA and State Coordinator, NETFISH on various issues related to marine fisheries at Digha Mohana on 20<sup>th</sup> January 2019. About 30 members of the association covering three maritime districts namely North 24 Parganas, South 24 Parganas and Purba Medinipur of West Bengal participated in the programme, which was presided over by the president of WBUFA.

The problem for getting Boat License Certificate (BLC) issued by Forest Department for wild harvest of Mud Crab and fishes from creeks and rivers of Sunderban areas was one of the issues raised at the meeting.

The Deputy Director, MPEDA presented the scheme of MPEDA for Capture Fisheries Sector, regarding installation of VMS on the fishing boat and its significances for exports. He also explained the function of Satellite Based Vessel Monitoring System, tracking the vessel and disseminates the information from land to boat and boat to land etc.

MPEDA has come up with By-catch Reduction Devices

(BRD) to conserve marine resources, he said, requesting the boat owners to fix square mesh panel in their trawl net. This will help the juveniles to escape from the net and thus helping sustainable fishing habits, he said.

State Coordinator of NETFISH said that VMS is essential for safety and security for the fishermen at seas, as it ensures proper communication between themselves and with the coast.

The President of WBUFA agreed to install the square mesh in the trawl net cod end and requested MPEDA to provide a sample of the square panel to study the efficiency of the net. The Secretary of WBUFA welcomed the proposal of installing VMS, as it is very helpful for the fishers as well as for the boat owners to monitoring their boats while on fishing and also get the required information about fishing and related activities.

The Secretary, Digha Fishermen and Fish Traders Association requested to the Deputy Director to arrange a meeting between the boat owners and the MPEDA's empanelled suppliers for demonstration of the VMS set at the end of January at Digha Mohana, Purba Medinipur.





# Awareness meeting on MPEDA scheme on safety of the fishermen and Sustainable Fisheries



*A view of the programme*

**M**PEDA Regional Division, Mumbai conducted an awareness meeting on the scheme by MPEDA on safety of the fishermen (VMS) and Sustainable Fisheries on 11<sup>th</sup> January 2019 at the conference hall of Fishery Survey of India (FSI), Sasoondock Harbour, Colaba, Mumbai. Ahead of this meeting, MPEDA officials held a preliminary meeting with the Commissioner of Fisheries and Joint Commissioner of Fisheries on 05<sup>th</sup> January 2019 and briefed about the MPEDA schemes.

About 50 stakeholders participated in the meeting where Mr. Rajendra Jadhav, Joint Commissioner of Fisheries, Government of Maharashtra; Dr. Maheshkumar., Deputy Director General (Eng), FSI; Mr. Vinod Kumar, Senior Fisheries Scientist, FSI; officials M/s. Elektroniklab India Pvt. Ltd. (an empanelled vendor of VMS) and Mr Santosh Kadam, State Coordinator, MPEDA-NETFISH, were present.

Mr. Rajakumar S. Naik, Deputy Director, MPEDA, explained about the purpose of the meeting to all present and said that MPEDA is keen towards fishermen safety, sustainable fisheries and emphasized the benefit of financial assistance schemes. Dr. Mahesh Kumar, explained the need of sustainable fishing and said that many developed countries are more conscious about

the resource conservation and reluctant to consume the depleting and endangered resources. Mr. Rajendra Jadhav, Joint Commissioner of Fisheries, Maharashtra Government, explained the importance of square mesh net and TED and encouraged fishermen to make use of the MPEDA scheme.

Mr. Bhushan Patil, Assistant Director, MPEDA, made a presentation of the MPEDA schemes. Mr. Santosh Kadam, Maharashtra Coordinator NETFISH, presented the importance of square mesh net and shared some success stories of square mesh used in Kokan area of Maharashtra through NETFISH programmes.

Officials from M/s. Elektroniklab India Pvt. Ltd. explained the features of the product namely, Inmarsat Isatphone-2 and documents required for registration.

Deputy Director, MPEDA, requested all stake holders to collect the format of intimation letter to apply for MPEDA assistance and supplied intimation letter format and scheme copies for their reference. All fishermen told the officials that they need a week's time and they will revert back through their societies about requirement of equipment. The meeting concluded with Mr. Rajakumar Naik proposing the vote of thanks.



# PMKVY Training Programme for Seafood Processing Plant Workers



*Mr. Ram Adhar Gupta, Deputy Director, MPEDA addressing the audience*

The first batch of training for seafood processing plant workers under the Pradhan Mantri Kaushal Vikas Yojana (PMKVY) was organized from 15-17, January 2019 at M/s. Castlerock Fisheries Pvt Ltd, Unit-III, Veraval. Mr. Ram Adhar Gupta, Deputy Director MPEDA Regional Division, Veraval, inaugurated the programme. Quality Manager of sea food processing plant delivered the introductory speech and Mr. Shrimali Vinod Kumar M., Assistant Director, Regional Division, Veraval, proposed the vote of thanks.



*A view of the trainees with PMKVY kits and pre-screening in progress*



*Orientation Programme*

Twenty-seven processing plant seafood workers, who have been registered and enrolled under Skill Development and Management System (SDMS) of National Skill Development co-operation (NSDC) as per the protocol, were trained on different aspects of plant, equipment and personal hygiene, sanitations aspects, product handling at various stages from pre-processing to packing etc. The training was led by Mr. Shrimali Vinod Kumar M., Assistant Director, RD, Veraval. An assessment of the trainees was conducted by the deputed Assessor from the sector council namely Food Industry, Capacity and Skill Initiating Sector Council (FICSI) on the second and third days of training.



# Study on 'Environmental impact of Effluent Discharges from Seafood processing plants and its Control measures'

It was suggested in the 129<sup>th</sup> Authority meeting that MPEDA should take up "a study on pollution control measures adopted in the processing plants and the treatment of water for re-use". Following this, tenders were invited through national editions of a leading daily for appointing an agency for conducting the study on 'Environmental impact of effluent discharges from seafood processing plants and control measures'. The CAC meeting convened on November 22, 2017 then recommended to award the work to M/s. Ultratech Environmental Consultancy and Laboratory, Kochi.

The scope of the study were (i) to determine the effectiveness of operation of ETP (Both Common and independent) installed in the Sea processing plants (SPPs), (ii) pollution issues reported from the processing plants including freezing, chilled, dried preservation systems, (iii) present issues for the operation of ETP in seafood processing units for pollution control, (iv) recommendation of optimum capacity of ETP vis-à-vis for the processing units identified for the study, (v) suggesting practical measures to overcome the issues in pollution control, (vi) suggesting optimal ETP Models

(ecofriendly /energy efficient) for use in seafood processing units, (vii) treatment of wastewater treated in ETP for re-use in seafood processing plants and (viii) suggesting recommendations towards financial assistance for the setting up of recommended models of ETP in Seafood Processing Plants.

The study including the sampling/survey as per the schedule was undertaken by the consultant in selected 106 processing plants located in various coastal states, and the final report on the study on "Environmental impact of effluent Discharges from Seafood processing plants and control measures" was submitted on August 23, 2018. The report was circulated to all field offices of MPEDA and their comments also were incorporated in the report. The consultant also made a presentation before Chairman and other senior officials from MPEDA on the final report on 29<sup>th</sup> January 2019.

The consultant has made certain recommendations based on the impact study done at the Seafood Processing Plants (SPPs). The findings were also communicated to the units covered for the study and to the Seafood Exporters Association of India.



**Breeding, Seed Production and Farming of Mud Crab**

ORDER YOUR COPY!

₹50

THE MARINE PRODUCTS EXPORT DEVELOPMENT AUTHORITY  
(Ministry of Commerce & Industry, Government of India)  
Head Office, MPEDA House, Building No: 27/1162, PB No:4272, Panampilly Avenue, Panampilly Nagar PO, KOCHI-682 036



# Awareness programmes for School Children



*Children given activities for better learning*

**S**chool students of coastal areas are identified as the potential group to be involved in fishery resource conservation activities. Awareness on conservation of fish resources and sustainable fishing as well as fish quality management are inculcated in children studying in schools along coastal areas.

The goal behind this drive is to make these children pass on the message to their parents and other family

members, who are engaged in fishing and allied activities.

In January 2019, NETFISH held a series of awareness programme for educate children of regular schools as well as vocational schools in Odisha, Tamil Nadu and Kerala.

Details of these campaigns are given in the table below.

Sl. No.	Programme Date	Place	No: of students attended the programme
1	7.1.19	St.Mary's High School, Pallippuram, Kerala	100
2	11.1.19	Govt. VHSS, Kaipamangalam, Kerala	50
3	12.1.19	U P School, Nehru Bungalow, Paradeep, Odisha	30
4	15.1.19	Govt. High School, Kadappuram, Kerala	60
5	15.1.19	Govt. VHSS, Kadappuram, Kerala	110
6	16.1.19	Dr.Jadunath Junior Vocational College, Balasore, Odisha	30
7	18.1.19	Tharuvaikulam Government Higher Secondary school, Tharuvaikulam, Tamil Nadu	150
8	18.1.19	Govt. High School, Kadappuram, Kerala	70
9	19.1.19	T. Saveriyarpuram R.C Govt High school, Tuticorin, Tamil Nadu	200



## FOCUS AREA



*Awareness programme for school children at Paradeep*

During the training programme, the students were taught about the importance of protection of coastal and marine ecosystems, ill effects of illegal fishing and the depletion of fishing resources.



*Presenting the mementos to the winners of competitions held at Saveriyarpuram school*

The issues of sustainable use of living and non-living resources of the seas, protection of mangrove vegetation, marine turtle and fish seed along with the environment where they are dwelling were also covered in the programme. Besides, present status of the fishery resources, exports from the state as well as from the country, fish quality management and personal hygiene



*Drawing competition for the School children*

were also described. NETFISH leaflets on conservation & fish quality were distributed and documentary and animation films on "Conservation of marine resources" were shown to the students

The programmes in Tamil Nadu included recitation competitions on "harmful effects and eradication of plastic wastes in the coasts", drawing competition on the topic "conservation of coastal and marine ecosystems" and essay writing competition on "conservation of fish and fishery resources". Participants in all competitions were given mementos and certificates.





# Sea Safety training by NETFISH

**N**ETFISH usually conduct capacity building programmes on sea safety and navigation for fishers, fishing boat drivers and crew, so as to equip them for safe fishing. In January 2019, six such programmes were conducted. The trainees were made aware about the safety and security at sea, safety measures on boat, importance of registration and license of fishing boat, use of different life-saving equipment such as lifejacket, lifebuoy, distress alert transmitter etc. and different communication measures during distress. They were also trained on personal safety, through demonstration of safety equipment and the ways to manage the emergency situation. The Coastal Police too joined the programme held at Bhatkal along with NETFISH officials and the police personnel explained various aspects of sea safety and

navigation and demonstrated on how to use lifejackets and lifebuoys.

Details of the programmes held are in the table.

Sl. No.	Programme Date	Place	No. of Beneficiaries
1	7.1.19	Nagapattinam	30
2	10.1.19	Paradeep	30
3	26.1.19	Machilipatnam	30
4	28.1.19	Pondicherry	30
5	29.1.19	Kasimedu	30
6	29.1.19	Bhatkal	35



*GPS Training programme in Machilipatnam*

Some of the programmes conducted were specifically on GPS system and its operation, where the function of GPS, different kind of GPS devices available, need of satellite GPS and its importance in traceability

system, etc. were explained and also demonstrated the procedures for recording a waypoint, navigating to the recorded waypoints, using GPS waypoints in rescue situations, troubleshooting etc.



# Training Programme on 'Sustainable Shrimp Farming and Aquaculture of Diversified Species'

A three-day training programme on 'sustainable shrimp farming and aquaculture of diversified species' was organized at the office of MPEDA, Sub Regional Division, Ratnagiri from 15-17, January 2019, where 24 farmers, entrepreneurs, SHGs attended.



*Dr. T.R. Gibinkumar, Deputy Director, MPEDA inaugurating the training programme*

Ahead of the inauguration, Dr. Vishnudas R. Gunaga, Junior Technical Officer, MPEDA, outlined various activities of the MPEDA for shrimp/prawn culture and briefed the scope and status of shrimp/prawn farming in India, especially in Maharashtra.



*Trainees during field visit to MPEDA's mud crab demo farm*

Inaugurating the programme, Dr. T.R. Gibinkumar, Deputy Director, MPEDA, explained the purpose of conducting such training programmes by MPEDA and how they are beneficial for the farmers as well as new entrepreneurs. He highlighted the various schemes of MPEDA available for aquaculture farmer. Mr. Shaji George, Assistant Director, Sub Regional Division,

Ratnagiri and Mr. S. Pandiyarajan, Assistant Director, Sub Regional Division, Panvel were also present for the inaugural session.

The technical session that followed the inaugural programme included lectures, field visits and experience sharing continuously for the next three days. Dr. Vishnudas R. Gunaga covered related topics starting from site selection to post harvest techniques. Dr. Gibinkumar made a presentation on MPEDA and its various schemes for aquaculture development and certification. A special lecture was also delivered on value addition of seafood products. Mr. Pandiyarajan talked about aquaculture of diversified species. Mr. Arun Alsae, a progressive farmer, was invited as resource person to share his experiences with trainees.



*Trainees during a field trip to a Vannamei farm*

On the second day of the training programme, a field trip was also arranged for trainees to MPEDA's mud crab demonstration farm at Bakale village in Ratnagiri district that belonged to Mrs. Neeta Vaiti. The trainees also visited the shrimp farm that belonged to Mrs. Manali Vaiti at Bakale village, the one owned by Mr. Charles Benzamene at Kondsar village in Ratnagiri district and crab nursery sites at Partwane. Dr. Vishnudas R. Gunaga and Mr. Pandiyarajan accompanied the trainees and explained the techniques involved in Vannamei culture as well as crab culture at the farm sites.

The 3-day training programme concluded with the valedictory session, where Mr. Shaji George distributed the certificates to participants.





# Awareness Programmes for Popularising Schemes for Capture Fisheries



*Dr. T. R. Gibinkumar, Deputy Director being welcomed by Karla Society*

**M**PEDA has published the new Schemes under capture fisheries and it was decided to organise awareness programmes by regional divisions for publicising the schemes among the various stake holders in the fisheries sector. The Sub Regional Division of MPEDA at Ratnagiri organised two awareness programmes at Ratnagiri on 14<sup>th</sup> January 2019 – one at Karla and another at Tilak Lane, Ratnagiri.

The first awareness programme was organised in association with Karla Machhimar Sahakari Sansta Maryadit in their meeting hall. The programme was started with the welcome address by Mr. Nadim Mohammed Solkar, Chairman of the Society. Members of the Director Board of the Society and official of M/s. Elektroniklab from Goa, were present.

Dr. T.R. Gibinkumar, Deputy Director, MPEDA Sub Regional Division, Ratnagiri gave a presentation on MPEDA schemes pertaining to the capture fisheries sector and explained the process of application for claiming financial assistance as well as the documents required to be submitted along with the application. Official of M/s. Elektroniklab presented on the Satellite phone and VMS device supplied by them under the

MPEDA scheme, elaborating the specification and advantages of the equipment and the process of purchase.



*Presentation of schemes by Dr. T. R. Gibinkumar*

Later, Dr. T.R. Gibinkumar gave a presentation on the VMS models supplied by M/s. Marine Electricals (I) Ltd., at Mumbai and on the square mesh cod end models supplied by Matsyafed. The contact details of empanelled vendors for electronic equipment as well as Matsyafed Net Factory were provided to the participants. About 26 fishing vessel owners and

## FOCUS AREA



*Presentation by Mr. Vijay Venkatesh of Elektroniklab*

fishermen society members attended the awareness programme.

The second awareness programme was organized in association with Ratnagiri Taluka Purse Seine Net Machchimaar Malak Association in their office at Tilak Lane in Ratnagiri. The meeting was chaired by Mr. Vikas M. Sawant, Chairman of the Society. Mr. Javed Abbas Hodekar, member of the Society, welcomed the officials and all participants to this awareness programme.

Director Board members of the Society and the representative from empanelled equipment supplier agency Elektroniklab, Goa, were present.

Dr. T.R. Gibinkumar, Deputy Director, MPEDA Sub Regional Division, Ratnagiri, made the presentation on MPEDA schemes here also, with all the details. As he did at Karla, Dr. Gibinkumar made a presentation on the VMS models supplied by M/s. Marine Electricals (I) Ltd., at Mumbai and on the square mesh codend models supplied by Matsyafed here too and the contact details of empanelled vendors for electronic equipment as well as Matsyafed Net Factory were shared with the participants.

Official of M/s. Elektroniklab presented on the Satellite phone and VMS device supplied by them under the MPEDA scheme and explained the process. Doubts raised by the participants about the call charges and subscription charges for the equipment were also cleared by him.

The awareness meeting was attended by 12 purse seine net vessel owners and orders for 4 satellite phones were received during the meeting itself. The participants suggested the equipment vendor to conduct a demo during their anniversary meeting, which was scheduled to be held on 29<sup>th</sup> January 2019. This was agreed to.

Copies of application forms for assistance for certification of fishery and chain of custody, installation of satellite based vessel monitoring system (VMS) for compliance with catch certification regulations and for fishing nets incorporated with environment friendly and selective fishing methods like by-catch reduction devices (BRDs), i.e., square mesh cod ends and turtle excluder devices (TED) etc. were distributed among the participants during the programmes.





# Hon'ble Commerce Minister reviews MPEDA initiatives in Konkan



*Mr. Suresh Prabhu, Hon'ble Minister of Commerce & Industry interacts with Mr. K.S. Srinivas IAS, Chairman, MPEDA and other officials of MPEDA*

**M**r. Suresh Prabhu, Union Minister for Commerce and Industry chaired the review meeting of MPEDA regarding ongoing initiatives in Konkan area. Mr. Deepak Vasant Kesarkar, Minister for Home (Rural), Finance and Planning and MLA of Sindhudurg Assembly constituency, Maharashtra was present during the meeting held at Hotel Konkan Crown, Sawantwadi in Sindhudurg district on 27<sup>th</sup> January 2019.

Mr. K.S. Srinivas IAS, Chairman, MPEDA, Mr. B. Sreekumar, Secretary, MPEDA and Dr. S. Kandan, Project Director, RGCA, attended the discussions. The progress of the Memorandum of Understanding (MoU) to be signed between the Government of Maharashtra and MPEDA-RGCA was discussed. Mr. Suresh Prabhu reviewed the initiatives taken by MPEDA for the overall development of Konkan region with respect to production and export of aquaculture products.

After this meeting, he interacted with the representatives of farmers and exporters of the region. The Minister listened to their grievances and requested MPEDA officials to look into the matter.

Mr. Kashinath Tari, Secretary, MAFA; Mr. Arun Alase, a progressive prawn farmer and Chairman, Kurundwad Urban Bank, Kolhapur district; Mr. Laxman Tari, a lead crab farmer; and Mr. Suhas Sawant, president of Sindhudurg Ornamental Fish Farmers, represented

the farmers at the meeting. From the exporter side, representatives from M/s. Akash Fish Meal & Fish Oil Pvt Ltd, M/s. Karunya Marine Exports Pvt Ltd and M/s. Amison Fisheries attended the interactive session with Minister.



*MPEDA Team at proposed crab hatchery site located at Sagareshwar beach in Vengurla*

After review meeting, which was coordinated by Sub Regional Division of MPEDA at Ratnagiri, farmers and exporters had discussions with Mr. K.S. Srinivas. After discussion, MPEDA-RGCA officials inspected the proposed crab hatchery site at Sagareshwar beach in Vengurla.





# PMKVY Training Programme at Tuticorin



*MPEDA officials with the participants of the programme*

**A** PMKVY (Pradhan Mantri Kaushal Vikas Yojana) training for Seafood Processing Technician was conducted at M/s. Diamond Sea Food Exports, Krishnarajapuram, Tuticorin from 10-12, January 2019.

Ahead of the programme, a pre-screening was conducted in the company premises on 10<sup>th</sup> December 2018, in which 30 processing workers attended. Mrs. Anju, Assistant Director, MPEDA, distributed the pre-screening questionnaire with questions in English and vernacular language to the candidates to assess their skill gaps. Before the pre-screening, personal information from the candidates like Aadhar, bank account number, address and other details were collected.

After the pre-screening, details of the candidates were uploaded in the NSDC site, following which batch was created and 30 candidates were enrolled for the RPL (Recognised Prior Learning) trainings. Unfortunately, one candidate cannot attend the assessment day due to unavoidable situation. Before the RPL training, the date of training for the processing workers of M/s. Diamond Sea Food Exports was informed to the District Collector.

The programme began with lighting of lamp by Mr. Lakshmikanthan, Technical Officer, MPEDA, Mr. Jegan,

Production Manager, M/s. Diamond Sea Food Exports, and Dr. Vinoth S. Ravindran, State Coordinator (SCO), NETFISH. The trainees were issued the PMKVY kits, comprising of PMKVY caps and aprons and required stationery.

The forenoon session began with a brief introduction of the programme by Dr. Vinoth S. Ravindran, State Coordinator (SCO), NETFISH, on the need of the programme and the importance of the same in the present scenario.

The session by Dr. Vinoth S. Ravindran, State Coordinator (SCO), NETFISH, also stressed on the preparation and maintenance of work area and process machineries in order. This session was based on syllabus in the National Occupational Standards (NOS) issued by National Skill Development Corporation (NSDC) and FICSI.

In the afternoon session Dr. Vinoth elaborated on how to prepare for execution of fish and seafood processing and execution of fish and seafood processing based on NOS. The qualifications Pack-Fish and seafood processing technician – course manual issued by PMKVY- FICSI was strictly adhered to in the training sessions.

On the second day, Dr. Vinoth started the forenoon

## FOCUS AREA

session with detailed class on complete documentation and record keeping related to processing of firm and seafood. The afternoon session featured a class on HACCP with details on food safety, hygiene and sanitation for processing food products based on NOS of NSDC and this session was handled by Mr. Lakshmikanthan, Technical Officer, MPEDA.

The afternoon session on second day was fully dedicated for practical training and demonstrations. Demonstrations on the Good Manufacturing Practices (GMP) related to personal hygiene, hygienic handling of processing materials, maintenance of machineries and work etc. were done. Also, the workers were trained on the whole process followed during production. They were asked to read and interpret the production flow chart and safety instructions in the plant. On 12<sup>th</sup> January 2019, the last day, an assessment was made by the external assessor Mrs. Vijya Durga Devi, Quality Assurance Manager, M/s V.V. Marine Products based on the assessment criteria laid out in the NOS of NSDC

and FICSI. Theoretical and practical assessments were made by the assessor in the presence of Mrs. Anju, Assistant Director, MPEDA and SCO, NETFISH Tuticorin. The proceedings of assessments including photos, videos and other documentations as required were uploaded while the assessment was going on.



Practical session - Assessment





**International Transport of Live Fish in the Ornamental Aquatic Industry**

GET A COPY NOW!

₹125

**International Transport of Live Fish in the Ornamental Aquatic Industry**

THE MARINE PRODUCTS EXPORT DEVELOPMENT AUTHORITY (Ministry of Commerce & Industry, Government of India)  
Head Office, MPEDA House, Building No: 27/1162, PB No:4272, Panampilly Avenue, Panampilly Nagar PO, KOCHI-682 036,



# Awareness campaign on species diversification in aquaculture

Sub Regional Division of MPEDA at Ratnagiri organised an awareness meeting on safety of the fisherman and sustainable fisheries at District Machimar Society, Petkilla, Ratnagiri District on 10<sup>th</sup> January 2019 for local boat owners and fishermen community.



*A view of the programme*

The meeting was organised to provide awareness among participants on aquaculture of diversified species. Dr. T.R. Gibinkumar, Deputy Director, MPEDA, Sub Regional Division, Ratnagiri explained the role of MPEDA in developing export-oriented aquaculture for the augmentation of fish production and elaborated the purpose of MPEDA conducting such awareness campaign programmes. He stressed eco-friendly sustainable aquaculture and on the need for the diversification of aquaculture. Dr. Vishnudas Gunaga, Junior Technical Officer, introduced various candidate species selected for the diversification of aquaculture. Videos on the culture and demonstrations conducted by MPEDA in various places were also shown.

The programme ended with participants getting a chance to interact with the MPEDA. Literature related to the subject was distributed among all the 35 participants who attended the workshop.



### Advertisement Tariff in MPEDA Newsletter Rate Per Insertion

Back Cover (Colour)	Rs. 15,000/-	US\$ 250/-
Inside Cover "	Rs. 10,000/-	US\$ 200/-
Inside Full Page "	Rs. 8,000/-	US\$ 150/-
Inside Half Page "	Rs. 4,000/-	US\$ 75/-

\* GST @ 18% is extra

Ten Percent concession for contract advertisement for one year (12 issues) or more.

Matter for advertisement should be provided by the advertiser in JPEG or PDF format in CMYK mode.

Mechanical Data : Size : 27 x 20 cms.

Printing : Offset (Multi-colour)

Print Area : Full Page : 23 x 17.5 cm, Half Page : 11.5 x 17.5 cm



For details contact:

Deputy Director (MP) MPEDA House, Panampilly Avenue, Cochin - 682036 Tel: +91 484 2321722, 2311979  
Fax: +91 484 2312812, E-mail : [newslet@mpeda.gov.in](mailto:newslet@mpeda.gov.in)

# MPEDA – MAC starts supply of high-health Black tiger shrimp seeds



*Inaugural sale of high-health black tiger shrimp seeds to Mr. Hormis Tharakan by Mr. K. S. Srinivas IAS, Chairman, MPEDA*

**M**arine Products Export Development Authority (MPEDA) started supplying high-health black tiger shrimp seeds from its new Multispecies Aquaculture Complex (MAC) at Vallarpadam on 18<sup>th</sup> February 2019. The inaugural sale of the seeds was done by MPEDA Chairman Mr. K.S. Srinivas IAS by handing over one lakh of them to former Kerala Director-General of Police Mr. Hormis Tharakan, who is also a progressive shrimp farmer.

MPEDA, a statutory body under the Union Government's Ministry of Commerce & Industry, has developed these seeds with the help of its research wing, Rajiv Gandhi Centre for Aquaculture.

At today's function here, Mr. Srinivas noted that lessons from the international market had prompted the MPEDA to promote the production of black tiger shrimp in Kerala. Substantiating, he said black tiger was the dominant cultured shrimp in India till a decade ago. In 2009, the country began experiencing non-availability of disease-free seeds of this species, prompting aquaculture farmers to shift focus to exotic vannamei species.

"The dependence on one species, that too an exotic one, is not sustainable in the long run," he pointed out. "Figures indicate that major vannamei-producing countries such as Thailand, Vietnam and China have that variety of shrimp facing serious disease problems during the past five years. This dwindle their contribution

of shrimp in the international shrimp market." In order to avoid any such situation in India, MPEDA has decided to encourage and expand the production of black tiger shrimp endemic to South Asia. Production of Black Tiger can support the shrimp exports much more in the long run, Mr. Srinivas said.

Of late, tiger shrimp's higher price and increasing demand in the international market has led India's farming community to restart farming of this variety. To meet that, the country needs more disease-free seeds of Black Tiger. It is for this reason the MPEDA has developed its MAC at Vallarpadom Island here nine weeks ago, with black tiger shrimp as the main species for seed production.

The MPEDA head said the nine-acre MAC will pave the way for the revival of black tiger shrimp farming in the country. In addition to this, the Rs 7.26-crore facility has begun supplying fingerlings of other fish species such as GIFT, Asian seabass, Cobia, Pompano and Mud Crab. Since December last year, MPEDA supplied a total of over seven lakh fish seeds to farmers in Kerala.

The MAC was opened on December 8 to facilitate production of safe seafood from disease-free breeds. Featuring a hatchery for black tiger shrimp and six nurseries, the state-of-the-art facility was inaugurated by Union Commerce and Industry Minister Mr. Suresh Prabhu.





# Training Programme held on “Eco-friendly and Sustainable Shrimp Farming”



*Field visit to the farm of Mr. Pradip Mondal at Abad Kuliadanga, Hasnabad*

### West Bengal

Regional Division, Kolkata organised a 5-day training programme on “Eco-friendly and sustainable shrimp farming” at Bachara Mohanpur, Minakhan, North 24 Parganas district from 04-08, February 2019. The main objective was to educate the farmers on sustainable farming, BMP and further developmental scope in aquaculture with special emphasis on diversification in culture practices. The programme was attended by 20 participants.

Mr. Sibnath Das, Secretary, Mohanpur Social Welfare Assosiation, Mohanpur, Minakhan, North 24 Parganas district, inaugurated the programme. During the 5-day programme, various topics related to the subject were discussed in depth by Mr. Dhirit Ekka, Assistant Director, MPEDA, Regional Division, Kolkata; Mr. Pradip Maity, Field Manager, NaCSA, and Mr. Santanu Mahato, Field Assistant Officer, Minakhan Block, West Bengal Fisheries. A field visit was done to the the farm of Mr. Prodig Mondat at Abad Kuliadanga, Hasnabad, North 24 Parganas District on February 7 and trainees explained about farm construction to pond preparation,

seed stocking etc by Mr. Bhagabata Rout. Doubts raised by the participants were cleared in the interactive session held on the last day. Participants were given certificates and stipends after the valedictory function.

The Regional Division, Kolkata had earlier organised another 5-day training programme on the same topic, this time for SC/ST trainees at Shankardaha, Sandeshkhali, North 24 Parganas district from 14-18, January 2019.

Just as the other programmes, this one too was aimed at educating the farmers on adoption of farming methods for eco-friendly and sustainable in aquaculture with special emphasis on diversification in culture practices. The programme was attended by 19 farmer trainees.

Mr. Dhirit Ekka, Assistant Director, MPEDA Regional Division, Kolkata inaugurated the programme. Mr. Dhirit Ekka and Johnson D' Cruz, Assistant Directors, MPEDA, Mr. Pradip Maity, Field Manager, NaCSA and Mr. Goutham Bisai, Field Extension Officer, Minakha, led classes at the programme, which also included a field visit.

## AQUACULTURE SCENE



*Mr. Maruti D. Yaligar, Deputy Director, MPEDA distributing certificate to trainees*

### Gujarat

The Regional Division of MPEDA at Valsad too organised a five-day training programme on "Eco-friendly and Sustainable shrimp farming" at APMC Hall, Bharuch from 09-13, January 2019 for SC/ST candidates of Bharuch district, in which 21 trainees attended. The objective of the training programme was to promote shrimp farming practice in coastal villages of Bhaurch district.

Mr. Bhavin M.G., Field Supervisor made the registration of participants on the first day. After this, the programme was inaugurated by Mr. Maruti D Yaligar, Deputy Director, MPEDA. In his address, Mr. Yaligar explained the purpose of conducting the training and role of MPEDA for development of shrimp farming.

After inaugural session, MPEDA officials engaged classes on various technical aspects related to the subject. Mr. Maruti D Yaligar, delivered a lecture on introduction to shrimp farming and role of MPEDA in eco-friendly and sustainable shrimp farming. Mr. Bhavin M. G. talked about identification and life cycle of shrimp and pond preparation.

Mr. Razak Ali, Assistant Director (AE) and Mr. Maangaal A Patil, Junior Technical Officer (Aqua) delivered lectures on seed selection, packing, transportation, acclimatization and stocking and water quality management, on site selection and farm construction on the next day. Lectures on land leasing policy and procedure for submission of application to Collector and Department of Fisheries for allotment of government land for development of shrimp farming, uses of Pro-Biotic and abuse of antibiotics in aquaculture, harvesting and post-harvest management, marketing and HACCP

in aquaculture were given by Mr. Maangaal A Patil and Mr Bhavin the day after.

Trainees were taken out for a field trip by Mr Maruti D Yaligar on January 12. They visited the shrimp farm owned by Mr. Rajeshkumar Shantilal Patel of Machhasara village in Bharuch district. The practical aspects related to farm construction, management, bio-security measures, Good Management Practices (GMPs) and use of field equipment for testing of various water quality parameters were explained to trainees. Farm supervisor explained his experience and Vannamei shrimp culture method to trainees.



*Mr. Maruti D. Yaligar, Deputy Director, MPEDA speaks at Bharcuch*

MPEDA officials engaged classes on remaining important technical aspects on the last day. Mr. Maruti Yaligar and Mr. Bhavin spoke on disease prevention and control, on Aquaculture Authority guidelines and how to apply for license and diversification of aquaculture.

Certificates were distributed to all the 21 trainees who completed the programme. Mr. Maruti D. Yaligar delivered valedictory address.





# Training on Eco-friendly Sustainable Aquaculture and Diversification



*Field visit to fish farm*

**F**isheries Research Information Centre (FRIC) under the Government of Karnataka at Bhutanal in Vijayapura district organised a three-day training programme on 'eco-friendly sustainable aquaculture and diversification' interested farmers and entrepreneurs from SC/ST category. The programme was organised



*Field visit -Observing scampi seed*

jointly by FRIC and MPEDA from 23-25, January 2019.

Speaking on the present fisheries scenario in the country with special reference to Karnataka, Mr. Vijayakumar C. Yaragal, Deputy Director, MPEDA, emphasized the importance of reservoir, inland water bodies, He also explained scampi culture, value-added products and its export potential. His talk covered various aspects of freshwater aquaculture from site selection to Best Management Practices in harvest. Other technical

lectures on Carp culture, Poly culture, Tilapia culture etc were handled by Dr. S. Vijayakumar, Assistant Professor and Head, FRIC and Mr. Vijayakumar Atnur, Assistant Professor, FRIC, Bhutanal. Mr. Sheshendra Shirodkar, Junior Technical officer, MPEDA, talked about topics like pond preparation, water culture, feed and feed management in prawn culture and different financial schemes by MPEDA. Video film on the various cultivable species such as seabass and tilapia was also screened. A visit to ponds and brooders section of FRIC was arranged on the second day of the training programme, where trainees got a direct exposure to farm operations. On the third day Mr. Shrisai, Assistant Director, Department of Fisheries, Vijayapura, spoke on the present status and potential of fisheries operations in Vijayapura district and explained different government schemes.

Mr. Vijayakumar C. Yaragal, Deputy Director, MPEDA and other officials led the interactive session with participants where they cleared doubts on various issues. Mr. Ganu Chavan, President, M/s. Minigarika Society, Bhutanal said that fish farming and reservoir fishing required financial support from the government. He also requested for more training programmes in future. Certificates and stipend were distributed to all the 22 SC/ST candidates who attended this program. Mr. Sheshendra Shirodkar, Junior Technical Officer proposed vote of thanks.



**BEST IN MARKET**

**IMPORTED FROM SPAIN**



**MASTERS IN CEPHALOPODS ADDITIVES**

## PRODUCTS LIST

### ► **BIWET - I**

Phosphate free Moisture retainer & texture enhancer for Cephalopods



### ► **ACUATIC - K**

Whitening & Brightness enhancer for Cephalopods



### ► **ARTIC - L**

Glazing agent for Cephalopods & Shrimps



### ► **ARTIC - P**

Glazing agent for Cephalopods & Fish

**Seaeyes**  
SYSTEM  
LIMITED  
Dealers & Distributors of Seafood Processing Aid

6C, J. P. Towers, 7/2 Nungambakkam High Road, Nungambakkam, Chennai - 600 034, India.  
Email: [seaeyesindia@gmail.com](mailto:seaeyesindia@gmail.com)

**For queries / Customer Care : M. Balakrishnan**  
Mob: +91 93800 41050, Ph: +91 44 25992315, Email: [sales.seaeyes@gmail.com](mailto:sales.seaeyes@gmail.com),  
Cochin Branch Office : Ph: +91 484 4066899



## AQUACULTURE SCENE

# Training programme on “Adoption of CoP's on Antibiotic Free Shrimp Production”



*Distribution of certificates to the trainees*

**M**PEDA Sub regional Division, Contai organized a 5-day training programme on “Adoption of CoP's on Antibiotic Free Shrimp Production” for SC/ST trainees at Aurai Beliachatta village, Purba Medinipur district from 10-15, December 2018. The main objective was to educate the farmers on adoption of farming methods for eco-friendly and sustainable aqua culture with special emphasis on diversification in culture practices. The programme was attended by 20 participants.

Mr. Rabindra Nath Bar, Ex Panchayat Member inaugurated the programme. During the 5-day

training programme, various topics and lectures related to the subject was discussed in depth by Mr. Surajit Bag, Assistant Director, DoF, West Bengal, Mr. Johnson D' Cruz, Assistant Director, MPEDA, Regional Division, Kolkata, Mr. Biswajit Ojha, Field Manager, NaCSA and Dr. Debashish Roy, JTO, MPEDA, Sub Regional Division, Contai. On the third day trainees were taken to nearby shrimp farm to have a field exposure.

Doubts raised by the participants were cleared in the interactive session held on the last day. Participants were given certificates and stipends after the valedictory function.





**Hatchery Seed Production & Farming of Cobia Initiatives**

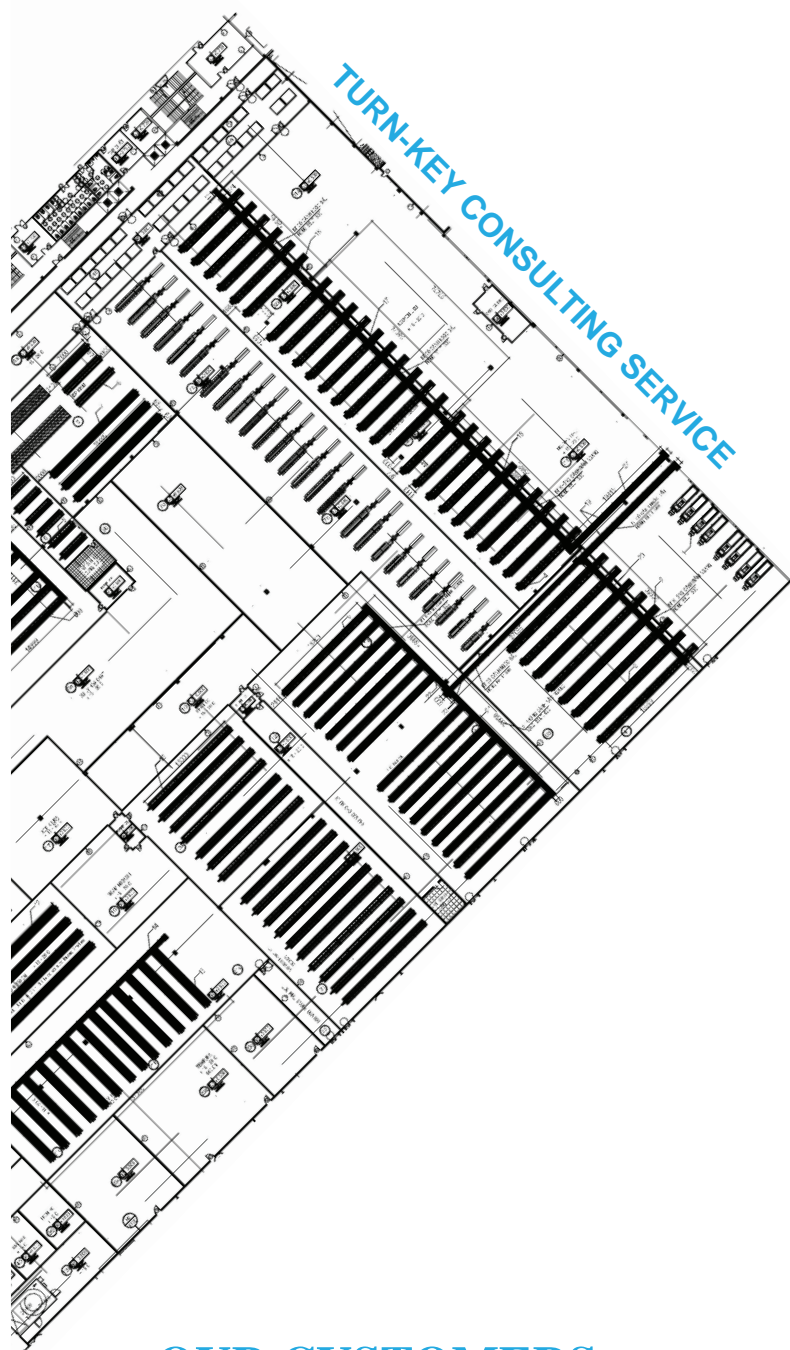
GRAB YOUR COPY!

THE MARINE PRODUCTS EXPORT DEVELOPMENT AUTHORITY (Ministry of Commerce & Industry, Government of India)  
Head Office, MPEDA House, Building No: 27/1162, PB No:4272, Panampilly Avenue, Panampilly Nagar PO, KOCHI-682 036

**₹50**



BEST SOLUTIONS FOR SUSTAINABLE DEVELOPMENT



TURN-KEY CONSULTING SERVICE

## OUR CUSTOMERS



### SHRIMP PROCESSING EQUIPMENT

- PRE-PROCESSING CONVEYOR
- WASHING MACHINE
- HLSD GRADING MACHINE
- PUD GRADING MACHINE
- SOAKING TANK



### FREEZING EQUIPMENT

- FEEDING MACHINE
- IQF FREEZER
- GLAZER
- RE-FREEZER



### VALUE ADDED PRODUCTS

- COOKER
- CHILLER
- BOILER
- NOBASHI LINE
- SUSHI CONVEYOR
- SUSHI CUTTER

### NAMDUNG COMPANY LIMITED

35 Ho Hoc Lam, Ward 16, District 8,  
Ho Chi Minh City, Viet Nam

(8428) 3751 0725

WhatsApp (+84) 949362408

namdung-co@namdung.vn

www.namdung.vn





# Assessors training organized by FAO at ICAR-CIFT, Cochin



*Participants of the programme*

Food and Agriculture Organization (FAO) organized an Assessors Training for Principal Investigators of Indian Network for Fisheries and Animal Antimicrobial Resistance (INFAAR) on FAO Assessment Tool for Laboratories and Antimicrobial resistance surveillance System (FAO-ATLASS) at one of its Nodal Centre ICAR-CIFT, Cochin from January 21 to 25.

About 20 Project Investigators associated with the INFAAR project from different ICAR research institutes of fisheries and animal science all over India actively participated in the training programme. Five FAO experts who led the training sessions included Dr. Joy Gordoncillo, Dr. Michael Treilles, Dr. Francesca Latronico, Dr. Rajesh Bhatia, Former AMR Advisor and Dr. Rajesh Dubey, National Operational Officer, FAO, India.

Inaugurating the programme on January 21, the Chief Guest Dr. J.K. Jena, Deputy Director General (Fisheries and Animal Sciences), ICAR, New Delhi, stressed the need for the surveillance of disease in fisheries and animal sectors as it is the key for AMR management.

He told that in India, production of shrimp, the major export item is badly affected by diseases since last two decades. Early mortality syndrome in fisheries and FMD in animal sector have been the major menace. Intensification and diversification in farming sector and evolving climate change are primarily responsible for diseases emergence in these sectors.

Over-use of antibiotics in aquaculture has aggravated the problem of AMR in fisheries. He emphasized the need for an objective surveillance of AMR through well-equipped laboratory facilities and well-trained professionals to counter the issues faced by AMR. He was optimistic that this type of training programme will cater to the need-based gap to address the AMR issue.

In his presidential address, Dr. Ravishankar C.N., Director, ICAR-CIFT, highlighted the need and importance of the surveillance and appraisal of Antimicrobial Resistance (AMR) in fisheries and animal sectors and its containment in perspective human health in general and fisheries and animal health in particular. He also

## NEWS SPECTRUM

dealt at length on the contribution of the institute for fisheries development in chronological perspective. At the beginning, Dr. M.M. Prasad, Head of Microbiology Fermentation and Biotechnology Division welcomed the gathering and give a special mention about all FAO experts. Later, the FAO experts drew the attention of the gathering on the issues of AMR right from mythical nature to subject of priority issue and were optimistic

of mutual benefits likely to be derived from the training programme. Those present were told by the FAO experts that as on October 2018, FAO-ATLASS has used to assess 17 national AMR surveillance system in the world-over and were optimistic on the increase in use of the tools worldwide for harmonization and improved coordination of AMR surveillance system in food science sector.

- ICAR-CIFT



## Budget 2019 proposals on fisheries to boost seafood export

The seafood industry expects the proposals for separate department for fisheries and the 2% interest subvention for fishery farmers to raise shrimp production and help in boosting the export.

India was the top producer of aquaculture shrimps in the world last year with over 6 lakh tons and its seafood export stood around a record Rs 45,000 crore in 2017-18. Separate department may help focus more on fisheries as at present it is clubbed along with animal husbandry and dairy under Agriculture Ministry.

"It will help in quicker decisions at administrative level for fisheries and seafood being an export-oriented industry will definitely benefit," said S Chandrasekhar, president of Society of Aquaculture Professionals. He said it has been a long-pending demand of the industry. "We hope that there will be a secretary for fisheries under the department whom we will be able to approach

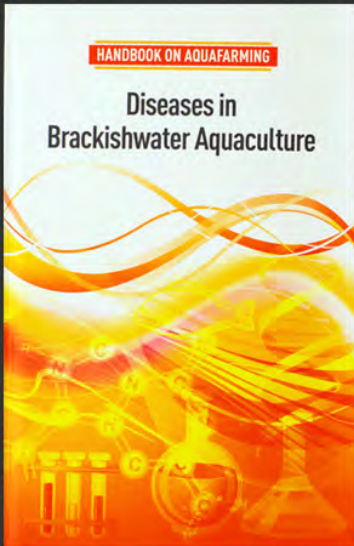
directly. For instance, our demands like quarantine facility for aquaculture can be easily settled," said V Balasubramaniam, general secretary of Prawn Farmers Federation of India.

He said the 2% interest subvention for fishery farmers and 2% interest subvention for farmers affected by calamities will help the industry. Recently the Gaja cyclone had hit the shrimp farmers in parts of Tamil Nadu.

The lack of clarity in the proposal for interest subvention was pointed out by Kenny Thomas, MD of Jinny Marine Traders in Gujarat, an exporter. "The announcement says farmers pursuing fisheries and animal husbandry will get interest subvention. But we need to clarify whether it applies to river fisherman or in general including shrimp farmers," he said.

- Economic Times





**ORDER YOUR COPY!**

**Diseases in Brackishwater Aquaculture**

**₹100**

THE MARINE PRODUCTS EXPORT DEVELOPMENT AUTHORITY (Ministry of Commerce & Industry, Government of India)  
Head Office, MPEDA House, Building No: 27/1162, PB No:4272, Panampilly Avenue, Panampilly Nagar PO, KOCHI-682 036



# India is top exporter of shrimp to US for fourth straight year

India is once again the top country of origin for shrimp entering the United States. India outpaced Indonesia, Thailand, and Ecuador to take the title for most shrimp exports to the U.S. for the fourth straight year.

Thirty-two percent of all shrimp imported into the U.S. came from India, and India continues to build market share, as it realized a compounded annual growth rate (CAGR) of 25.2 percent between 2014 and 2017, outpacing total U.S. shrimp demand CAGR growth of 7.1 percent, according to India's Business Standard.

Shrimp exports to the U.S. were up 16 percent in 2018 over 2017 through November, despite lower prices due to a high supply volume, according to ShrimpTails magazine. The anomaly may be due to the expansion of the U.S. Seafood Import Monitoring Program to cover shrimp in 2019.

"As all markets that export shrimp to the U.S. will have to adhere to the requirements set out by SIMP, it seems inevitable that importers and their suppliers are trying to move as much product into the country as they can before it takes effect," analysts Willem van der Pijl and Ken Salzinger wrote. "Especially for a country like India, which deals with tens of thousands of small-scale farmers, exporters are struggling to trace shrimp

all the way back to the original farm, which is part of the requirements under SIMP." ICRA Limited, an India-focused investment advisory firm, warned that SIMP could cause India's share of the U.S. market to fall in 2019.

"Despite the robust growth in shrimp imports from India, the country faces stiff competition from Indonesia and Ecuador, whose export contribution during 10 months of FY 2018 has increased, supported by the increasing shrimp production in the respective countries," the rating agency said.



ICRA Vice President and Sector Head for Corporate Sector Ratings Pavethra Ponniah, vice president and sector head predicted in a recent note that increasing

competition could lead to further gluts of shrimp in the U.S. market, and continued low prices.

"Going forward, Indian exporters face stiff competition from Ecuador, Indonesia and Vietnam," Ponniah wrote, according to the Business Standard. "A strong uptick in major shrimp production since CY 2017 has intensified competition amongst leading global shrimp exporting nations. ICRA expects increasing shrimp production amongst the top shrimp-producing nations to cause demand-supply mismatches inducing volatile in prices."

-SeaFood Source 

# Kerala's 'Kole' paddy fields must be used as prawn farms: MPEDA

Such an initiative will work effectively in the coastal state that is endowed with water bodies and enjoys high domestic demand for prawns, MPEDA chairman KS Srinivas noted here at ASCEND Kerala 2019 meet, which aims to showcase Kerala as a top-notch investment destination.

Kerala must use its sprawling 'Kole' fields as prawn farms, considering that these wetlands lie submerged under water for about half a year, the Marine Products Exports Development Authority (MPEDA) suggested on Monday. Such an initiative will work effectively in the coastal state that is endowed with water bodies and enjoys high domestic demand for prawns, MPEDA chairman KS Srinivas noted here at ASCEND Kerala 2019 meet, which aims to showcase Kerala as a top-notch investment destination.

Fisheries and aquaculture remain important sources of food, nutrition, income and livelihoods for hundreds of millions of people around the world. Overfishing in India has pushed a number of popular target species to the brink of collapse in recent decades. The state also

has a strong segment of labourers with high technical expertise in prawn cultivation, he pointed out at a session titled 'Opportunities in the MSME and Food Processing Sectors' of the day-long event organised by the Kerala government's Department of Industries and Commerce, Kerala State Industrial Development Corporation, Kerala Bureau of Industrial Promotion and Kerala Industrial Infrastructure Development Corporation.

For better pisciculture, Kerala must emulate Andhra Pradesh by implementing a law that forbids use of antibiotics, the MPEDA chief said. Kerala's fishing harbours warrant better infrastructure and such developmental projects can be carried out on PPP or BOT basis, he added. Indian fish landing touched an all time high of 3.94 million ton in 2012 approaching the recommended potential of 4.4 million ton from the Indian EEZ, officials said. India stands seventh with regard to marine capture fish production in the world and the sector supports four million fishermen population.

- *financialexpress* 

## Subscription Order / Renewal Form

Please enroll me / us as a subscriber / renew my existing subscription of the MPEDA Newsletter. The subscription fee of Rs. 1000/- inclusive of GST for one year is enclosed vide local cheque/DD No.....

dt..... drawn in favour of The Secretary, MPEDA', payable at Kochi.

Please send the journal to the following address:

Tel No..... Fax : .....

E mail .....

For details, contact:

The Editor, MPEDA Newsletter, MPEDA House, Panampilly Nagar, Kochi - 682 036

Tel: 2311979, 2321722, Fax: 91-484-2312812. Email : [newslet@mpeda.gov.in](mailto:newslet@mpeda.gov.in)



# Government launches online course, app to support potential exporters

Commerce & Industry Minister Suresh Prabhu has launched "Anytime-Anywhere" online export awareness course for potential exporters to train, mentor and hand-hold them to tap international trade opportunities, Ministry of Commerce & Industry said in a release.

Prabhu announced the course in a meeting of the Board of Trade (BOT) chaired by him recently. The online course is funded under the 'Niryat Bandhu' scheme of Directorate General of Foreign Trade (DGFT) and is launched in partnership with the Indian Institute of Foreign Trade, the ministry said.

The Niryat Bandhu scheme help entrepreneurs exploring business in exports through training, counselling and information sessions through the network of DGFT offices across India, according to details available on DGFT website. The participants would receive a certificate in Export Import Management under Niryat Bandhu Scheme post course completion.

Prabhu also launched DGFT's mobile app during the occasion to allow exporters share their grievances, apply for different licenses, view their status apart from information pertaining to latest trade notices,

circulars, Foreign Trade Policy and trade fairs. "Through concerted efforts of improved logistics, trade facilitation, increased digitization to reduce human interface and increase transparency, implementation of GST, capacity building through skilling etc., the government has been able to arrest the downturn (in exports) affecting India," commerce secretary Dr Anup Wadhawan said highlighting the need for the course.

DGFT Director General Alok Chaturvedi, claiming government's commitment for end-to-end IT enablement and paperless process, said the Department of Commerce has approved a project for the revamp of entire IT system of DGFT.

India's exports grew marginally by 3.74% in January to \$26.36 billion, compared with \$25.41 billion in January 2018 due to subdued performance of key sectors including engineering, leather, and gems and jewellery, PTI reported quoting data from the commerce ministry.

On the other hand, trade deficit at \$14.73 billion widened in January as compared to December 2018 when it stood at \$13 billion. However, the deficit has lowered when compared to \$15.67 billion in January 2018.

- **financialexpress**







### Coffee Table Book

**GRAB YOUR COPY!**

THE MARINE PRODUCTS EXPORT DEVELOPMENT AUTHORITY  
(Ministry of Commerce & Industry, Government of India)  
Head Office, MPEDA House, Building No: 27/1162, PB No: 4272  
Panampilly Avenue, Panampilly Nagar PO, KOCHI-682 036

# Andhra Pradesh : Fisheries department to join hands with Singapore, Vietnam in aquaculture

With an aim to further boost the aquaculture sector in Andhra Pradesh, the State government is exploring the possibility of collaborations with various countries to adopt international practices. The State Fisheries department has already held discussions in this regard with various organisations from Singapore, Netherlands, Vietnam and a few other countries.

According to information, the collaborations are for knowledge-sharing and technology transfer for better culture of aqua products. "We are looking at collaborations in areas such as farming, hatcheries, processing, value addition, cold-chain development, feed technology and others.

The emerging collaborations will not only help in increasing the aquaculture production in the State but also give the farmers more export opportunities," a senior official explained. The official noted that teams from the said countries have already visited the State in the last four months and held discussions on forging

a joint partnership in deep sea fishing as well. While the collaboration with Singapore is expected to be in transfer of technology in aquaculture and in shrimp exportation, the tie-up with Netherlands will be in the fields of feed technology and cold-chain development.

"With Vietnam, we will jointly work mostly on deep sea tuna fishing and value addition products," the official noted. The Fisheries department is likely to enter into agreements to take the collaboration forward. It may be recalled that the department has already signed an MoU with USA-based Fishin Company for increasing the production of Genetically Improved Farmed Tilapia fish in the State.

For the record, the fisheries sector contributes 7.4 per cent to the State GSDP and has a sector share of 24.24 per cent in the country's fisheries production. AP is also the highest producer of shrimp, occupying about 66 per cent of country's production.

- The New Indian Express



## Tuna long liner cum gillnet fishing vessels flags off

The First batch of Four (4 Nos) Tuna Long Liner Cum Gillnetter Fishing Vessels designed and built by Cochin Shipyard Limited, for fishermen beneficiaries of Department of Fisheries, Government of Tamilnadu was flagged off here on Tuesday by Tamil Nadu Chief Minister Thiru Edappadi K Palaniswamy.

In this respect a ceremony was conducted in Cochin Shipyard Ltd attended by Shri Johnny Tom IAS, Additional Director, Tamil Nadu Fisheries, Shri. K.S. Srinivas IAS, Chairman MPEDA, and Senior Officials of various other organizations connected with Fishing Industry in the presence of Shri. Madhu.S.Nair, Chairman – Cochin Shipyard and employees of Cochin Shipyard, a Shipyard release said here on Tuesday.

Cochin Shipyard is building a total of 16 Nos. Tuna Long Lining and Gillnetting fishing vessels under the diversification scheme of trawling fishing boats into deep sea fishing boats under Govt. of India Blue Revolution scheme with financial assistance from Government of India and Government of Tamilnadu. These vessels are designed and built as 'state of the art' high quality fishing vessels with modern navigation and communication equipment and advanced net hauling and liner winches. Other facilities include galleys, bio-toilet, refrigerated seawater system and stainless steel clad PUF insulated Fish Hold to preserve the fish catch. These boats are a great boon to Indian Fishing Community to migrate to more sustainable Deep Sea Fishing, it added.

- United News of India





## PRAWN FEED



VANNAMEI FEED



BLACK TIGER SHRIMP FEED



BLACK TIGER SHRIMP FEED



In the business of quality Prawn feed and Prawn Exports  
An ISO 9001: 2008 Certified Company

# Aiding sustainability & reliability to Aquaculture



Shrimp Hatchery



Feed Plant - Gujarat



Prawn Feed & Fish Feed



Prawn Processing & Exports

## INNOVATIVE - SCIENTIFICALLY FORMULATED - PROVEN

- GREATER APPETITE • HEALTHY & FASTER GROWTH
- LOW FCR WITH HIGHER RETURNS • FRIENDLY WATER QUALITY

### AVANT AQUA HEALTH CARE PRODUCTS

#### AVANTI A.H.C.P. RANGE



IN COLLABORATION WITH:  
THAI UNION FEEDMILL CO., LTD.,  
Thailand.



Chelated Trace  
Mineral Supplement



Gut Probiotic



Marine Mineral



Ammonia Absorber



Oxy-Generator



Water Quality Improver



Soil & Water Probiotic



Immunity Enhancer



Avant Catcher

Corporate Office: **Avanti Feeds Limited**

G-2, Concord Apartments 6-3-658, Somajiguda, Hyderabad - 500 082, India.  
Ph: 040-2331 0260 / 61 Fax: 040-2331 1604. Web: [www.avantifeeds.com](http://www.avantifeeds.com)

Regd. Office: **Avanti Feeds Limited.**

H.No.: 3, Plot No.: 3, Baymount, Rushikonda, Visakhapatnam - 530 045, Andhra Pradesh.





## Innovative safeguards against complex risk

At Integro, we understand the risks involved with Seafood. We are committed to simple solutions to complex risks through our expertise.

Protect yourself with bespoke Rejection/Transit Insurance solutions from Integro Insurance Brokers.

Contact us to experience our expertise:

**Raja Chandnani**

Phone: +44 20 74446320

Email: [Raja.Chandnani@integrogrouk.com](mailto:Raja.Chandnani@integrogrouk.com)

[www.Integrouk.com](http://www.Integrouk.com)

**INTEGRO**   
INSURANCE BROKERS