

# MPEDA

Newsletter

Vol.V/No.10/ JANUARY 2018





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# CPF-TURBO PROGRAM -

Pioneering Successful and Profitable Shrimp Aquaculture

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Dr. A. JAYATHILAK IAS Chairman

Dear friends,

he 21st edition of India International Seafood Show was widely acclaimed as a well organized and well-attended exhibition. At this moment, I thank every exhibitor, delegate, the State Government of Goa, Union Ministry of Commerce and Industry, members of Seafood Exporters and each other who have contributed to make the event a grand success.

Post IISS, MPEDA is into participating in the Seafood Expo North America at Boston, the major seafood show in North America, along with 40 exporters. Further to that, a delegation is planned to Russia to tackle trade issues that are plaguing our seafood exports to that market since long. A larger participation of exporters is also envisaged in the Seafood Expo Global, Brussels.

I am also glad to convey the approval of the proposal submitted by MPEDA on 'Skill Development of Seafood Processing Workers' under the *Pradhan Mantri Kaushal Vikas Yojana* (PMKVY) scheme. National Skill Development Corporation (NSDC) under the Ministry of Skill Development and Entrepreneurship has approved the project for implementation in nine maritime states and included under Recognition of Prior Learning (RPL) - Type 2 of PMKVY scheme. MPEDA will implement the project in the maritime states, and targets to cover 6000 seafood workers through 200 training programmes. The Trainers' training for this is underway.

A lot of activities and initiatives are planned by MPEDA, which I will detail in the next issue.

Thank you.



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# **India International Seafood Show in Goa Makes New Waves**



Mr. Manohar Parrikar, Chief Minister of Goa inaugurates the India International Seafood Show (IISS) 2018 in Margao, Goa



he three day India International Seafood Show (IISS), Marine Products Export Development Authority (MPEDA), the 21st edition of the biennial international event in the marine sector was held at Margao, Goa from January 27 - 29, 2018 with 'Safe and Sustainable Indian Aquaculture' as its main theme. The objective was to highlight the technological advances and sustainable practices followed in Capture and Culture Fisheries in India.

Ground, Fatorda, Margao, Goa, jointly organized by the

a statutory body under the Union Commerce and Industry Ministry and the Seafood Export Association of India (SEAI), drew more than 3,000 delegates, including representatives from 12 countries and over 3,500 business delegates over three days.

The IISS, which visited the West Coast after 10 years. IISS 2018 which was held at Open Sports Complex renewed calls for the region to catch up with the East Coast, especially states like Andhra Pradesh, who have

# **COVER STORY**

21º India 🅊

made leaps in aquaculture and are strengthening their contribution to marine exports.

Mr. Suresh Prabhu. Hon'ble Union Minister for Commerce addressed the delegates on the inaugural day, pledged support to all states exploring aquaculture while outlining plans to map potential land for culture fisheries using satellite imagery and drawing up a comprehensive marketing and development strategy to boost exports.

Mr. Prabhu said the Ministry will task the MPEDA and SEAI to prepare a detailed strategy including what the states need and can do to build robust aquaculture and fisheries industries.

He added that inland fishery is a priority area for the government and the aim is to create a system for all 13 coastal states to work in tandem for aquaculture development.

"Aquaculture is not just the biggest employment generator in the seafood sector, it is also helping us use land that is not fit for any other purpose, for example, brackish water lands. We will try and systematically map all such regions using satellite imagery in the next few months and identify potential areas for development of aquaculture,"

"We will actively work with the states to make sure they are able to optimally use these lands and take advantage of their exports potential," the Minister said.

The government also proposes to create 10 marketing offices around the world to promote and create brand equity for Indian products.

Mr. Prabhu said exporters also need to revisit marketing of their products in a changing world. "Marketing today is not just about selling your ware, attention must also be placed on the quality of the products, on packaging, on increasing their shelf-life and so on," he said.

Dr. A. Javathilak IAS, Chairman MPEDA noted that the organisation has been pushing for greater value addition across the supply chain and is focusing on quality for the demanding overseas markets.

"Value addition in ready to eat forms will also address the embargos raised by certain markets on account of biosecurity concerns. It is also imperative to address those concerns by implementing mechanisms to declare disease and pathogen-free systems at the production level. Similarly, we also need to strengthen up the linkages of quality and traceability to improve the market access of Indian seafood in international markets." he said.

He also pointed out that a key element for exports shall be to provide the fish as fresh as possible, if not alive. It is a potentially lucrative area of business with live edible



Mr. Suresh Prabhu, Union Minister for Commerce addresses the delegates at the MPEDA Export Award function

# **COVER STORY**

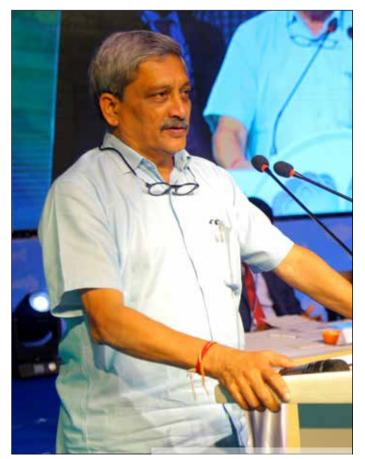
shrimp and fish in high demand in the international market.

"India has the potential to become a seafood superpower and the goal of 20 percent growth or doubling of the export volumes will not be as difficult if we tap into this potential fully," he said.

Mr. Manohar Parrikar, Chief Minister of Goa, Mr. Vijay Sardesai, Minister for Agriculture, Mr. Vinod Paliencar, Minister for Fisheries and Water Resources, Dr. A. Jayathilak IAS, Chairman, MPEDA, Mr. V. Padmanabhan, National President, SEAI, Mr. Babu Kavlekar, Opposition leader, Goa, Mr. M. M. Ibrahim, President, SEAI, Goa, and Mr. K. Hari Babu, Member of Parliament attended the inaugural event.

Mr. Parrikar, who inaugurated the event said India should do more to make use of the fishing potential along the underutilized but large Andaman and Nicobar coastline, explore sustainable deep sea fishing and address issues such as seawater pollution from chemical fertilizer washoff, overexploitation of existing fishing zones and damage to breeding grounds.

He also expressed interest in taking cues from AP and training farmers in aquaculture production.



Mr. Manohar Parrikar, Chief Minister of Goa



In his introductory remarks at the inaugural function, Dr. Jayathilak IAS pointed out that in 2016-17, India had exported 11,34,948 MT of seafood, principally frozen shrimp and frozen fish, worth 37,870.90 crores and provisional export figures for April-November 2017 have shown an increase of 18.72 percent and 15.16 percent respectively in quantity and value (in US Dollars) of seafood exports.

The export earnings are expected to cross a high of US\$ 6 billion during the current fiscal, buoyed by aquaculture growth, enhanced processing capacity and favourable market conditions, Dr. Jayathilak noted.

THE EXPORT EARNINGS ARE
EXPECTED TO CROSS A HIGH OF
US\$ 6 BILLION DURING THE
CURRENT FISCAL, BUOYED BY
AQUACULTURE GROWTH,
ENHANCED PROCESSING CAPACITY AND
FAVOURABLE MARKET CONDITIONS

"If we are able to sustain our efforts in production and augment the efforts to value-add, India can become the second largest exporter of seafood next to China within a few years surpassing countries like Norway, Vietnam, U.S. or Thailand," he added.

Goa's Minister for Agriculture Mr. Vijai Sardesai, who presided over the function, pointed to overexploitation as a major concern and called for proactive measures to avoid situations like the 'fish famine' affecting Southeast Asian countries.

"As a small, progressive state, Goa is taking strict measures such as a ban on LED lights to curb damaging fishing practices, but bigger states also need to do their bit if we wish to have sustained exports," he said.

Mr. Vinoda Paliencar, the state's Minister for Fisheries and Water Resources said they were planning to set up a Fisheries Corporation in Goa with the dual aim of increasing exports as well as ensuring that fish is available to domestic consumers at reasonable prices.

SEAI National President Mr. V. Padmanabham highlighted the challenges faced by seafood producers and exporters and hoped that the deliberations at IISS 2018 will help address some of these issues.



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Aluminium (SS) Pan (Tray)



Breading machine (Line)



Tunnel Powder Coating Machine



Shrimp Fryer



Automatic Pan separating Conveyor



Shrimp Peeler

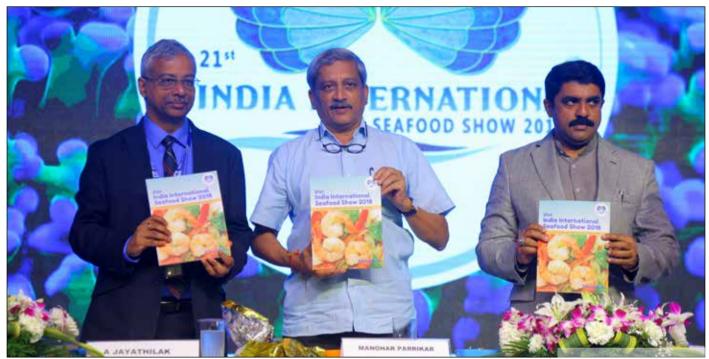
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↑ Release of IISS 2018 Souvenir

Delegates who participated in IISS 2018 include exporters, machinery suppliers, importers, other service providers, researchers, policy makers, etc. from India and countries such as the U.S., the U.K., Spain, Japan, Australia, China, Vietnam, South Korea, Thailand, Malaysia and the Middle East.

The expo, featuring 325 stalls spread over a 7,000 sqm area, presented an array of advanced processing and packaging machinery, as well as cold storage facilities, testing equipment and fishing gear. A range of conventional seafood products and other value-added products were also on display.

# PARTNERSHIP WITH COOP, SWITZERLAND

Another significant initiative for the marine industry, formalized at IISS 2018, was the Memorandum of Cooperation with COOP Cooperative, one of Switzerland's biggest retail and wholesale companies, equip farmers and entrepreneurs in India to produce organic shrimp for the EU market.

The MoC was signed by Dr. A. Jayathilak, Chairman, MPEDA, and Mr. Gerard Zurlutter, Member of Management, COOP.

Under the project, MPEDA will assist in identifying entrepreneurs and providing them with technical advice on the production of high-quality organic shrimp that meet national and international certification protocols.



Mr. Vinod Paliencar, Minister for Fisheries and Water Resources, Goa



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Mr. Gerard Zurlutter, Member of Management, COOP and Dr. A. Jayathilak, Chairman of MPEDA hands over signed Memorandum of Cooperation on export oriented organic shrimp farming



Mr. Gerard Zurlutter, Member of Management, COOP and Dr. A. Jayathilak, Chairman of MPEDA sign Memorandum of Cooperation. Mr. Alex Ninan, M/s. Baby Marine Group is seen to the extreme left







# **COVER STORY**

COOP, which has nearly 2,200 sales outlets throughout Switzerland and wholesale/production business active across Europe, has offered to procure the processed organic shrimp at a premium of up to 15 percent and with an additional 5 percent through financing for development activities, including training.

The pilot project will be run in Kerala to produce Organic Black Tiger Shrimp (*Penaeus monodon*) initially in an area of about 1000 ha, and if successful, extended to other locations across India.

MPEDA AND COOP WILL FACILITATE
THE CERTIFICATION OF A SHRIMP
HATCHERY FOR THE PRODUCTION
OF ORGANIC SHRIMP SEED AND
SIMILARLY CERTIFY AND EMPANEL
A SMALL SCALE FEED MILL UNIT TO
SOURCE THE ORGANIC FEED FOR THE
PROJECT.

MPEDA and COOP will facilitate the certification of a shrimp hatchery for the production of organic shrimp seed and similarly certify and empanel a small scale feed mill unit to source the organic feed for the project.

It marks a new direction for aquaculture in India which is not just the mainstay of Indian seafood exports but also serves the economy in other ways by generating large-scale employment and putting to use saline barren lands and inland resources to raise food fish for domestic and international markets.

# MPEDA EXPORT AWARDS

Mr. Suresh Prabhu presented the MPEDA awards for Export Excellence for the years 2015-16 and 2016-17 on the inaugural day of the  $21^{\rm st}$  IISS.

MPEDA presents annual awards to companies that have registered outstanding performance across multiple categories, including deep sea fishing, sustainable aquaculture, compliance and training. MPEDA Export Awards were instituted in 1990. The awards are given to two top manufacturer-exporters under Categories I to V.

A total of 27 companies were presented performance awards for the years 2015-16 and 2016-17 by the Union Minister at the ceremony attended by Goa's Minister for Agriculture Mr. Vijai Sardesai and Minister for Fisheries and Water Resources













# Mr. Suresh Prabhu, Union Minister for Commerce and Industries presents MPEDA awards for Export Excellence for 2015-16, 2016-17











































Mr. Vinoda Paliencar and MPEDA Member and MP Mr. K. Hari Babu, among others.

# **IISS 2020**

It was announced at the Conference that the 22<sup>nd</sup> edition of IISS will be held at Kochi in 2020.

# TECHNICAL SESSIONS

Across the three days of technical sessions held during IISS 2018, seafood industry stakeholders, policymakers and other experts discussed a range of subjects. It offered a platform for exporters raise concerns, including the need for clarity on elements of GST, streamlining of regulations and certifications, issues with delisting and so on.

An EU-India Shrimp in association with the Embassy of the Kingdom of Netherlands discussed various aspects of the trade on the concluding day. India is a leading supplier of shrimps to the EU market.

During one of the sessions, stakeholders of the Indian seafood industry voiced the need for a common standard certification to allay the burden of costs and effort in acquiring multiple certifications to remain credible in the business. Adding to the difficulties was the demand by individual countries to adhere to their certifications and the cumbersome process for companies to prepare and maintain records of all certifications, they said.

However, many admitted that certification was a necessary assurance for end consumers. Mr Chandrajith, Director, Wimpey Laboratories, Kuwait, said, "Certification not only ensures the quality and credibility, but also brand awareness, which in turn can bring several positive outcomes for the company, such as improved client relationship, a rise in prices and the like."

He also elaborated on various certifications like Hazard Analysis and Critical Control Points (HACCP), a standard approach to food safety from biological, chemical, and physical hazards, ISO 9001: 2015, British Retail Consortium (BRC) and others. Mr. Chandrajith added that certifications such as ISO 9001: 2008, that was no longer valid, needed to be removed from the products and related materials.

Mr. Yoshiyuki Shige, Senior Executive, Managing Director, Japan Fisheries Association, spoke about the importance of eco-labelling in a separate session.

"Marine eco-labels are marks attached to fishery products to indicate that they have been caught by a method that gives consideration to the sustainability of ecosystem and resources with an aim to promote customer understanding of resource management," he said.



# **TECHNICAL SESSION OF IISS 2018**

**SESSION - 1 (27.01.2018 AFTERNOON)** 

Chairman of the session: Dr. C. N. Ravisankar, Director, Central Institute of Fisheries Technology, Kochi		
Торіс	Speakers	
Key note address: Role of technology and value addition in seafood marketing	Dr. C. N. Ravisankar, Director, CIFT, Kochi, India	
Overview of seafood safety requirements in major markets	Dr. I. Karunasagar, Senior Director (International Relations), Nitte University, Mangaluru, India	
GST implementation and its implication in seafood sector	Mr. Karthik IVRN, Lakshmikumaran & Sridharan, Chennai, India	
Live transportation of edible shrimp and fish: international standards, specifications and requirements	Mr. Lim Meng Huat, Chief Operating Officer, Apollo Aquarium, Singapore	
Use of e-commerce in international seafood marketing	Mr. Sanjay Sharma, Global Head, TDI International India (P) Limited, New Delhi, India	

# **SESSION - 2 (28.01.2018 FORENOON)**

Chairman of the session: Mr. Elias Sait, Secretary General, Se	afood Exporters Association of India
Торіс	Speakers
Key note address: Seafood marketing and certification	Mr. Elias Sait, Secretary General, SEAI, Chennai, India
Value addition "Concept, Opportunities & Challenges"	Mr. Kenny Thomas, Chief Executive, Jinny Marine Traders, Veraval, Gujarat, India
Seafood demand & supply in international market: Price influencing factors	Mr. Allen, Managing Director of Iceland Seafood Barraclough Ltd (ISB), UK
Seafood certifications- A Boon or Bane?	Mr. Chandrajith, Director, Wimpey Laboratories, Kuwait
Japanese Eco - Labelling	Mr. Yoshiyuki Shige, Senior Executive, Managing Director, Japan Fisheries Association, Japan

# **SESSION - 3 (28.01.2018 AFTERNOON)**

Theme: Seafood export trade: Challenges in meeting regulatory requirements		
Chairman of the session: Dr. S.K. Saxena, Director, Expo	rt Inspection Council of India	
Торіс	Speakers	
Key Note address	Dr. S. K. Saxena, Director, EIC	
Export certification: Role of EIC in achieving regulatory Compliance	Mr. R. M. Mandlik, Deputy Director, Export Inspection Council	
Challenges and opportunities for Indian seafood exports based on EU regulations	Mr. Wojciech Dziworski Counsellor for Health and Food Safety Delegation of the European Union to India	



Challenges in meeting biosecurity measures in Seafood Trade	Dr. K.K. Vijayan, Director, ICAR - Central Institute of Brackish-water Aquaculture, Chennai
Challenges and opportunities for Indian Aquaculture Seafood Exports	Dr. A. Ravi Shankar, IPS, Director General Drugs & Copy Writes, Drug Control Administration, Andhra Pradesh
Challenges and opportunities for Indian seafood exports based on Australian regulations	Dr. Nora Galway, Counsellor (Agriculture) Australian High Commission, New Delhi
Seafood exports: Industry Perspective	Mr. Elias Sait, Secretary General SEAI

# **SESSION - 4 (29.01.2018 FORENOON)**

# **INDIA -EU SHRIMP DIALOGUE**

Facilitator: Mr. Anand Krishnan, Deputy Agricultural Counselor, Embassy of the Kingdom of the Netherlands, New Delhi.

Chairman of the session: Dr. A. Jayathilak IAS, Chairman, The Marine Products Export Development

Authority, Kochi, India Topic	Speakers
Welcome Address - Introduction to theme, word of thanks, intro Sol/ STIP, purpose and outcomes of the workshop	Mr. Willem Van Der Pijl Solidaridad / Seafood Trade Intelligence Portal
Opening Address	Dr. A. Jayathilak IAS, Chairman, MPEDA, India
Buyers perspective on Indian shrimp in the EU market (commercial perspective)	Mr. Frank Molenaar Klaas Puul
EU DG SANTE Perspective on current developments with regard to audits	Mr. Wojciech Dzirowski EU DG SANTE Representative, Delhi
Export Inspection Council perspective on current developments with regard to audits	Dr. S. K. Saxena, Director, EIC of India
EU importers on current developments with regard to audits	Mr. Olivier Hottlet, European Seafood Importers and Processors Alliance / Dutch Fish Federation
Indian exporters on current developments with regard to audits	Mr. Elias Sait, Secretary General, SEAI
EU-India grape example NL-India cooperation to prevent/lift EU ban	Mr. Wouter Verhey, Agricultural Counselor, Embassy of the Kingdom of the Netherlands
Discussion: How to cooperate to let EU-India shrimp trade flourish	Mr. Willem Van Der Pijl Director, Solidaridad SSEA
Closing remarks	Dr. M. K. Ram Mohan Joint Director, MPEDA, India
Valedictory	Mr. Wouter Verhey, Agricultural Counselor, Embassy of the Kingdom of the Netherlands





























Mr. Shige further noted that the purpose of the label is to support conservation efforts of fish producers by promoting their products. Their efforts are essential to ensuring sustainable fisheries into the future, he said.

Participating in a technical session dealing with various aspects of processing and export of marine products, they said they were happy with the merger of the multiplicity of central and state-level taxes into single GST. However, they were finding it difficult to understand the nuances of the new tax regime.

Though the seafood exporters acknowledged that the central government has addressed a lot of their concerns over the Goods and Services Tax (GST), they pointed out that a number of GST provisions continued to be in the grey area, impeding their trade.

While the tax refund procedure had been clarified and simplified, exporters were yet to get the refunds as there was no timeline for the purpose. Among the other thorny issues were merchant exporters' warehouses and claiming drawback benefit, which took into account only the central GST, not the state GST.

Making clarifications on their doubts, trade law expert Mr. Karthik IVRN said clarity was needed in several GST clauses relating to exports. An enabling GST regime is crucial for achieving the export target for marine products. The central government, the Marine Products Export Development Authority (MPEDA) and the Seafood Exporters Association of India (SEAI) are seeking a target of US \$ 10 billion in exports by 2022.

Dr. C. N. Ravishankar, Director of the Central Institute of Fisheries Technology, Kochi, gave details of new and emerging technologies for processing seafood to increase its shelf life and thereby help farmers get remunerative prices for their produce.

Dr. I. Karunasagar, Senior Director (International Relations), Nitte University, Mangaluru, gave an overview of seafood safety requirements in major markets.

Mr. Lim Meng Huat, Chief Operating Officer, Apollo Aquarium, Singapore, said the demand for live edible shrimp and fish was rising in the international market which necessitated adoption of latest technologies for live transportation of marine products.

# **COVER** STORY

















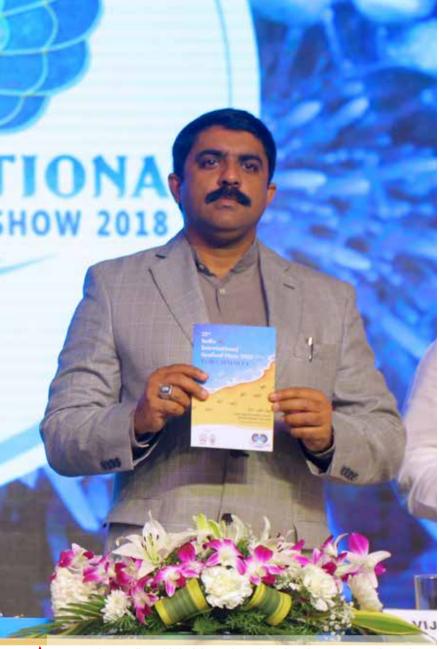






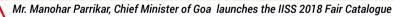




























# **STALL AWARDS 2018**

In the category of Best Stall (Overseas), M/s. Asia Refrigeration Industry Joint Stock Company based in Vietnam, got the first prize while M/s. Glory Co. Ltd, a Vietnamese company, was adjudged the runner up.

The award for the Best Stall in the category of Registered Exporters was bagged by M/s. Gadre Marine Exports Pvt.

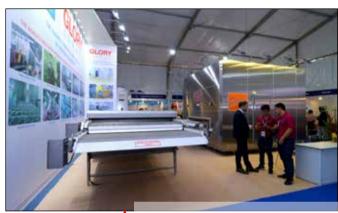
Ltd. while M/s. K N C Agro Limited got the award for the Second Best in the category.

M/s. Ishida India Private Limited was given the award for the Best Indian Stall while the second best award in the category went to M/s. Pari Chemicals.

The awards were presented by Dr. A Jayathilak IAS, Chairman, MPEDA, in the presence of Mr. V Padmanabham, President, Seafood Exporters Association of India (SEAI).



Best Stall : Overseas - Asia Refrigeration Industry Joint Stock Company



Second Best Stall : Overseas - Glory Co. Ltd.



Nest Stall : Registered Exporters - Gadre Marine Exports Pvt. Ltd.



Second Best Stall : Registered Exporters - KNC Agro Limited



↑ Best Stall : Indian - Ishida India Pvt. Ltd.



🔨 Second Best Stall : Indian - Pari Chemicals



# **IISS 2018 PRODUCT AWARDS**

As done in the previous IISS 2016, a product award competition was successfully conducted during IISS 2018 in 3 categories for product innovation. The main intention of this initiative was to encourage processors/exporters to come up with new products. Following were the categories of IISS 2018 product awards:

#### i. Best Convenience Product

This category is the competition for seafood products which are convenient to the end users and consumers.

# ii. Best Retail Packaging

This category is the competition for presenting seafood packaging which are intended for retail marketing or which are already available/introduced in the domestic or international market for packing products less than 2 kg and having qualities mentioned in the Judging criteria.

#### iii. Best Innovative Product

This category is the completion for new seafood products which are ready or having great potential for introducing in domestic or international retail market and having qualities mentioned in the Judging criteria.

# **WINNERS**

#### 1. Best Convenience Product



WINNER: Masala Mackerel: Gadre Marine Exports Pvt. Ltd., Ratnagiri

#### 2. Best Retail Packaging



WINNER: Fresh Tilapia Fish in Intact Pack : West Coast Frozen Foods Pvt. Ltd., Mumbai

#### 3.Best Innovative Product



WINNER: Fish Seekh Kebab - West Coast Frozen Foods Pvt. Ltd., Mumbai



Dr. A. Jayathilak IAS, Chairman, MPEDA with the award winners of the best stall and product of IISS 2018



# **LIST OF EXPORT AWARDEES FOR THE YEAR 2015-16**

CATEGORY	POSITION	AWARDEE
	<b>1</b> st	M/s. FALCON MARINE EXPORTS LTD, BHUBANESWAR
I.(A) Overall Exports – Value wise	2 <sup>nd</sup>	M/s. DEVI SEA FOODS LTD, VISAKHAPATNAM
	<b>1</b> st	M/s. MUKKA SEA FOOD INDUSTRIES PVT. LTD, MANGALORE
I.(B) Overall Exports- Quantity wise	2 <sup>nd</sup>	M/s. FALCON MARINE EXPORTS LTD, BHUBANESWAR
II. Commodity- wise		
	<b>1</b> st	M/s. FALCON MARINE EXPORTS LTD, BHUBANESWAR
(A) Frozen Shrimp	2 <sup>nd</sup>	M/s. DEVI SEA FOODS LTD, VISAKHAPATNAM
	<b>1</b> st	M/s. BLUE WATER FOODS & EXPORTS PVT. LTD, MANGALORE
(B) Frozen Cephalopods	2 <sup>nd</sup>	M/s. GRAND MARINE FOODS, ALAPPUZHA
	<b>1</b> st	M/s. RAMESHWAR COLD STORAGE, VERAVAL
(C) Frozen Fin Fish	2 <sup>nd</sup>	M/s. INDIAN MARINE INDUSTRIES, KOCHI
	<b>1</b> st	M/s. AQUA WORLD EXPORTS PVT. LTD, CHENNAI
(D) Chilled Marine Products	2 <sup>nd</sup>	M/s. GOLDMARINE EXPORTS PVT. LTD, CHENNAI
	<b>1</b> st	M/s. MUKKA SEA FOOD INDUSTRIES PVT. LTD, MANGALORE
(E) Dried Marine Products	2 <sup>nd</sup>	M/s. GLOBAL IMPEX TRADING, MUMBAI
	<b>1</b> st	M/s. SEABOY FISHERIES PVT. LTD, TRIVANDRUM
(F) Molluscs other than Cephalopods	2 <sup>nd</sup>	M/s. CAPITHAN EXPORTING CO., KOLLAM
III. Live Marine Products other than	<b>1</b> st	M/s. KANNAN MARINE FOODS, CHENNAI
Aquarium Fish	2 <sup>nd</sup>	M/s. SCANET TRADING PVT. LTD, CHENNAI
	<b>1</b> st	M/s. PESCINA INDICA, KOLKATA
IV. Aquarium Fish	2 <sup>nd</sup>	M/s. ASIAN EXPORTS, KOLKATA
V. Special Efforts		
	<b>1</b> st	M/s. ACCELERATED FREEZE DRYING CO. LTD., ALAPPUZHA
(A) Value added products	2 <sup>nd</sup>	M/s. HIC-ABF SPECIAL FOODS PVT. LTD, ALAPPUZHA
(B) Woman Entrepreneur	<b>1</b> st	M/s. VASAI FROZEN FOODS, THANE



# **LIST OF EXPORT AWARDEES FOR THE YEAR 2016-17**

CATEGORY	POSITION	AWARDEE
	<b>]</b> st	M/s. DEVI FISHERIES LTD, VISAKHAPATNAM
I. (A) Overall Exports – Value wise	2 <sup>nd</sup>	M/s. DEVI SEA FOODS LTD, VISAKHAPATNAM
	<b>]</b> st	M/s. GADRE MARINE EXPORT PVT. LTD, RATNAGIRI
I. (B) Overall Exports- Quantity wise	2 <sup>nd</sup>	M/s. MUKKA SEA FOOD INDUSTRIES PVT. LTD, MANGALORE
II. Commodity- wise		
	<b>1</b> st	M/s. DEVI FISHERIES LTD, VISAKHAPATNAM
(A) Frozen Shrimp	2 <sup>nd</sup>	M/s. DEVI SEA FOODS LTD, VISAKHAPATNAM
(B) Frozen Cephalopods	<b>1</b> st	M/s. PROFAND VAYALAT MARINE EXPORTS PVT. LTD, KOCHI
	2 <sup>nd</sup>	M/s. SILVER SEA FOOD, PORBANDAR
	<b>]</b> st	M/s. SILVER SEA FOOD, PORBANDAR
(C) Frozen Fin Fish	2 <sup>nd</sup>	M/s. INDIAN MARINE INDUSTRIES, KOCHI
	<b>]</b> st	M/s. AQUA WORLD EXPORTS PVT. LTD, CHENNAI
(D) Chilled Marine Products	2 <sup>nd</sup>	M/s. GOLDMARINE EXPORTS PVT. LTD, CHENNAI
	<b>]</b> st	M/s. MUKKA SEA FOOD INDUSTRIES PVT. LTD, MANGALORE
(E) Dried Marine Products	2 <sup>nd</sup>	M/s. RAJ FISH MEAL & OIL COMPANY, UDUPI
	<b>]</b> st	M/s. SEABOY FISHERIES PVT. LTD, TRIVANDRUM
(F) Molluscs other than Cephalopods	2 <sup>nd</sup>	M/s. JACKVIN SEAFOODS, CUDDALORE
III. Live Marine Products other than	<b>1</b> st	M/s. KANNAN MARINE FOODS, CHENNAI
Aquarium Fish	2 <sup>nd</sup>	M/s. SCANET TRADING PVT. LTD., CHENNAI
	<b>]</b> st	M/s. MALABAR TROPICALS, KOLKATA
IV. Aquarium Fish	2 <sup>nd</sup>	M/s. AQUATIC WORLD, MUMBAI
V. Special Efforts		
	<b>]</b> st	M/s. GADRE MARINE EXPORT PVT. LTD, RATNAGIRI
(A) Value added products	2 <sup>nd</sup>	M/s. ACCELERATED FREEZE DRYING CO. LTD, ALAPPUZHA
(B) Woman Entrepreneur	<b>]</b> st	M/s. VASAI FROZEN FOODS, THANE

# Highlights of marine fish landings in selected harbours of India during November 2017

# **VINOTH S. RAVINDRAN, V. V. AFSAL, JOICE V. THOMAS**

**NETFISH-MPEDA** 

nformation on boat arrivals and fish landings at the major fishing harbours along the east and west coasts of India is recorded by NETFISH as part of MPEDA's catch certification system. NETFISH monitors the marine fish capture along Indian coast by recording the boat arrivals and fish landings at 47 major harbours and landing centres (Table 1) from the 9 maritime states in the country. The data collected are processed to arrive at a species-wise, state-wise, region-wise and harbour-wise evaluation of landings. This report highlights the marine fish landings at major harbours of India during November 2017.

Table 1. List of harbours and landing centres selected for data collection

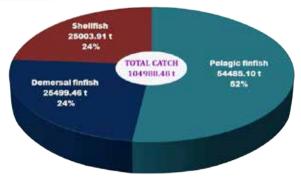
Sl. No.	State	Fishing harbour
1		Beypore
2		Puthiyappa
3		Thoppumpady
4		Munambam
5	Kerala	Sakthikulangara
6		Thottapally
7		Kayamkulam
8		Vizhinjam
9		Mangalore
10		Malpe
11	Karnataka	Gangoli
12	Railiataka	Tadri
13		Karwar
14		Honnavar
15		Harne
16	Maharashtra	New Ferry Wharf
17	Ivialialasiitia	Ratnagiri (Mirkarwada)
18		Sasson Dock
19		Veraval
20	Gujarat	Porbandar
21		Mangrol
22	West Bengal	Digha (Sankarpur)
23	West bengal	Deshapran

24		Namkhana
25	West Bengal	Sultanpur
26		Kakdwip
27		Raidigi
28		Paradeep
29	Odisha	Balaramgadi
30	Udisha	Bahabalapur
31		Dhamara
32		Kakinada
33	Andhra	Machilipatnam
34	Pradesh	Nizampatnam
35		Visakhapatnam
36		Chennai
37		Pazhaiyar
38		Nagapattinam
39		Tuticorin
40	Tamail Nia du	Cuddalore
41	Tamil Nadu	Mandapam
42		Chinnamuttom
43		Colachel
44		Pondicherry
45		Karaikal
46	Coo	Cutbona
47	Goa	Malim

# **ESTIMATES BASED ON FISH LANDINGS**

In all, 104988.48 tons of marine catch landings were recorded during November 2017 from the selected 47 harbours and landing centres. The total catch was comprised of 54485.10 tons (52%) of pelagic finfish resources, 25499.46 tons (24%) of demersal finfish and 25003.91 tons (24%) of shellfish resources (Fig. 1). Landings of 112 varieties of fish items were recorded during the month, among which the top five contributors, in the chronological order, were Indian oil sardine, Indian mackerel, Ribbonfish, Cuttlefish and Squid. These five species together formed 48% of the

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↑ Fig. 1. Category-wise fish landings during November 2017

total catch (Fig. 2). The Indian oil sardine was the species which recorded maximum landings during the period and its landing was to the tune of 15299.86 tons, forming 15% of the total catch. Besides the above named 5 major fishery items, the other important contributors to the landing were Japanese Threadfin bream and Croakers, with a share of 4347.56 tons and 4242.25 tons respectively. The Spotted butterfish was the species which recorded the least quantity, ie. 0.27 tons, during the month.

The category-wise quantity of various fishery items recorded during the month is given in Table 2. Among pelagic finfish

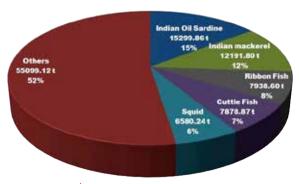


Fig. 2. Major items landed during November 2017

resources, the Indian oil sardine recorded the highest landing which was followed by Indian mackerel and Ribbonfish. In the case of demersal finfishes, the major contributors were Bull's eyes, Croakers and Japanese threadfin bream. Around 64% of the shellfish landing was formed by the Molluscan stock comprised of Cuttlefish, Squid and Octopus and the rest 36% was of Crustaceans. Among Crustaceans, Penaeid shrimps were the major contributor, wherein *Karikkadi* shrimp had the highest share (2505.04 tons).

Table 2. Category-wise landing of various fishery items during November 2017

Fish item	Qty. in tons	% of total catch
Pelagic finfish		
Indian Oil Sardine	15299.86	14.57
Indian mackerel	12191.80	11.61
Ribbonfish	7938.60	7.56
Tunas	3559.39	3.39
Anchovies	2423.10	2.31
Lesser Sardines	2325.99	2.22
Seer Fish	2052.48	1.95
Bombay Duck	2009.39	1.91
Scads	2005.71	1.91
Dolphin fish	1026.55	0.98
Trevallys	737.83	0.70
Horse mackerel	638.28	0.61
Leather jacket	482.95	0.46
Barracudas	436.71	0.42
Herrings	381.86	0.36
Hilsa	242.84	0.23
Queen fish	115.34	0.11
Oriental Bonito	98.60	0.09
Sail fish	84.74	0.08
Marlins	84.42	0.08

Mullet	71.97	0.07
Indian ilisha	56.11	0.05
Barbed halfbeak	54.70	0.05
Flat needle fish	38.99	0.04
Cobia	30.71	0.03
Seabass	27.77	0.03
Needle fish	21.90	0.02
Rainbow runner	17.86	0.02
Indian salmon	14.44	0.01
Silver sillago	10.84	0.01
Milkfish	1.90	0.00
Indian thread fish	1.50	0.00
Indian thread fish  Total	1.50 <b>54485.10</b>	0.00 <b>51.90</b>
		0.00
Total		0.00
Total  Demersal finfish	54485.10	51.90
Total  Demersal finfish  Bull's eye	<b>54485.10</b> 4991.75	<b>51.90</b> 4.75
Total  Demersal finfish  Bull's eye  Croakers  Japanese Thread	<b>54485.10</b> 4991.75 4447.01	<b>51.90</b> 4.75 4.24
Total  Demersal finfish  Bull's eye  Croakers  Japanese Thread fin bream	<b>54485.10</b> 4991.75 4447.01 4347.56	4.75 4.24 4.14
Total  Demersal finfish  Bull's eye  Croakers  Japanese Thread fin bream  Reef cods	54485.10 4991.75 4447.01 4347.56 3022.96	4.75 4.24 4.14 2.88

# **FOCUS** AREA

Table 2. Category-wise landing of various fishery items during November 2017

uui	ing November 20	<u>'                                    </u>
Sole fish	1440.87	1.37
Pomfret	1012.87	0.96
Eel	231.67	0.22
Goat fish	222.25	0.21
Pony fish	129.24	0.12
Rays	128.68	0.12
Moon fish	76.64	0.07
Tiger perch	39.68	0.04
Glassy perchlet	35.23	0.03
Ghol	31.10	0.03
Sea breams	23.45	0.02
Whip fin silver biddy	7.65	0.01
Indian halibut	6.37	0.01
Parrot fish	5.60	0.01
Black tip shark	4.24	0.00
Spine foot	1.20	0.00
Spotted butter fish	0.27	0.00
Total	25499.46	24.29
<i>Total</i> Shellfish	25499.46	24.29
	25499.46	24.29
Shellfish	<b>25499.46</b> 8280.97	7.89
Shellfish Crustaceans		
Shellfish  Crustaceans  Penaeid shrimps  Sea crab  Mud crab	8280.97 643.51 108.13	7.89
Shellfish  Crustaceans  Penaeid shrimps  Sea crab	8280.97 643.51	7.89 0.61
Shellfish  Crustaceans  Penaeid shrimps  Sea crab  Mud crab	8280.97 643.51 108.13	7.89 0.61 0.10
Shellfish  Crustaceans  Penaeid shrimps  Sea crab  Mud crab  Lobsters  Non-penaeid	8280.97 643.51 108.13 16.17	7.89 0.61 0.10 0.02
Shellfish  Crustaceans  Penaeid shrimps  Sea crab  Mud crab  Lobsters  Non-penaeid shrimps	8280.97 643.51 108.13 16.17 1.20	7.89 0.61 0.10 0.02 0.00
Shellfish  Crustaceans  Penaeid shrimps  Sea crab  Mud crab  Lobsters  Non-penaeid shrimps  Total Crustaceans	8280.97 643.51 108.13 16.17 1.20	7.89 0.61 0.10 0.02 0.00
Shellfish  Crustaceans  Penaeid shrimps  Sea crab  Mud crab  Lobsters  Non-penaeid shrimps  Total Crustaceans  Molluscs	8280.97 643.51 108.13 16.17 1.20 9049.98	7.89 0.61 0.10 0.02 0.00 8.62
Shellfish  Crustaceans  Penaeid shrimps  Sea crab  Mud crab  Lobsters  Non-penaeid shrimps  Total Crustaceans  Molluscs  Cuttlefish	8280.97 643.51 108.13 16.17 1.20 9049.98	7.89 0.61 0.10 0.02 0.00 8.62
Shellfish  Crustaceans  Penaeid shrimps  Sea crab  Mud crab  Lobsters  Non-penaeid shrimps  Total Crustaceans  Molluscs  Cuttlefish  Squid	8280.97 643.51 108.13 16.17 1.20 9049.98 7878.87 6580.24	7.89 0.61 0.10 0.02 0.00 8.62 7.50 6.27
Shellfish  Crustaceans  Penaeid shrimps  Sea crab  Mud crab  Lobsters  Non-penaeid shrimps  Total Crustaceans  Molluscs  Cuttlefish  Squid  Octopus	8280.97 643.51 108.13 16.17 1.20 9049.98 7878.87 6580.24 1494.83	7.89 0.61 0.10 0.02 0.00 8.62 7.50 6.27 1.42

# **REGION-WISE LANDINGS**

On assessing landing data region-wise, it was found that the South West coast (comprised of 15 selected harbours in Kerala, Karnataka and Goa) registered the maximum quantity which was to the tune of 46704.60 tons (45%) and followed by North West region (comprised of 7 selected landing sites in Maharashtra and Gujarat coasts) with 41,895.81 tons (40%) (Fig. 3). The landings from 14 harbours in Tamil Nadu and Andhra Pradesh formed the catch data for the South East region, where a total quantity of 4925.55 tons, only 5% of the total catch, was recorded. The North East region consisting of 10 of the selected landings sites in Odisha and West Bengal recorded a quantity of 10946.92 tons (10%).

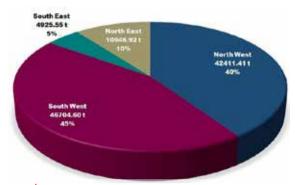


Fig. 3. Region-wise landings recorded during November 2017

In the North West, South West and North East coasts, pelagic finfish landing was more than the other 2 categories whereas in South East the landing was dominated by shellfish resources (Fig. 4). Demersal finfish landing was the lowest in all the regions except North West.

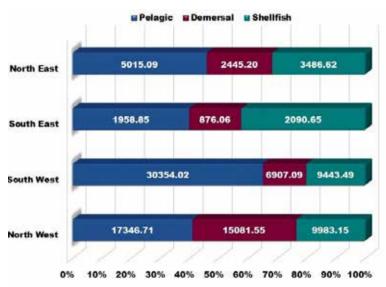


Fig. 4. Comparison of category-wise contribution (in tons) to the total landings of each region

The five major fishery items which had contributed predominantly to the landings in each region are given in Table 3.

Table 3. Major items landed in each region during November 2017

Item	Quantity in tons	% of total landings of the region			
South West					
Indian oil sardine	14501.30	31.05			
Indian mackerel	4250.00	9.10			
Squid	3143.53	6.73			
Cuttlefish	2852.48	6.11			
Ribbonfish	2313.53	4.95			
North West					
Horse mackerel	6538.96	15.42			
Ribbon fish	4512.71	10.64			
Cuttlefish	4150.42	9.79			
Japanese thread fin bream	3728.90	8.79			
Squid	2919.44	6.88			
South East					
Cuttlefish	453.50	9.21			
Ribbonfish	429.20	8.71			
Tuna	401.89	8.16			
White prawn	303.30	6.16			
Brown shrimp	284.36	5.77			
North East					
Croaker	1431.43	13.08			
<i>Karikkadi</i> shrimp	910.82	8.32			
Bombay duck	900.26	8.22			
Ribbonfish	683.16	6.24			
Indian mackerel	682.18	6.23			

# STATE-WISE LANDINGS

Among the 9 maritime states along the main land of India, the state of Gujarat had recorded the maximum marine fish landing during the month, which was to the tune of 27,116.53 tons forming around 26% of the total catch (Fig. 5). Next to Gujarat, the state of Karnataka contributed 24,826.29 tons which was around 24% of the total from all the states.

Kerala held the third place with a total landing of 19,994.85 tons (19%). The West coast states together formed about 85% of the total catch. In East coast, the highest landing was reported from West Bengal which was 8,119.51 tons (8%). The state which recorded least marine landing during the month was Goa where merely 1,883.47 tons of fish catch was recorded.

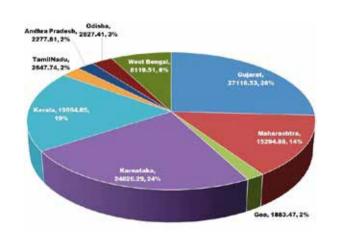


Fig. 5. State-wise fish landings (in tons) during November 2017

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Table 4. Major items landed in various states during November 2017

Item	Quantity in tons	% of total landings of the state		
Kerala				
Indian oil sardine	3194.57	15.98		
Squid	1946.40	9.73		
Cuttlefish	1869.70	9.35		
Ribbonfish	1405.65	7.03		
Snapper	1276.44	6.38		
Karnataka				
Indian oil sardine	10815.08	43.56		
Indian mackerel	2681.13	10.80		
Deep bodied sardinella	1670.00	6.73		
Squid	1187.68	4.78		
Bull's eye -dusky finned	1040.26	4.19		
Goa				
Indian mackerel	579.60	30.77		
Indian oil sardine	491.65	26.10		
Tuna	290.15	15.41		
Horse mackerel	151.15	8.03		
Scad	110.10	5.85		
Maharashtra				
Indian mackerel	6469.39	42.30		
Croaker	1433.62	9.37		
Japanese thread fin bream	1076.90	7.04		
Bombay duck	928.93	6.07		
Reef cod	659.66	4.31		
Gujarat				
Ribbonfish	4008.00	14.78		
Cuttlefish	3923.00	14.47		
Squid	2749.00	10.14		
Japanese thread fin bream	2652.00	9.78		
Bull's eye- dusky finned	2090.90	7.71		
Tamil Nadu				
Cuttlefish	424.27	16.02		
Squid	230.17	8.69		

Tuna	187.50	7.08		
Indian scad	132.21	4.99		
Indian oil sardine	118.43	4.47		
Andhra Pradesh				
Ribbonfish	347.45	15.25		
White prawn	255.11	11.20		
Brown shrimp	244.06	10.71		
Tuna	214.39	9.41		
Tiger prawn	156.96	6.89		
Odisha				
Croaker	655.35	23.18		
Ribbonfish	292.56	10.35		
<i>Karikkadi</i> shrimp	279.25	9.88		
Indian mackerel	176.17	6.23		
Cat fish	141.58	5.01		
West Bengal				
Bombay duck	836.84	10.31		
Croaker	776.08	9.56		
<i>Karikkadi</i> shrimp	631.57	7.78		
Deep sea shrimp	513.13	6.32		
Indian mackerel	506.02	6.23		

# HARBOUR-WISE LANDINGS

The fish landings recorded during the month in the selected

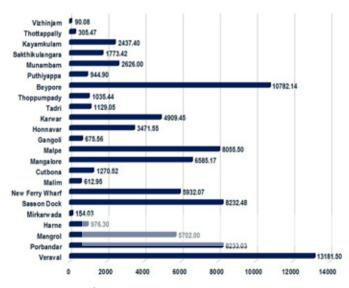


Fig. 6. Landings (in tons) at harbours along west coast during November 2017

harbours along West and East coasts are presented in Fig. 6 and Fig. 7 respectively. Of the 47 harbours, Veraval harbour in Gujarat registered the maximum landing of 13,181.50 tons (13%) and followed by Beypore harbour in Kerala with

# **FOCUS** AREA

a contribution of 10,782.14 tons (10%).

Porbandar harbour in Gujarat and Sassoon dock harbour in Maharashtra recorded nearly same quantity of 8,233 tons (8%) and held the subsequent positions. Along East coast, the harbour which recorded the highest landing was Sankarpur in West Bengal where 2,994.55 tons (3%) was landed. Among the selected 23 harbours in the West coast, 16 recorded more than 1,000 tons of catch whereas only 4 harbours of East coast had recorded over 1,000 tons. The least quantity of landings was recorded from the Chinnamuttom harbour (46.58 tons) in Tamil Nadu.

### **ESTIMATES BASED ON BOAT ARRIVAL**



Fig. 7. Landings (in tons) at harbours along east coast during November 2017

# **COMPARATIVE ANALYSIS**

Table 6 shows the comparison of the data of November with that of previous months. The total fish catch had shown increasing trend over the months and there was an increase by over 2,000 tons in November when compared to that of October. The Pelagic finfish continued as the top contributor to the total catch with same percentage share as of previous month. The percentage share of Demersal finfish resources increased by 3% because of which a

A total of 36,858 boat arrivals were recorded during November 2017, of which the highest of 4,745 boat arrivals was from Veraval harbour. Next to Veraval was the Porbandar harbour where 3,297 numbers of boat arrivals had occurred. Only 11 out of the 47 harbours had recorded more than 1,000 boat arrivals during the period, the details of which are given in Table 5. More than 82% 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, Ring seiners, Gillnetters and traditional crafts.

Table 5. Fishing harbours which recorded > 1000 boat landings during November 2017

SI. No.	Fishing harbours	State	Number of boat landings		
1	Veraval	Gujarat	4745		
2	Porbandar	Gujarat	3297		
3	Mangrol	Karnataka	2543		
4	Malpe	Karnataka	2102		
5	Sasson Dock	Maharashtra	1795		
6	Mangalore	Karnataka	1645		
7	New Ferry Wharf	Maharashtra	1312		
8	Harne	Maharashtra	1238		
9	Digha (Sankarpur)	West Bengal	1151		
10	Deshapran	West Bengal	1139		
11	Sakthikulangara	Kerala	1007		

corresponding decrease was observed in the percentage share of shellfish landing. Indian oil sardine recorded as the topmost contributor during November, displacing Indian mackerel to the second position. The state of Gujarat continued in the topmost position in terms of landings and Veraval harbour in Gujarat too maintained the prime position among the harbours by recording the maximum landing. The total number of boat landings recorded had increased in November by over 2,000 boats in comparison to that of October.

Table 6. Comparative analysis of the data

	September 2017	October 2017	November 2017
Total Catch	102013.55 t	102848.44 t	104988.48 t
Landing of Pelagic finfishes	46448.00 t (46%)	53123.87 t (52%)	54485.10 t (52%)
Landing of Demersal finfishes	21374.27 t (21%)	22231.88 t (21%)	25499.46 t (24%)
Landing of Shellfishes	34191.28 t (33%)	27492.69 t (27%)	25003.91 t (24%)

Species recorded highest landing	Squid (14%)	Indian mackerel (13%)	Indian oil sardine (15%)
State recorded highest landing	Karnataka (25%)	Gujarat (25%)	Gujarat (26%)
Harbour recorded highest landing	Veraval (14%)	Veraval (11%)	Veraval (13%)
Total Boat Arrivals	32657	34623	36858

#### **SUMMARY**

\*Percentage of Total Catch

In November 2017, a total of 1,04,988.48 tons of marine fishery resources were landed along 47 major fish landing sites of India, wherein pelagic finfish contributed more quantity than shellfish stocks and demersal finfish. Considering the total quantity landed, Indian oil sardine recorded as the major fishery item. Landings from the West

coast states together formed more than 85% of the total catch, and the South West coast contributed the maximum share of around 45%. However, Gujarat recorded the highest catch among the 9 maritime states. Among the 47 selected harbours, 20 harbours recorded more than 1000 tons of fish landings and the Veraval harbour recorded the highest landing as well as the maximum boat arrivals.







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# Highlights of marine fish landings in selected harbours of India during December 2017

R. BALASUBRAMANIAN, V. V. AFSAL, JOICE V. THOMAS

**NETFISH-MPEDA** 

## INTRODUCTION

NETFISH is mandated with obtaining information on daily boat arrival and marine catch landings occurring at some selected harbours and landing centres across the coastal states of India. The data collected during December 2017 from 46 major landing sites were analyzed and the report is presented below.

## **METHODOLOGY**

A daily recording of boat arrivals as well as total fish landings occurred at 46 selected landing sites in the coastal states (Table 1) was carried out by the harbour data collectors. Approximate quantity of different fish species 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. These data were further analysed using online applications and MS office (excel) tools to arrive at species-wise, region-wise, state wise and harbour wise estimation.

Table 1: List of harbours and landing centres selected for data collection

Sl.No	State	Fishing harbour
1		Beypore
2		Puthiyappa
3		Thoppumpady
4	Kerala	Munambam
5	Keraia	Sakthikulangara
6		Thottapally
7		Kayamkulam
8		Vizhinjam
9		Mangalore
10		Malpe
11	Manna at also	Gangoli
12	Karnataka	Tadri
13		Karwar
14		Honnavar

15		Harne
16	Malanashana	New Ferry Wharf
17	Maharashtra	Ratnagiri (Mirkarwada)
18		Sasson Dock
19		Veraval
20	Gujarat	Porbandar
21		Mangrol
22		Digha (Sankarpur)
23		Deshapran
24	Wast Barrel	Namkhana
25	West Bengal	Sultanpur
26		Kakdwip
27		Raidigi
28		Paradeep
29	Odiah -	Balaramgadi
30	Odisha	Bahabalapur
31		Dhamara
32		Kakinada
33		Machilipatnam
34	Andhra Pradesh	Nizampatnam
35		Visakhapatnam
36		Chennai
37		Pazhaiyar
38		Nagapattinam
39		Tuticorin
40	Tamil Nadu	Cuddalore
41		Mandapam
42		Colachel
43		Pondicherry
44		Karaikal
45	Coo	Cutbona
46	Goa	Malim

### **ESTIMATES BASED ON FISH LANDINGS**

In December 2017, the total catch recorded from the 46 landing sites was 82849.37 tons, which were comprised of 39,510.15 tons (48%) of pelagic finfish resources, 23,492.34 tons (28%) of demersal finfishes, 12,433.70 tons (15%) of molluscans and 7,413.18 tons (9%) of crustacean varieties (Fig 1).

Landings of 112 varieties of fish items were recorded during the month, among which the top five contributors, in the chronological order, were Indian oil sardine, Indian mackerel, Ribbonfish, Squid and Cuttlefish. These five species together formed 41% of the total catch (Fig 2). The Indian oil sardine was the species which recorded maximum landings during the period and the landing was to the tune of 8,433.07 tons, forming 10% of the total catch. Besides the above listed 5 fishery items, the other major contributors to the total catch were Dusky finned bull's eye and Japanese Threadfin bream, with a share of 4,483.24 tons and 4,111.69 tons respectively. The Yellowfin sea bream was the species which recorded the least quantity during the month (0.08 tons).

The category-wise quantity of various fishery items recorded during December 2017 is given in Table 2. Among pelagic finfish resources, the Indian oil sardine recorded the highest landing which was followed by Indian mackerel and Ribbonfish. In the case of demersal finfishes, the major contributors were Bull's eyes, Japanese threadfin bream and Croakers. The Molluscan stock comprised of Squid, Cuttlefish and Octopus formed 63% of the shellfish landing and the rest 37% was of Crustaceans. Among Crustaceans, Penaeid shrimps were the major contributor, wherein *Karikkadi* shrimp had the highest share (2,033.09 tons).

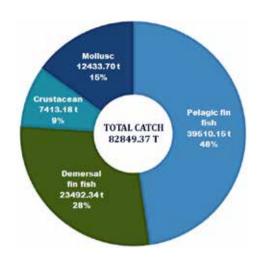


Fig.1. Category-wise fish landings during December 2017

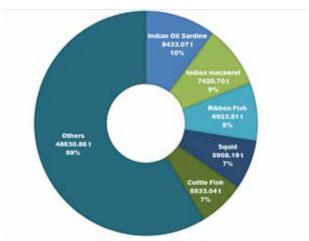


Fig. 2. Major items landed during December 2017

Table 2: Category-wise Landing of various fishery items during December 2017

Fish Item	Qty. in tons	% of Total Catch
Pelagic finfish		
Indian oil sardine	8433.07	10.18
Indian mackerel	7420.70	8.96
Ribbon fish	6923.51	8.36
Tuna	3860.15	4.66
Anchovy	2189.36	2.64
Seer fish	1719.63	2.08
Scads	1442.27	1.74
Horse mackerel	1378.08	1.66

Dolphin fish	1341.32	1.62
Bombay duck	1064.42	1.28
Lesser sardines	987.50	1.19
Barracuda	606.31	0.73
Trevallies	518.75	0.63
Herrings	335.72	0.41
Leather jacket	324.61	0.39
Queen fish	310.37	0.37
Hilsa	91.81	0.11
Mullet	89.49	0.11
Marlins	87.06	0.11

Oriental bonito	68.90	0.08
Cobia	52.30	0.06
Sail fish	52.00	0.06
Needle fish	50.10	0.06
Indian ilisha	44.79	0.05
Flat needle fish	41.06	0.05
Seabass	26.48	0.03
Rainbow runner	23.69	0.03
Indian salmon	17.92	0.02
Silver sillago	7.40	0.01
Indian thread fish	0.93	0.00
Milk fish	0.37	0.00
Ladyfish	0.10	0.00
Total Pelagic	39510.15	47.69
Demersal finfish		
Bull's eyes	6022.62	7.27
Japanese Threadfin bream	4111.69	4.96
Croakers	3523.51	4.25
Reef cods	2104.33	2.54
Sole fish	2001.21	2.42
Lizard fish	1782.94	2.15
Cat fish	1499.22	1.81
Pomfrets	873.52	1.05
Snapper	622.06	0.75
Goat fish	247.15	0.30
Eel	172.39	0.21
Moon fish	165.57	0.20
Pony fishes	155.08	0.19
Rays	81.77	0.10
Tiger perch	45.00	0.05
Indian halibut	22.43	0.03
Ghol	21.00	0.03
Filefish	10.04	0.01
Emperor bream	8.97	0.01
Whip fin silver biddy	7.53	0.01

Glassy perchlet	5.76	0.01
Parrot fish	5.10	0.01
Black tip shark	2.99	0.00
Spine foot	0.25	0.00
Indian drift fish	0.15	0.00
Yellowfin sea bream	0.08	0.00
Total Demersal	23492.34	28.36
Shellfish		
Crustacean		
Penaeid shrimps	6770.98	8.17
Sea crab	604.51	0.73
Mud crab	19.00	0.02
Lobsters	15.17	0.02
Non-penaeid shrimps	3.51	0.00
Total Crustacean	7413.18	8.95
Mollusc		
Squid	5908.19	7.13
Cuttlefish	5533.04	6.68
Octopus	992.47	1.20
Total Mollusc	12433.70	15.01
Total Shellfish	19846.87	23.96
GRAND TOTAL	82849.37	100.00

## **REGION-WISE LANDINGS**

On assessing landing data region wise, it was found that the North West region (comprised of 7 selected landing sites in Maharashtra and Gujarat coasts) registered the maximum quantity, which was to the tune of 37,520.41 tons (45%) and followed by South West coast (comprised of 15 selected harbours in Kerala, Karnataka and Goa) with 30,458.31 tons (37%) (Fig. 3). The landings from 13 harbours in Tamil Nadu and Andhra Pradesh formed the catch data for the South East region, where a total quantity of 4,640.57 tons (only 6% of the total catch) was recorded. The North East region consisting of 10 of the selected landings sites in Odisha and West Bengal recorded a quantity of 10,230.08 tons (12%).

In the South West and North East coasts, pelagic finfish landing was much higher than the other 2 categories,



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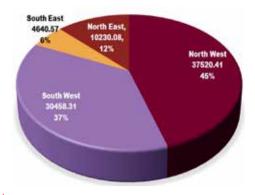












↑ Fig.3. Region-wise landings recorded during December 2017

whereas in North West demersal finfish stocks recorded more in quantity than pelagic finfishes and shellfishes (Fig. 4). In South East, the landing was dominated by shellfish resources. Demersal finfish landing was the lowest in all the regions except North West.

The five major fishery items which had contributed predominantly to the landings in each region are given in Table 3.

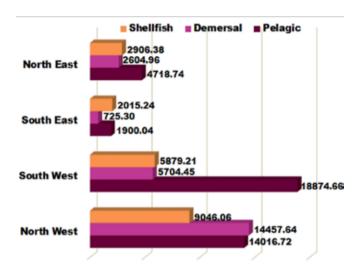


Fig. 4. Comparison of category wise contribution (in tons) to the total landings of each region

Table 3. Major items	landed in eac	h region during	December 2017
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Item	quantity in tons	% of total landings of the region		
South West	South West			
Indian oil sardine	7266.81	23.86		
Indian mackerel	3279.51	10.77		
Squid	2270.34	7.45		
Ribbon fish	1418.30	4.66		
Cuttlefish	1171.74	3.85		
North West				
Ribbon fish	4303.74	11.47		
Cuttlefish	3643.97	9.71		
Dusky finned bull's eye	3494.60	9.31		
Indian mackerel	3441.72	9.17		
Squid	3125.15	8.33		
South East				
Tuna	494.40	10.65		
Ribbon fish	463.04	9.98		
Cuttlefish	430.86	9.28		
Brown shrimp	288.00	6.21		
White prawn	263.30	5.67		
North East				
Croaker	1299.67	12.70		

Indian oil sardine	816.61	7.98
Ribbon fish	738.43	7.22
Golden anchovy	719.80	7.04
Karikkadi shrimp	676.90	6.62

### STATE-WISE LANDINGS

Among the 9 maritime states in the mainland of India, the state of Gujarat had recorded the maximum marine fish landing during the month, which was to the tune of 25,254.28 tons forming more than 30% of the total catch (Fig. 5). Next to Gujarat, the state of Karnataka contributed 16,493.81 tons which were around 20% of the total quantity recorded from all the states. Maharashtra held the third place with a total landing of 12,266.13 tons (15%). The West coast states together formed more than 82% of the total catch. In East coast, the highest landing was reported from West Bengal which was 7,239.78 tons (9%). The state which recorded the least landing during the month was Goa where merely 1,840.72 tons of marine fish catch was recorded.

The major five fishery items which had contributed significantly to the landings in each state during December 2017 are given in Table 4.

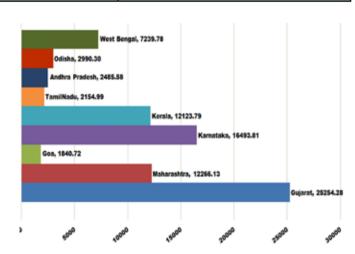


Fig.5. State wise fish Landings (in tons) during December 2017

Table 4. Major Items landed in various states during December 2017

Item	Quantity in tons	% of total landings of the state
Kerala		
Indian oil sardine	1921.01	15.84
Squid	1151.62	9.50
Japanese threadfin bream	922.60	7.61
Ribbonfish	863.10	7.12
Cuttlefish	841.18	6.94
Karnataka		
Indian oil sardine	4396.10	26.65
Indian mackerel	2188.06	13.27
Squid	1105.72	6.70
Little tunny	819.83	4.97
Indian scad	787.41	4.77
Goa		
Indian oil sardine	949.70	51.59
Indian mackerel	363.53	19.75

Little tunny	167.95	9.12	
Tuna	95.00	5.16	
Horse mackerel	49.90	2.71	
Maharashtra			
Indian mackerel	2865.42	23.36	
Ribbonfish	932.24	7.60	
Croaker	906.82	7.39	
Cuttlefish	862.47	7.03	
Horse mackerel	744.14	6.07	
Gujarat			
Dusky finned bull's eye	3494.60	13.84	
Ribbonfish	3371.50	13.35	
Cuttlefish	2781.50	11.01	
Squid	2654.00	10.51	
Japanese Thread fin bream	2313.00	9.16	
Tamil Nadu			

Cuttlefish	394.19	18.29			
Squid	188.73	8.76			
Tuna	182.15	8.45			
Indian oil sardine	87.41	4.06			
Indian mackerel	86.96	4.04			
Andhra Pradesh					
Ribbonfish	391.00	15.73			
Tuna	312.25	12.56			
Brown shrimp	252.77	10.17			
White prawn	217.58	8.75			
Pink shrimp	199.82	8.04			
Odisha					
Croaker	614.10	20.54			
Ribbonfish	335.55	11.22			
Golden anchovy	251.60	8.41			
Karikkadi shrimp	247.70	8.28			
Sole fish	153.71	5.14			
West Bengal					
Indian oil sardine	717.50	9.91			
Croaker	685.57	9.47			
Bombay duck	557.78	7.70			
Golden anchovy	468.20	6.47			
Indian mackerel	449.04	6.20			

### HARBOUR-WISE LANDINGS

The fish landings recorded during the month in the selected harbours along West and East coasts are presented in figures 6 and 7 respectively. Of the 46 harbours, Veraval harbour in Gujarat registered the maximum landing of 10,625.40 tons (13%) and followed by Porbandar harbour in Gujarat with a contribution of 8,917.88 tons (11%). Malpe harbour in Karnataka recording a quantity of 7,351.60 tons (9%) and Beypore harbour in Kerala with a quantity of 6,907.10 tons (8%) held the subsequent positions. Along East coast, the harbour which recorded the highest landing was Digha (Sankarpur) in West Bengal where 3,299.65 tons (4%) was landed. Thirteen out of the selected 23 harbours on the West coast recorded more than 1000 tons of catch whereas only 4 out of 23 harbours of East coast had recorded over 1000 tons. The least quantity of landings was recorded from Colachel harbour (13.75 tons) in Tamil Nadu.

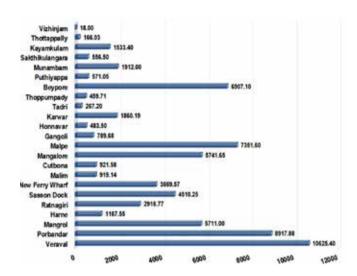


Fig. 6. Landings (in tons) at harbours along West coast during December 2017

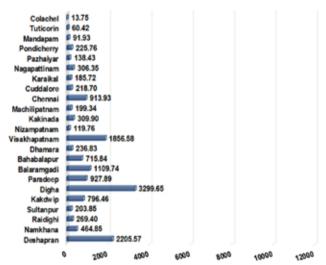


Fig. 7. Landings (in tons) at harbours along East coast during December 2017

### **ESTIMATES BASED ON BOAT ARRIVAL**

A total of 32,115 boat arrivals were recorded during December 2017, of which the highest of 4,687 boat arrivals was from Veraval harbour. Next to Veraval was the Porbandar harbour where 3,178 numbers of boat arrivals had occurred. Only 8 out of the 46 harbours had recorded more than 1000 boat arrivals during the period, the details of which are given in Table 5. More than 76% 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, Ring seiners, Gillnetters and Traditional crafts.

Table 5. Fishing harbours which recorded > 1000 boat landings during December 2017

Sl.No	Fishing harbours	State	Number of boat landings
1	Veraval	Gujarat	4687
2	Porbandar	Gujarat	3178
3	Mangrol	Gujarat	2478
4	Malpe	Karnataka	2212
5	Sasson Dock	Maharashtra	1263
6	Mangalore	Karnataka	1225
7	Harne	Maharashtra	1090
8	Digha (Sankarpur)	West Bengal	1060

## **COMPARATIVE ANALYSIS**

Table 6 shows the comparison of the data of December 2017 with that of previous months. The total fish catch had declined by more than 22,000 tons during December 2017 when compared to that of November 2017. The Pelagic finfish continued as the top contributor to the total catch with a slight decrease in percentage share. The percentage share of Demersal finfish resources had increased by 4% whereas the percentage share of shellfish landing remained the same. Indian oil sardine continued as the topmost contributor during the period. The state of Gujarat continued in the top position in terms of landings and Veraval harbour in Gujarat too maintained the prime position among the harbours by recording the maximum landing. The total number of boat arrivals recorded had decreased in December 2017 by over 4.700 boats when compared to that of November 2017.

Table 6. Comparative analysis of the data

	October 2017	November 2017	December 2017
Total Catch	1,02,848.44 t	1,04,988.48 t	82,849.37 t
Landing of Pelagic finfishes	53,123.87 t (52%)	54,485.10 t (52%)	39,510.15 t (48%)
Landing of Demersal finfishes	22,231.88 t (21%)	25,499.46 t (24%)	23,492.34 t (28%)
Landing of Shellfishes	27,492.69 t (27%)	25,003.91 t (24%)	19,846.87 t (24%)
Species recorded highest landing	Indian mackerel (13%)	Indian oil sardine (15%)	Indian oil sardine (10%)
State recorded highest landing	Gujarat (25%)	Gujarat (26%)	Gujarat (30%)
Harbour recorded highest landing	Veraval (11%)	Veraval (13%)	Veraval (13%)
Total Boat Arrivals	34,623	36,858	32,115

\*Percentage of Total Catch

## **SUMMARY**

In December 2017, a total landing of 82,849.37 tons of marine fishery resources was recorded from 46 major fish landing sites of India, wherein pelagic finfishes contributed more quantity than shellfish stocks and demersal finfishes. Considering the total quantity landed, Indian oil sardine recorded as the major fishery item. Landings from the West

coast states together formed more than 85% of the total catch and the North West coast contributed the maximum share of around 45%. The state of Gujarat recorded the highest catch among the 9 maritime states. Among the 46 selected harbours, 13 harbours recorded more than 1000 tons of fish landings and the Veraval harbour registered the highest landing as well as the maximum boat arrivals.



# MPEDA participates in Karnataka Mathsya Mela 2017



Mr. Pramodh Madhvaraj, Minister of Fisheries, Karnataka and Mr. H. S. Veerappa Gowda, Director of Fisheries, Karnataka visiting MPEDA stall

he premier fisheries event 'Karnataka Mathsya Mela 2017' held at Sree Kanteerava Stadium in Bengaluru was organized by Department of Fisheries, Government of Karnataka. The four-day Mathsya Mela was inaugurated by Mr. Pramodh Madhvaraj, Minister of Fisheries, Karnataka and Mr. H. S. Veerappa Gowda, Director of Fisheries, Karnataka presided over the function. Officials from Fisheries Department, Karnataka were also present.

THE SECOND MATHSYA MELA ORGANIZED BY THE KARNATAKA FISHERIES DEPARTMENT SHOWCASED THE FISHERY INDUSTRY IN KARNATAKA TO ATTRACT MORE INVESTMENT IN THE SECTOR

The second Mathsya Mela organized by the Karnataka Fisheries Department showcased the fishery industry in Karnataka to attract more investment in the sector. Fisheries and aquaculture in the state have been vibrant with one of the fastest growing food production systems.

The event hosted a wide range of exhibitors and stakeholders from the entire country and more than 50,000 people visited the event. The main attractions were the ornamental fish gallery, ornamental fish competitions, ready to eat fish items, aquarium accessories, informative theme areas,

delicious food court, fish recipe competitions, fresh fish sales, ornamental fish sale, sea shells exhibition, etc.

The MPEDA stall displayed banners of value-added seafood products, commercially important shrimp, crab, cephalopods, fishes and a backdrop focussing IISS -2018 at Goa. Many inquiries received regarding IISS -2018 and MPEDA issued delegates registration form to them. MPEDA displayed an aquarium tank and that was a centre of attraction for the public. Along with MPEDA stall, Central Inland Fisheries Research Institute (CIFRI), Central Institute of Fisheries Technology (CIFT), University of Agricultural Sciences (UAS), Bengaluru, Central Institute of Freshwater Aquaculture (CIFA), Karnataka Fisheries Development Corporation (KFDC), and Department of Animal Husbandry and Fisheries, Karnataka also arranged stalls in Mathsya Mela.

Mr. Pramodh Madhvaraj, Fisheries Minister, Karnataka, Director of CIFRI, Scientists from Agricultural University, Professors from College of Fisheries, Mangalore, Officials from Mangalore State Fisheries Department and other stakeholders of fisheries sector visited MPEDA stall.

Technical session for aqua farmers and ornamental fish farmers were also arranged by organizers in regional language. Various traditional cultural programmes of Karnataka were staged on all the four days of the event.

Valedictory function of the event was chaired by the Director of Fisheries and he distributed participation certificate and memento.

# MPEDA's Valsad Regional Division organises training on eco-friendly, sustainable shrimp farming

#### TRAINING PROGRAMME IN SURAT

MPEDA Regional Division in Valsad organised a five-day training programme on eco-friendly and sustainable shrimp farming at Sachin Community Hall in Sachin, Surat. The training was to promote shrimp farming practices in coastal villages of Surat District. 101 people participated in the programme conducted during January 2-6, 2018.

Mr. U. K. Pandya, Assistant Director inaugurated the programme and explained the role of MPEDA in the development of shrimp farming. Mr. Bhavin M. Gheravara, Field Supervisor delivered a lecture on identification and life cycle of shrimp and pond preparation.



Mr. Maruti D. Yaligar, Deputy Director taking class during the field visit at Aahu, Surat

On the second day, Mr. Razak Ali, Assistant Director delivered a lecture on site selection and farm construction. Mr. M. A. Patil, Junior Technical Officer discussed seed selection, packing, transportation, acclimatization, stocking and water quality management. Mr. Maruti D. Yaligar, Deputy Director supervised the training program.

On the third day, Mr. Yaligar delivered a lecture on diseases prevention and control. Mr. Pandya and Mr. Gheravara discussed about land leasing policy, the procedure for submission of an application to the District Collector/Department of Fisheries for allotment of Govt. land for development of shrimp farming, uses of pro-biotic, abuse of antibiotics, harvesting, post-harvest management, marketing and HACCP in aquaculture.

On the fourth day of the training programme, the trainees were taken for a field visit to the shrimp farm of Mr. Rohanbhai



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

Patel, at Ahu in Sultanabad village, accompanied by Mr. Yaligar and Mr. Gheravara. The practical aspects consist of farm construction, management, biosecurity measures, Good Management Practices and use of field equipment for testing of various water quality parameters were explained to trainees. Mr. Suketu, Farm-in-Charge explained his experience and Vannamei shrimp culture method to trainees.

At the concluding session, Mr. Yaligar delivered a lecture on Aquaculture Authority guidelines and how to apply for a license. Mr. Pandya delivered a lecture on *L. vannamei* culture and biosecurity measures. Mr. Gheravara spoke about diversification of aquaculture and conducted an exam to the trainees.

Mr. Pandya welcomed the participants and invitees to the valedictory function. Mr. Yaligar distributed the certificates to 101 trainees and delivered the valedictory address. Mr. Gheravara proposed a vote of thanks.

### TRAINING PROGRAMME IN NAVSARI

A five-day training programme on "Eco friendly sustainable shrimp farming" was conducted at Shree Mahakali Mata Mandir Seva Samiti Hall in Masa from January 1-5, 2018, by the Regional Division of MPEDA, Valsad.

Mr. Maruti D. Yaligar, Deputy Director inaugurated the training programme. He requested the trainees to attend the training regularly. Mr. U. K. Pandya, Assistant Director discussed the eco-friendly and sustainable shrimp farming and current status in Gujarat, especially in Navsari District. Mr. Bhavin M. Gheravara described the identification and

# **AQUACULTURE** SCENE



Visiting the farm of Mr. Nilesh Bhai in Panar village

life cycle of shrimp and pond preparation.

On the second day, Mr. Razak Ali described on site selection and farm construction. Mrs. M. A. Patil, Junior Technical Officer explained the water quality management, selection, packing, transportation, acclimatization of seed and stocking.

On the third day of the training programme, Mr. Pandya and Mr. Gheravara delivered lectures on feed management, daily monitoring, water quality management, diseases prevention and control, harvesting, post-harvest management and marketing. They also explained about role of HACCP in aquaculture, abuse of antibiotics in aquaculture, the importance of pre-harvest testing, harvesting and land

leasing policy, difference between *L. vannamei* and *P. monodon, L. vannamei* culture, importance of bio-security and ETS requirement in *L. vannamei*.

On the fourth day, Mr. Yaligar and Mr. Gheravara along with the trainees visited the farm of Mr. Nilesh Bhai in Panar village of Navsari District. Mr. Nilesh explained the practical aspects of farm construction and management, bio-security measures, good management practices and the use of field equipment for testing of various water/soil quality parameters. Mr. Amit Patel, a shrimp farmer, shared his experience in shrimp farming and the cultural practices adopted in the farm.

On the final day of the training programme, Mr. Pandya delivered a lecture on Aquaculture Authority Guideline and procedure for application of CAA License. Mr. Gheravara discussed about the importance of diversification in aquaculture. An examination was conducted on the final day, followed by a discussion in which doubts raised by the participants were clarified by officials.

In the valedictory function, Mr. Yaligar distributed certificates to 152 trainees. Mr. Pandya proposed a vote of thanks to the valedictory function.





# MPEDA Regional Division of Vijayawada conduct training at Rajubangaru Palem in Guntur

three-day general training was organised on "Better management practices in shrimp farming and diversification in aquaculture" at Rajubangaru palem village, Chinnaganjam Mandal of Prakasam District in Guntur. The training conducted by the MPEDA Regional Division of Vijayawada on December 13-15, 2017 was attended by 20 farmers.



Mr. Archiman Lahiri, Deputy Director taking class during the training programme held at Rajubangaru palem

THE TRAINING CONDUCTED BY THE MPEDA REGIONAL DIVISION OF VIJAYAWADA ON DECEMBER 13-15, 2017 WAS ATTENDED BY 20 FARMERS

Mr. Dunna Yedukondalu, Panchayath President of Rajubangaru Palem village of Chinnaganjam Mandal inaugurated the programme. Mr. Archiman Lahiri, Deputy Director, Mr. B. Narasimha Rao, Assistant Director, Mr. T. Nanda Kishore, Regional Co-ordinator, NaCSA and Mr. G. Sreenivasulu, Field Supervisor discussed various topics such as pond culture, feed, management, diversification in aquaculture and its potentiality in Andhra Pradesh.

Mr. Dunna Yedukondalu appreciated MPEDA for conducting such a training programme for the benefit of farmers and requested to conduct more programmes in future. Certificates and stipends were distributed to the participants.

Mr. G. Sreenivasulu, Field Supervisor, proposed a vote of thanks

# TRAINING ON 'ECO SUSTAINABLE AND DEVELOPMENT SCOPES IN AQUACULTURE' AT ADAVULADEEVI

MPEDA Regional Division, Vijayawada organised a three-day general training programme during December 6-8, 2017 on "Eco sustainable and development scopes in aquaculture" at Adavuladeevi village of Nizampatnam Mandal in Guntur District. The programme was attended by 20 participants.

Mrs. Sonti Renukha, Panchayath President, Adavuladeevi village, Nizampatnam Mandal inaugurated the training programme. Mr. Archiman Lahiri, Deputy Director, Mr. V. Ratna Prakash, Project Assistant (Fisheries), Krishi Vigyan Kendra, Kanuru, Mr. K. Srinivas Naik, Assistant Director of Fisheries, Nizampatnam, Mr. T. Nanda Kishore, Regional Coordinator, NaCSA, Mr. G. Sreenivasulu and Mr. S. Venu Gopal Rao, Field Supervisors took classes on various



Mr. Archiman Lahiri, Deputy Director taking class during the three-day training programme at Adavuladeevi

topics such as pond preparation, water and soil quality management, selection of quality seed, feed management, use of probiotics in shrimp farming, bio-security measures, diversification in aquaculture and its potentiality in Andhra Pradesh, unauthorized use of antibiotics in shrimp farming, harvest and post-harvest quality management, significance of pre-harvest test and health care.

Mr. G. Sreenivasulu, Field Supervisor proposed a vote of thanks.

# **AQUACULTURE** SCENE

# Training on better management practices for SC/ST beneficiaries

PEDA Regional Division of Vijayawada organised a five-day training programme during December 11-15, 2017 on "Better management practices in shrimp farming and diversification in aquaculture" for Scheduled Cast/Scheduled Tribe beneficiaries at Gokarnamatham village, Nizampatnam Mandal in Guntur District. The programme was attended by 20 participants.



Mr. Archiman Lahiri, Deputy Director taking class during the training programme held at Gokarnamatham

Mrs. Mopidevi Vijaya Nirmala, Panchayath President of Nizampatnam village, Nizampatnam Mandal inaugurated the programme. Mr. Archiman Lahiri, Deputy Director, Mr. B. Narasimha Rao, Assistant Director, Mr. K. Srinivas Naik, Assistant Director of Fisheries, Nizampatnam and Mr. S. Venu Gopal Rao, Field Supervisor engaged on various topics such as water and soil quality management, selection of quality seed, feed management, unauthorised use of antibiotics in shrimp farming, etc.

Mr. S. Venu Gopal Rao, Field Supervisor proposed a vote of thanks.



Field visit to the shrimp farm

# TRAINING PROGRAMME ON ECO-FRIENDLY SHRIMP FARMING AND DIVERSIFICATION IN KARWAR

MPEDA Regional Sub-division in Karwar conducted a three-day training programme on eco-friendly shrimp farming and diversification in aquaculture in order to motivate young entrepreneurs of SC/ST category. The training programme held at Dr. Ambedkar Bhavan hall in Baad village during January 17-19, 2018 imparted awareness on better management practices adopted in sustainable shrimp farming production and the scientific farming of diversified exportable species viz; mud crab/sea bass/tilapia culture.

The training was organised on a request from the City Municipal Council of Karwar. 20 participants from Baad, Nandangadda, Karwar of Uttar Kannada district attended the programme.



Mr. Vijayakumar Yaligar, Deputy Director discusses various points during the training programme

Mr. Devanand Kanekar, President, SC/ST community, Karwar inaugurated the programme. He noted that aquaculture could provide new job opportunities and uplift the farmers economically.

Mr. S. M. Shirodkar, Junior Technical Officer, Mr. Vijayakumar Yaligar, Deputy Director, Mr. Vekatraman Hegde, Deputy Director and Mr. Sripad Kulkarni, AFDO, State fishery department took classes on various topics such as site selection, pond design, construction, biological aspects, seed stocking to harvesting, biosecurity and best management

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# **AQUACULTURE** SCENE



Distribution of certificates and stipends to the participants

practices in shrimp farming, diversification of crab culture, seabass culture, tilapia culture, financial assistance and its economical viability.

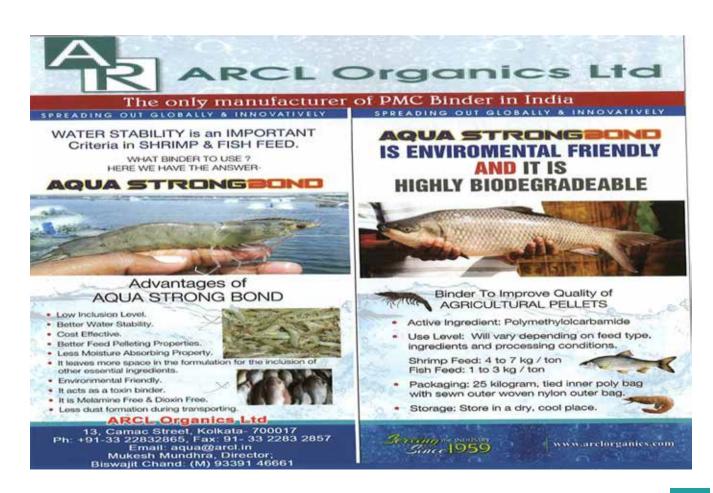
On the second day, trainees visited shrimp farms in Kanasgiri,

Kadwad, Madibag villages and observed practical methods and interacted with the farm operators/technicians.

On the valedictory function Mrs. Leelabai Thanekar, Vice President, City Municipal council Karwar appreciated MPEDA's effort to conduct such a training programme for SC /ST persons at their doorstep. She advised the trainees to come forward to form a society or club to take up aquaculture to uplift their socio-economic status and assured that they would get the Govt. land on lease. Mr. Vijayakumar Yaragal, Deputy Director assured support from MPEDA.

Mr. Vithal Lanjekar and Mrs. Roopa Hulsawr on behalf of farmers thanked MPEDA and said the training helped them learn new techniques and developments in aquaculture. Certificates and stipends were distributed to trainees. Mr. S. M. Shirodkar, Junior Technical Officer proposed a vote of thanks.





# Tropical Lobster Aquaculture: potential new industry for India

\*DR. SAGIV KOLKOVSKI

There is strong market demand for tropical lobsters that can fetch up to US\$100 per kilo in China and South East Asia. However, lobster fisheries in India are currently limited and underdeveloped due to lack of seed supply. Ranching of tropical lobster *puerulus* in Vietnam has become a booming business, with the production of 1,500 tonnes per year. In South India, several trials demonstrated the potential of this new industry.

ropical lobster or TL is considered to have a high value in China and South East Asia, fetching up to US\$100 per kg. Farming of lobsters has long been sought to meet the increasing demand for these premium crustaceans. Lobster fisheries throughout the world have static or decreasing production due to poor management or other factors including climate change, habitat, etc.

Adult (market size) lobster in holding tank

Closing the life cycle of lobsters and large-scale production of juveniles in a continuous and sustainable way is not yet achievable due to biological impediments such as prolonged larvae stages and the delicate nature of the larvae. Currently, there is no commercial supply of tropical lobster puerulus in India or anywhere else in the world. Hence, there is keen interest in 'lobster ranching,' i.e the capture of naturally

settling baby lobsters or lobster seed or pueruli, and rearing them to the marketable size. Currently, this form of lobster aquaculture is the only one with commercial success in several countries (Jones, C. et al., 2015).

Over the past decade, ranching of tropical lobster puerulus was developed in several countries in Asia including Vietnam, Indonesia, Philippines, and Malaysia. Interest in developing lobster ranching is also increasing in China, Thailand and India.

Vietnam has, by far, the most developed industry with production of 1,500 tonnes per year followed by Indonesia with 24-40 tonnes per year. Since 2015, it is illegal in Indonesia to collect lobster less than 200 grams which limits the development of the industry.

Primarily, there are two main tropical species which are collected in South East Asia, *Panulirus ornatus and P. homarus*. The ratio between these species varies between regions. In Vietnam, 75 percent are *P. ornatus* and 25 percent are *P.homarus* while in Indonesia the majority of the collection is *P. homarus* (*Jones, C., 2015*). Live tropical lobster can fetch up to US\$100 (farm-gate) and it is mainly exported to China.

# **COLLECTION**

Collection of puerulus is achieved by several methods including seine nets and light during the night, smaller nets, collectors and shelter traps of various materials. Catch range between 2-4 million per year and 0.6-5 million per year in Vietnam and Indonesia\* (\*numbers Correct to 2015), respectively. Most of the puerulus are caught in protected areas such as bays. Very high mortality occurs during the collection stage due to poor handling, holding and transport.

\*Nutrakol Pty Ltd, Australia, World Aquaculture Society, email: info@nutrakol.com

# **AQUACULTURE** SCENE

#### **NURSERY**

Nursery phase is done in shallowly submerged cages from floating frames. Puerulus are grown to an average weight of 30-50 gm and are fed on chopped trash fish. Survival varies between 30-70 percent. Once reaching the desired weight, the juvenile lobsters are transferred to grow-out cages which are bigger and usually in deeper water. The lobsters are fed trash fish and survival varies significantly between 5 to 70 percent. The growth period averages 20 months from 50 gm to 1 kg. *P. ornatus is* has grown to 1 kg while *P. homarus* grown to 500 gm (*Jones, C.et al., 2015*). Once reaching market size, the lobsters are shipped live to China.



▲ Lobster nursery cage photo - C Jones

## **INDUSTRY SECTOR**

In Vietnam, the industry of 'ranching' or 'fattening' of lobsters is divided into several sectors:

- 1. Puerulus 'seed' fishery: The collection of puerulus is done by fisherman from villages near the sites where puerulus are concentrated.
- 2. Seed dealers/middlemen buy the 'seed' from the fisherman and are in-charge on the transportation to the nursery sites. In some cases, dealers also have holding facilities for the seeds. In recent years, importation, mostly illegal, of seeds from Indonesia increased dramatically to supply the increased demand.
- 3. Nursery farming: Small cages near shore. The operators buy the seeds from the middlemen.
- 4. Grow-out farming: Farmers either buy the juveniles from nurseries or have their own nursery cages before

transferring the juveniles to grow-out cages.

5. Associated feed supply (mainly other fishermen who supply trash fish), equipment, wholesale buyers and exporters.



Lobster grow-out cages

# **ISSUES AND PROBLEMS**

- Diseases ('Milky'disease, rotten tail and others.) due to husbandry practices of trash fish feeding, relatively shallow water, accumulation of organic matter under the cages, health management and other factors and mortality are significantly varied. In Vietnam the survival was reportedly as high as 70 percent while in Indonesia (2013) it was low at 30 percent. For every puerulus captured in Vietnam, \$65 is returned, while in Indonesia it is <\$3 (Jones, C. 2015).
- Mortality of wild-caught puerulus (30 to 50 percent): Basic methods for packaging, holding and transporting puerulus after collection are the cause of high mortality.
- Trash fish feeding issues: One of the main issues in the nursery and grow out stage is the nutrition and feeding of lobsters with trash fish which results in high mortality due to bacteria load and diseases outbreaks.

#### **INDIA**

The fisheries of tropical lobster in India is currently limited and underdeveloped (~64 tonnes per year). There are no lobster-targeted fisheries and the majority of the lobsters are by-catch from other fisheries. The two main species are Panulirus ornatus and P. homarus. Several other species are also reported. Recently, few small-scale trials for ranching juvenile lobsters were carried out with promising results. In



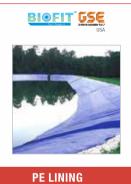




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# **AQUACULTURE** SCENE



Peurulus tropical lobster (size of lobster which is collected in Vietnam and Indonesia) - Photo: C Jones

Thoothukudi district of Tamil Nadu, wild caught juveniles of 40-60 gm (*P. homarus*) were grown in two different types of cages of steel or plastic frame and fed trash fish. Survival reported at 95 percent with a net profit of Rs. 30,000-54,000 per harvest after five months of growth period (*Kalidas, C. et al., 2017*). A different trial was carried out in Gujarat where lobsters, *Panulirus polyphagus* of average weight 100 gm, were caught by nets and placed in 'mud pits.' The average weight gain over three months growth period was 250-300 gm. The lobsters fetched an average market price of Rs 1,000 per kg (*Baraiya, K. G.et al. 2017*). These results demonstrate the untapped potential of this new industry.



Juvenile lobster

### **FUTURE DIRECTIONS**

It is suggested to develop several aquaculture projects in different states and locations, involving a collection of tropical lobsters puerulus and juveniles from South India and culture ('ranching') them to market size using either on-shore tanks and/or near-shore cage systems. These projects should focus on advanced collection (either puerulus or juvenile lobster), handling, transporting and grow out methods to ensure high survival and sustainability. Optimal nutrition and best feeding practices of available feeds (formulated feeds and/or boosters, on-farm made diets, etc.) to replace or limit the use of trash fish to reduce diseases outbreaks should be looked at.



Lobster fishing boat (light setup and nets for night collection)

- Photo: C Jones

### **ACKNOWLEDGEMENTS**

This article is based on a presentation given at a workshop 'Emerging Aquaculture Technologies Workshop' held on November 25, 2017, Kochi, India, by the author as a Director of the World Aquaculture Society (WAS) and supported by WAS and MPEDA. The author would like to thank Dr. Clive Jones for his valuable data and photos this article is based on.

## REFERENCES

Baraiya, K. G., Sreenath, K. R., Sukhdhane, K. S., Kumawat, T., Divu, D., Pradhan, R. K., Vase, V. K. and Azeez, P. A. 2017. Lobster fattening using pit culture along the intertidal zone of Bhavnagar-Amreli coast, Gujarat. 11th Indian Fisheries and Aquaculture Forum, Kochi, India, 21-24 November, 2017.

Jones, C. 2015. Status of rock lobster farming in Southeast Asia and opportunity for Australia and New Zealand. 2015 Trans-Tasman Rock Lobster Industry Conference and 9th Rock Lobster Congress, 29-30 April, Perth, Australia.

Jones, C., Huong, LL., Tuan, LA., Bahrawi, S. and Irvin, S. 2015. Spiny lobster aquaculture development in eastern Indonesia, Vietnam and Australia. Final Report, ACIAR, Australia, 52pp.

Kalidas, C., Ranjith, L., Kavitha, M., Jagadis, I. and Manojkumar, P. P. 2017. Success stories of model sea-cage farm Sippikulam fisher village, Thoothukudi district. 11th Indian Fisheries and Aquaculture Forum, Kochi, India, 21-24 November, 2017.



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# **NEWS** SPECTRUM

# MPEDA, Switzerland's COOP in pact for organic aqua farming

To cater to the growing demand for organic seafood products across the European Union, COOP Cooperative - one of Switzerland's biggest retail and wholesale companies - has partnered with the Marine Products Export Development Authority (MPEDA) to develop export-oriented organic aqua farming in India.

MPEDA will assist in identifying entrepreneurs and providing them with technical advice on the production of highquality organic shrimp that meet national and international certification protocols.

COOP, which today has nearly 2,200 sales outlets throughout Switzerland and wholesale/production business across Europe, has offered to procure the processed organic shrimp at a premium of up to 15 percent and with an additional 5 percent through financing for development activities, including training.

The pilot project will be run in Kerala to produce organic black tiger shrimp (Penaeus monodon) initially in 1,000

hectares, and if successful, extended to other locations across the country.

According to Dr. A. Jayathilak IAS, Chairman, MPEDA, there is an increased awareness across Europe about organic produce and it constitutes a niche market. The reason why many farmers are hesitant to get into organic production is the increased costs involved. The premium price offered will offset the extra cost and incentivise them to explore organic farming.

MPEDA and COOP will facilitate the certification of a shrimp hatchery for the production of organic shrimp seed and similarly certify and empanel a small scale feed mill unit to source the organic feed for the project.

Gerard Zurlutter, Member of Management, COOP, said India would be their second leg in organic farming after Vietnam, where they have had success with similar projects and organic producers who are generating considerably higher revenues than conventional farmers.

-www.thehindubusinessline.com



# Highlighting impact of climate change in fisheries

The open house, an exhibition-cum-education programme, held by the Central Marine Fisheries Research Institute (CMFRI) on its 71<sup>st</sup> foundation day highlighted the impact of climate change in fisheries. Aimed at creating awareness among the public, the CMFRI displayed the research output of the study on climate change conducted under the scheme of the National Innovations on Climate Resilient Agriculture (NICRA).

Explaining the details of the study to the visitors who thronged to understand the latest developments in the marine research and enjoy the wonders of marine biodiversity, the scientists said there had been changes in scores of areas such as sea surface temperature (SST), chlorophylla, wind and rainfall, ocean current, spawning season, maturity, distribution and catch of various marine fishes owing to climate change.

They said the shift in the distribution of commercially important fish resources affects the catch and thereby livelihoods and national economy to a sustainable level. "Climate change coupled with the intense fishing pressure has an adverse effect in fisheries resources," said P. U. Zacharia, project coordinator of the NICRA. Adaptive measures such as reducing fishing efforts, forestation of mangroves, farming of seaweeds and promotion of cage fish farming are the need of the hour, he said.

According to the NICRA study report, habitat mapping and ecological modelling could be done to prevent over-exploitation and manage climate stressors. During the open house, students and the public also got the rare opportunity to enjoy a ringside view of the secrets of marine life. As part of the programme, the National Marine Biodiversity Museum, various state-of-the-art laboratories, marine research aquarium, Agricultural Technology Information Centre (ATIC) and hatcheries were opened to the public. Awareness on dangers of dumping plastic wastes into water ecosystem was also stressed. The museum was the main attraction to the visitors.

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# Inexpensive fish disease diagnosis kits introduced in India

India's freshwater fish aquaculture sector loses an average of 25% of its production to disease. To help combat the problem, the Central Institute of Freshwater Aquaculture (CIFA) has created two inexpensive diagnostic kits that can detect major bacterial diseases in freshwater fish.

CIFA senior scientist Priyabrata Swain told SeafoodSource the spot agglutination and spot Elisa kits are meant for use in field condition by fish farmers to diagnose bacterial diseases and assess the health status of cultured fish on a regular basis.

"In this case, the blood of a live fish or small fins piece is collected to detect any diseases, while a non-live fish is sent to the lab," Swain said. "Use of the kits will help farmers to detect the disease early and control it in time. Once detected, the diseases can be cured and farmers saved from loss of production."

The diagnostic kits were released by the Parliamentary Standing Committee on Agriculture at Indian Council of Agricultural Research (ICAR-CIFA) recently. The spot agglutination kit costs INR 12 (USD 0.18, EUR 0.15) and the dot Elisa kit costs around INR 42 (USD 0.65, EUR 0.54) each. They are available from Chhattisgarh-based firm Agrawal Trading Co., which is licensed to sell the kits nationwide, under the guidance of CIFA.

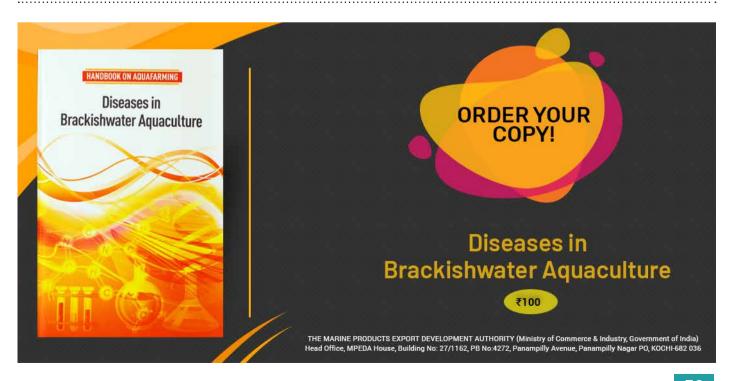
Swain said that fish raised in high-density conditions, such as those found in many Indian aquaculture operations, are especially susceptible to bacterial infections. Disease outbreaks elevate the mortality rate and decrease the production efficiency, causing high economic losses for fish farmers, he said.

"The company is only mandated to sell these in India and not allowed to export it to other countries," Swain said. As a vertical expansion of fish culture with diversified species and higher stocking density has resulted more frequent occurrence of bacterial, parasitic and viral pathogens, farmers have increasingly called for technological interventions and application of suitable diagnostic and control measures, Swain said.

According to CIFA, major bacterial diseases encountered in Indian aquaculture include ulcers, red diseases, septicemia, aeromoniasis, and gill diseases. Red disease is especially common in carp farming and can occur throughout the year, especially culture duration of carp farming. Other bacterial diseases, such as edwardsellosis and bacterial gill, occur mainly during winter, while columnaris and vibriosis hit their peak potency during summer and rainy season.

- www.seafoodsource.com







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# **NEWS** SPECTRUM

# Government to replicate Udipi's cage fish farming model

The state directorate of fisheries is looking to adopt Udipi's successful model of house-to-house cage fish farming.

Initially, about hundred 4m/4m sized cages will be set up that locals can install in their yards and begin fish culture. While the practice of raising selected fish in enclosures at open seas has been going on for the past few years at Polem and by way of reservoir culture at Chapoli dam, the new model will look at involving people other than fish farmers to raise fish for self-consumption and even sale if there is excess production.

"With this, there will be less dependency on the market and people can go for local species. The technical and financial assistance will be provided by the department," said fisheries secretary Govind Jaiswal. The National Fisheries Development Board (NFDB) has agreed to provide help in this regard, he said. "Local species of freshwater fish will be more feasible for this experiment. Seeds and feed for the same will be procured from NFDB and Central Marine Fisheries Research Institute. Every block in Goa will be provided with the opportunity," he said.







# Clam processing facility established

Clam picking and processing is an important livelihood practice of small scale fishers in Kerala where ICAR-CIFT, Cochin has made a timely intervention through PPP mode in collaboration with the Perumbalam Panchayat and

Haritha Farmers' Club. Perumbalam.

This facility has been established under a Department of Science & Technology, GOI funded project and is a first of its kind in Perumbalam. The facility will benefit around 200 fisher families in the village who depend

Dr. C. N. Ravishankar inaugurating the facility

on clam picking and processing for their livelihoods.

The project was based on a diagnostic study undertaken by the Institute in 2010, where the possibility of clustering the clam fishers and scientifically streamlining the processing activity which is now based at the homestead level was identified. The project was initiated in May 2015. During the first phase clusters of fisherwomen and fishermen have been formed and the clusters have been trained in improved methods of processing clam. In the next phase, the construction of the clam processing

facility was undertaken. The facility will have the process line for hygienically processing the harvested clam.

The clam processing facility was inaugurated by Dr. C. N. Ravishankar, Director, ICAR-CIFT, Cochin on 8, January, 2018 in a meeting which was presided over by Mr. K.S. Shibu, President, Perumbalam Panchayat. Dr. Nikita Gopal, Principal Investigator of the project presented the details

of the project implementation. Ward Members Mr. P. D. Sajeev, Mrs. Shobhana Chakrapani, Mr. K.A. Jayakumar and Perumbalam Coir Society President Mr. P. T. Ajayan offered felicitations. Mr. S. Sreejith, Scientist and Co-Pl of the project welcomed the gathering and Mr. Anoop Raj, Facilitator, Haritha Farmers' Club proposed the vote of thanks.

# ICAR-CIFT launches modern, hygienic, refrigeration enabled mobile fish vending kiosk for the vendors



Mrs. Chandrika Devi, Municipal Chairperson, Dr. Ravishankar,
Director, ICAR-CIFT making the inaugurating the kiosk

ICAR-Central Institute of Fisheries Technology, Cochin has developed a refrigeration enabled mobile fish vending kiosk to improve the handling and marketing practices of fisherfolk, small scale vendors and retailers. The main components of the kiosk are a chilled storage cum display facility, hand operated de-scaling machine, fish dressing deck with wash basin, water tank, waste collection chamber and working space.

In this unit, a consumer can see the fishes directly through transparent glass cover and select according to their choice of purchase. Additionally, the kiosk has provision for de-scaling, cutting, cleaning, and packing operations. Under ideal operating conditions, the unit can extend the shelf life of fish for 4 to 5 days and increase the marginal benefit to fish vendors. The fabrication cost of the kiosk comes to around Rs. 80,000/- including GST which is affordable to small scale and retail fish vendors for investment on the modern kiosk.

The kiosk was launched by ICAR-CIFT at Shah Cold Storage and Fish Centre at Pavankulangara Juntion, Puthiyakavu, Tripunithra, Ernakulam on 2 January 2018. The kiosk was inaugurated by Mrs. Chandrika Devi, Municipal Chairperson, Tripunithra, Ernakulam in the presence of Dr. C. N. Ravishankar, Director, ICAR-CIFT, Dr. Manoj P. Samuel, HOD, Engineering and other staff of ICAR-CIFT, Cochin.



★ First sale at the kiosk

In the launching function, Mrs. Chandrika Devi extolled the efforts of ICAR-CIFT scientists to evolve such type of useful technologies meant for the fish vendors that will help not only hygienic marketing of fish but also enhance the shelf life without hampering the quality of fishes. Dr. Ravishankar while making the first sale added that this vending kiosk can reduce the drudgery of the fish vendors in addition to attracting the consumers towards safe and hygienic fishes for consumption.



# Importers fearful of shrimp disaster



Given the recklessness with which some in Congress and the current administration are approaching trade issues, shrimp importers are fearful they could see a disaster that would have impacts across the entire U.S. restaurant sector and retail sector.

There is a rider in the Senate Budget Bill, S.B. 1662, that if passed, would give the U.S. shrimp industry 30 days to meet new reporting requirements of the seafood import monitoring program. Currently, Shrimp is exempted for the foreseeable future.

Shrimp is the country's most popular seafood, with Americans eating on average over 4 lbs. of shrimp per person per year. Almost all of this shrimp, around 90%, is imported. This year, Gulf landings are the second lowest in five years, around 93.4 million pounds through the end of November. Meanwhile, imports are at a record level of 1.3 billion pounds, with December's imports not counted yet.

So the Gulf is producing about 7% of the total U.S. shrimp supply. In this environment, Mississippi Sen. Thad Cochran has introduced a rider in the Senate budget bill that would require NMFS to bring shrimp under the U.S. seafood import monitoring program within 30 days.

SIMP requires seafood importers to track ten different data fields concerning vessel, fishing license, authority to harvest, pounds, the name of the first receiver, product form, the method of harvest, farm, and other data all designed to protect U.S. consumers against IUU fishing.

NFI lost a lawsuit against NOAA arguing that the regulations were excessive for the problem that is being addressed. Europe, by contrast, which is a global leader in the fight against IUU fishing, allows exemptions for imports from countries with adequate monitoring systems, such as New Zealand.

The U.S. makes no such distinction and requires all seafood products subject to the rule to provide complete data. The principal U.S. products currently under this requirement are tuna (all types), cod, crab (excluding blue swimming crab) and snapper.

In the development of the program, shrimp was specifically excluded because the investigators recognized the complexity of the requirements applied to shrimp, and were not certain of the benefits. Accordingly, NOAA said that shrimp and abalone were two products that would not be required to meet SIMP data without further study.

The Senate rider would overturn this decision, and require shrimp is brought into the program within 30 days.

If NOAA complied, it would be the same as an import ban. Normally such programs take 24 to 36 months to implement, as the entire supply chain needs to develop software and systems to capture the data, to transmit it to customs, and to educate suppliers down to the vessel level about requirements.

Even the timetable for implementation of the existing SIMP has proved unworkable. With three years of programme design, and a full year from the final rule to the implementation, NOAA pilot tests had only cleared a few hundred loads by January 1st of this year, the deadline. This has led NOAA to issue a blanket exemption at the start of this year. At this time, importers who can't provide the required data can leave the fields blank, and the entry will still get processed by customs. But at some point in the future, the NOAA will flip a computer switch and remove this dispensation. NOAA is rightly concerned about disruption in the seafood business and is trying to maintain the flow of imports into the U.S.

Not so those in Congress and the domestic shrimp industry who would wreak massive economic havoc to make a political point about imports.

# **NEWS SPECTRUM**

We have a real world example of what happens when a country bans imported shrimp. In January of last year, Australia suffered a white spot outbreak in its domestic farmed shrimp industry in Queensland, and one of the farmers demand was a ban on the import of raw shrimp because they feared such imports could contain the virus. One supplier, Poseidon Seafoods in Australia, said that in January of 2017, they paid A\$16 to A\$18 per kilo for 26-30 tiger shrimp. A month later, they were paying A\$27 to A\$30, an increase of 66%.

Since then, the ban in Australia has been lifted, but prices have not recovered. This December sellers in the Sydney fish market say cooked tiger prawn prices will get as high as A\$50 per kg, A\$20 higher than a year ago. Many say the market is up nearly 50%.

Partly this is due to a shortage of Australian grown prawns, and also that imported prawns have not bounced back. If Congress mandated an immediate requirement for shrimp to be under the SIMP program and told NOAA it could no longer provide an exemption, the U.S. would face a similar situation to Australia, except that in Australia local shrimp production supplies a much larger share of their market than in the U.S. For many buyers, shrimp would become unavailable.

Here is the problem: shrimp is the single largest seafood item sold at foodservice, and many restaurants rely on shrimp in their menu. For retailers, shrimp make up the single most valuable seafood item, by itself equal to the value of all frozen finfish items combined. In the past year, the value

of frozen shrimp sales at retail was over \$300 million. The provision in S.B. 1662, if it takes effect, would give the U.S. import shrimp industry 30 days to prepare for the new reporting requirements. Imports represent 90 percent of the U.S. shrimp industry. Most importers and brokers say that if forced to comply in haste with the new regulations it would create major obstacles to shrimp imports, throwing

the industry into chaos.

The Gulf shrimp industry doesn't see it that way. A spokesman for the Southern Shrimp Alliance noted that shrimp caught in U.S. waters has to be tracked via 'traceability tickets' and said there's no reason imported shrimp shouldn't also be subject to reporting requirements.

Of course, if Gulf shrimpers had been given a 30-day notice to comply with Turtle Excluder regulations they would have screamed. In fact, the implementation of the turtle regulations took years, first to develop them, and then to work with the industry to implement them.

It is obvious that NOAA is already willing at some future point to consider ways to include shrimp in the monitoring program. Mandating it be done in 30 days, without study or the possibility of implementing rules, is nothing more than a political kill shot to the shrimp industry.

In a normal environment, such wanton destructiveness would not be coming from Government. But in our upside-down world today, even the most careful and risk averse businessmen must worry that factions within the government will pull the rug out from under them.

- www.seafoodsource.com

# **Training on value-added fish products**

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Under the Mera Gaon Mera Gaurav (MGMG) Programme, a training on 'Value added fish products' was held for 45 farmers of the Jalakanyaka Club of Cherpu Grama Panchayat, Thrissur on 10 January 2018. Mr. C. K. Vinod, President, Cherpu Grama Panchayat inaugurated the programme.

The programme began with a brief inaugural function in which Mrs. C. R. Lisha, Project Co-ordinator, Department of Fisheries, Thrissur welcomed the participants. Mrs. Sujisha Kalliath, Vice President, Cherpu Panchayat presided over the function. Dr. Nikita Gopal, Principal Scientist, ICAR-CIFT, Cochin and Group Leader for the MGMG team, gave a brief overview of the training. Mr. Ramakrishnan, Fisheries Coordinator, Cherpu Panchayat proposed vote of thanks.

The other members from ICAR-CIFT included Dr. P. Muhamed Ashraf, Principal Scientist, Mrs. S. J. Laly and Dr. K. Elavarasan, Scientists, Mr. Nobi Varghese and Mr. K. Prabhu, Technical Assistants. The inaugural session as followed by the training in which four products; fish cutlets, fish balls, fish fingers and breaded shrimp were

demonstrated. There was a feedback session after the training programme in which participants cleared doubts and they were also given information on the prospects of value addition as well as on the possibilities of technologies from the Institute.



∧ Mr. C. K. Vinod inaugurating the programme



# PRAWN FEED

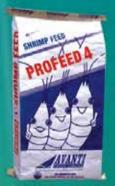


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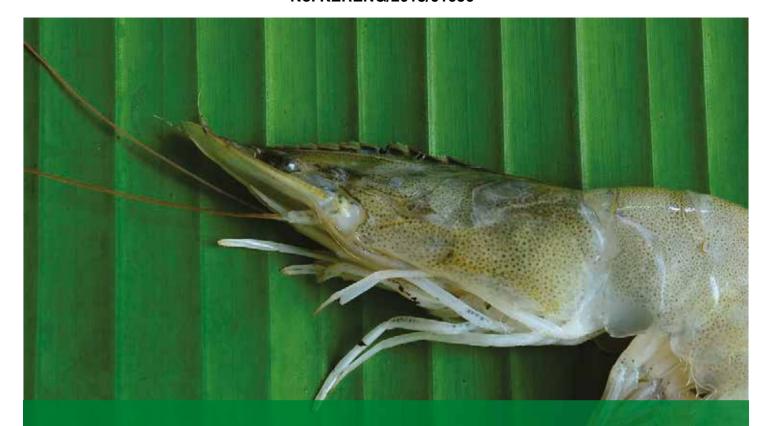




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