



MPEDA

Newsletter

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**MPEDA expansion aiming
to improve shrimp farming**

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Dr. A. JAYATHILAK IAS
Chairman

Dear friends,

I am glad to inform the readers about the new heights the marine products export from the country have reached in terms on quantity and value during 2017-18. Our exporters shipped 13,77,244 MT of seafood and earned US\$ 7.08 billion foreign revenue for the country. The rally by the sector against odds in the global seafood trade such as increased supply from competitor nations, drop in global shrimp prices, and issues related to antibiotic residues in EU and Japanese markets, is praiseworthy. It is delightful that MPEDA could support the sector with proper and timely assistance in facilitating the exports. A detailed account of the export statistics is presented in the inside pages of this issue.

The marine fish production of the country also showed signs of revival registering 5.6 per cent increase in 2017 compared to the previous year. The estimates by CMFRI indicate total marine fish landings of 3.83 million tons in the mainland.

At the trade front, India has decided to impose a higher tariff of 15% on the imports of Artemia cysts from the USA effective from 4th August 2018. This may increase the cost of shrimp seed production and could affect the shrimp prices at the farm gate and in the export market.

The Multi species aquaculture complex at Vallarpadam near Kochi is all set to launch its services for the farmers and hatchery operators. Spread over 8.5 acres, the facility will produce seeds and fingerlings of commercially important species such as Black Tiger shrimp, Asian Seabass, Pompano, Cobia, Genetically Improved Farmed Tilapia (GIFT), Mud crab etc. I am hopeful that the high quality Black Tiger seeds supplied by the Multi species Aquaculture Complex will be a boon to the farmers and could revive the shrimp farming activities in Kerala and adjoining states.

There were also concerns as reports come in about contamination of fish and shrimp in the domestic market. MPEDA has placed this issue as high in importance and is in constant touch with the seafood exporters and farmers to ensure that safety of shrimps and fishes supplied to the export as well as domestic market chain is not compromised.

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An overview of seafood export

During the financial year 2017-18, India has exported 13,77,244 MT of seafood worth USD 7.08 billion setting all time record figures in quantity and value of exports. USA and South East Asia continued to be the major import markets of

Indian seafood as in the previous year. Frozen shrimp remained the major export item followed by frozen fish. Export summary reports are given in the Table 1.

Table 1. Marine products export performance during 2017 - 2018 compared to 2016 - 2017			
Export Details	2017- 18	2016- 17	Growth %
Quantity in Tons	13,77,244	11,34,948	21.35
Value in Rs. Crore	45,106.89	37,870.90	19.11
USD value in Million	7,081.55	5,777.61	22.57
Unit Value (USD/Kg)	5.14	5.09	1.01

The average unit value realization of overall exports has rose to USD 5.14 per Kg in the period under review against US\$ 5.09 in the same period last year. However, the unit value realization of frozen shrimp has shown a decline of USD 0.01 per Kg compared to last year. (Shrimp constituted 68.46% value of total exports).

Major item-wise exports

Frozen shrimp continued to be the major item of export in terms of quantity and value, accounting for a share of 41.10% in quantity and 68.46% of the total USD earnings. Shrimp exports during the year rose by 30.26% in quantity and 30.10% in USD value.

The overall export of shrimp during 2017-18 was 5,65,980 MT worth USD 4,848.19 Million. USA is the largest market (2,25,946 MT) for frozen shrimp followed by South East Asia (1,59,145 MT), European Union (78,426 MT), Japan (33,828 MT), Middle East countries (23,441 MT), China (13,107 MT) besides others (32,087 MT).

The export of Vannamee shrimp has improved from 3,29,766 MT to 4,02,374 MT in 2017-18 with a growth of 22.02% in quantity and 24.74% in USD value. About 52.84% of total Vannamee shrimp exported was to USA, followed by 21.03% to South East Asian countries, 11.31% to EU, 4.67% to Japan, 3.00% to Middle East, 1.35% to

China and 5.80% to Other Countries. Japan is the major market for Black Tiger shrimp with a share of 43.18% in terms of value followed by USA (20.07%) and South East Asia (17.38%) in USD.

Frozen fish is the second largest export item, accounting to 25.64% in quantity and 10.35% in USD earnings. Export of frozen fish showed a positive growth of 9.03% in USD terms. However, the unit value realization decreased by 8.39% to 2.08 USD/Kg in 2017-18 from 2.27 USD/Kg in 2016-17.

Frozen squid exports grew by 1.51% in quantity, but declined by 4.79%, and 0.93% in Rupee value and USD earnings respectively. Unit value realization also dropped by 2.40%.

Export of **chilled items** has shown a decline of 38.71%, 15.90% and 12.27% in quantity, Rupee value and USD earnings respectively.

Frozen cuttlefish has shown a growth in exports by 9.26% in quantity, 21.19% in Rupee value and 26.35% USD. The Unit value realization also improved by remarkably 15.64%.

Dried items have shown a positive growth of 45.73% and 19.57% respectively in quantity and Rupee value,

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but declined by 18.14% in USD terms. The unit value realized was also lower by 43.83%.

The export of **live items** rose 4.93% in quantity; however declined by 29.14% and 25.63% in Rupee value and USD earnings respectively. Unit value realization also dropped by 29.12%.

Other items have shown a positive growth of 21.97%, 30.32% and 35.58% in quantity, Rupee value and USD earnings respectively. The Unit value realization also bettered by 11.16%.

Table 2. Item-wise exports: 2017 - 2018					
Q: Quantity in Tons, V: Value in Rs. Crore, \$: USD Million, UV\$:USD/Kg					
ITEM		Share %	2017-18	2016-17	Growth (%)
FR SHRIMP	Q:	41.10	5,65,980	4,34,486	30.26
	V:	68.43	30,868.17	24,711.32	24.92
	\$:	68.46	4,848.19	3,726.38	30.10
	UV\$:		8.57	8.58	-0.12
FR FISH	Q:	25.64	3,53,192	2,96,762	19.02
	V:	10.36	4,674.03	4,460.90	4.78
	\$:	10.35	733.17	672.47	9.03
	UV\$:		2.08	2.27	-8.39
FR CUTTLE FISH	Q:	5.02	69,183	63,320	9.26
	V:	5.22	2,356.46	1,944.50	21.19
	\$:	5.22	369.88	292.73	26.35
	UV\$:		5.35	4.62	15.64
FR SQUID	Q:	7.32	1,00,845	99,348	1.51
	V:	5.44	2,451.87	2,575.29	-4.79
	\$:	5.44	385.01	388.64	-0.93
	UV\$:		3.82	3.91	-2.40

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DRIED ITEM	Q:	6.46	88,997	61,071	45.73
	V:	2.31	1,042.37	871.74	19.57
	\$:	2.31	163.53	199.77	-18.14
	UV\$:		1.84	3.27	-43.83
LIVE ITEMS	Q:	0.51	7,034	6,703	4.93
	V:	0.63	286.11	403.75	-29.14
	\$:	0.64	45.41	61.05	-25.63
	UV\$:		6.46	9.11	-29.12
CHILLED ITEMS	Q:	1.42	19,501	31,815	-38.71
	V:	1.44	647.41	769.81	-15.90
	\$:	1.44	101.78	116.02	-12.27
	UV\$:		5.22	3.65	43.13
OTHERS	Q:	12.53	1,72,512	1,41,442	21.97
	V:	6.16	2,780.48	2,133.59	30.32
	\$:	6.14	434.58	320.54	35.58
	UV\$:		2.52	2.27	11.16
TOTAL	Q:	100.00	13,77,244	11,34,948	21.35
	V:	100.00	45,106.89	37,870.90	19.11
	\$:	100.00	7,081.55	5,777.61	22.57
	UV\$:		5.14	5.09	1.01

Fig.2. Item-wise share in export value: 2017-18 (US\$)

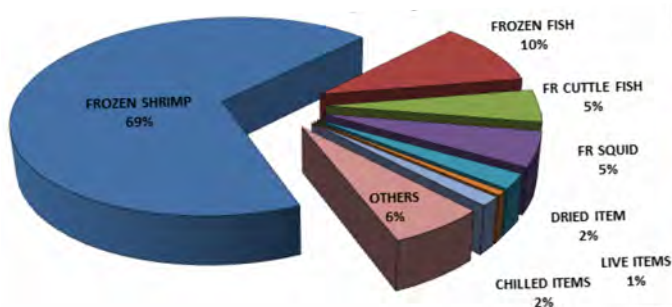
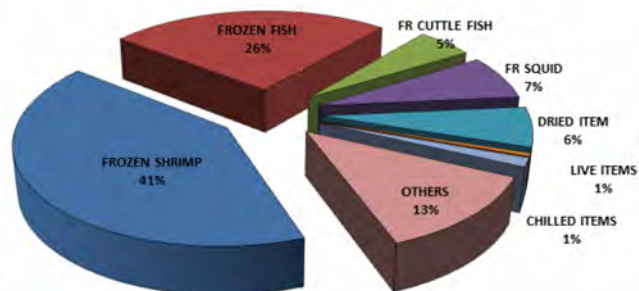


Fig.3. Item-wise share in export value: 2017-18 (Quantity)



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Market-wise exports

USA continued to be the major importer of Indian seafood with a share of 32.76% in terms of USD value. USA imported 2,47,780 MT of marine products from India during 2017-18. Export to USA has registered a growth of 31.37%, 28.63% and 33.97% in terms of quantity, Rupee and USD value respectively. Frozen shrimp continued to be the principal item of exports to USA with a share of 95.03% in USD value. Exports of Vannamei shrimp to USA showed an increase of 31.93% in quantity and 33.03% in USD terms. The Black Tiger shrimp exports to USA have decreased by 12.73% in quantity and 18.37% in USD value.

South East Asia remained the second largest market of Indian marine products accounting for a share of 31.59% in USD terms followed by European Union (15.77%), Japan (6.29%), Middle East countries (4.10%), China (3.21%) and other countries (6.28%) respectively. Overall exports to South East Asia increased by 27.20% in quantity 24.33% in Rupee value and 29.45% in US \$ earnings.

The major South East Asian markets for Indian marine products are Vietnam with a percentage share of 79.29% in US \$ terms followed by Thailand (11.63%), Taiwan (3.12%), Malaysia (2.57%), Singapore (1.68%), South Korea (1.51%) and other countries (0.20%) respectively. Among these, Vietnam alone imported 4,13,518 MT of Indian seafood; the quantity is much more than that of any other individual markets like US, Japan or China.

European Union continued to be the third largest destination for Indian seafood with a share of 13.82% in quantity. Frozen shrimp continued to be the major item of export to EU accounting 41.21% in quantity and 54.05% in USD earnings. Export of frozen shrimp to EU

increased by 1.62%, 1.19% and 5.38% in quantity, Rupee and USD value respectively.

Japan is in fourth largest destination for Indian seafood with a share of 6.29% in USD earnings and 6.22% in quantity. Exports to Japan increased by 24.06% in quantity, 8.58% in Rupee value and 12.87% in USD terms. Frozen shrimp continued to be the major item of exports to Japan accounting a share of 39.50% in quantity and 75.08% in USD earnings out of the total exports to Japan. Exports of frozen shrimp to Japan increased by 8.13% in quantity and 9.63% in USD value. This year BT Shrimp export to Japan has declined in quantity to 5,032 MT from 5,842 MT with a decrease of 13.87%. However, the unit value increased to 13.72 USD in 2017-18 from 12.40 USD in 2016-17, with a steep increase of 10.65%. This is mainly due to the high demand propelled by lower supply of BT shrimp owing to declining production. Exports of Vannamei shrimp improved by 28.62% in quantity and 28.48% in USD value.

The export to China market showed an increase of 9.37% and 12.47% in terms of quantity and USD respectively. The Rupee value has also increased 7.91%. Exports of frozen Vannamei shrimp to China have increased by 22.43%, 19.09% and 24.04% in terms of quantity, Rupee value and USD respectively.

Exports to Middle East showed a positive growth in quantity, Rupee value and USD value by 17.45%, 1.01% and 5.26% respectively. The exports to other countries showed a positive growth compared to previous year in quantity, Rupee value and USD value by 19.81%, 26.18% and 9.39% respectively.

The details on major markets for Indian marine products are given in the Table 3.

Table 3. Market -wise exports: 2017 - 2018					
Q: Quantity in Tons, V: Value in Rs. Crore, \$: USD Million					
Market	Share %		2017- 18	2016- 17	Growth (%)
JAPAN	6.22	Q:	85,651	69,039	24.06
	6.31	V:	2,846.30	2,621.37	8.58
	6.29	\$:	445.27	394.50	12.87
USA	17.99	Q:	2,47,780	1,88,617	31.37

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USA	32.74	V:	14,769.83	11,482.16	28.63
	32.76	\$:	2,320.05	1,731.81	33.97
EUROPEAN UNION	13.82	Q:	1,90,314	1,89,833	0.25
	15.78	V:	7,115.96	6,892.19	3.25
	15.77	\$:	1,116.74	1,038.59	7.52
CHINA	3.61	Q:	49,701	45,443	9.37
	3.21	V:	1,448.03	1,341.94	7.91
	3.21	\$:	227.39	202.19	12.47
SOUTH EAST ASIA	44.78	Q:	6,16,707	4,84,819	27.20
	31.59	V:	14,250.26	11,461.83	24.33
	31.59	\$:	2,237.07	1,728.19	29.45
MIDDLE EAST	4.52	Q:	62,220	52,973	17.46
	4.10	V:	1,849.10	1,830.58	1.01
	4.10	\$:	290.46	275.93	5.26
OTHERS	9.07	Q:	1,24,871	1,04,224	19.81
	6.27	V:	2,827.40	2,240.83	26.18
	6.28	\$:	444.57	406.40	9.39
Total	100.00	Q:	13,77,244	11,34,948	21.35
	100.00	V:	45,106.89	37,870.90	19.11
	100.00	\$:	7,081.55	5,777.61	22.57

Fig. 4. Market-wise share in export value: 2017-18 (USD)

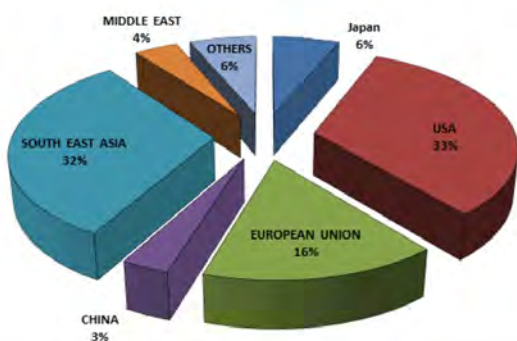
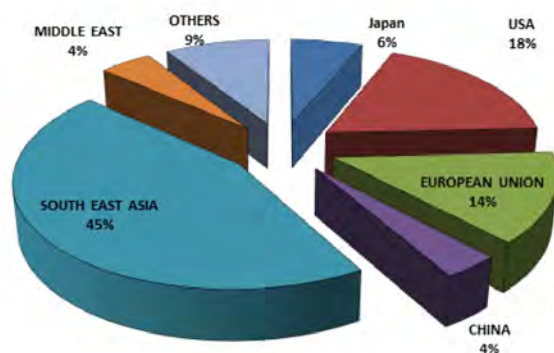


Fig. 5. Market-wise share in export value: 2017-18 (Quantity)



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Major port-wise exports

Marine products were exported through 31 different sea/air/land ports. Vizag, Kochi, Kolkata, Pipavav, Krishnapatanam and JNP are major ports handled

the marine cargo. Exports improved from all the ports, though the volume handled by the Kolkata port showed a slight decline. Major port-wise export details are given below.

Table 4. Port -wise exports: 2017 - 2018					
Q: Quantity in Tons, V: Value in Rs. Crores, \$: USD Million					
Ports		Share %	2017- 18	2016- 17	Growth (%)
VIZAG	Q:	14.58	200779	159973	25.51
	V:	25.37	11,442.39	9,294.31	23.11
	\$:	25.38	1,797.08	1,401.94	28.18
KOCHI	Q:	12.79	176090	155989	12.89
	V:	12.87	5,805.11	4,860.98	19.42
	\$:	12.87	911.71	733.24	24.34
Kolkata	Q:	7.18	98861	104691	-5.57
	V:	10.81	4,875.58	4,455.19	9.44
	\$:	10.81	765.65	705.35	8.55
PIPAVAV	Q:	22.23	306181	232391	31.75
	V:	10.81	4,876.20	4,217.45	15.62
	\$:	10.74	760.84	629.56	20.85
KRISHNAPATNAM	Q:	6.27	86420	62049	39.28
	V:	10.58	4,773.83	3,701.63	28.97
	\$:	10.59	749.65	557.87	34.38
JNP	Q:	12.91	177752	149914	18.57
	V:	10.42	4,699.10	4,084.96	15.03
	\$:	10.45	740.10	615.93	20.16
TUTICORIN	Q:	3.75	51684	42026	22.98
	V:	5.89	2,654.96	2,220.52	19.56
	\$:	5.89	417.09	334.77	24.59
CHENNAI	Q:	3.52	48442	37305	29.85
	V:	4.55	2,052.46	1,693.87	21.17
	\$:	4.56	322.88	255.50	26.37
MANGALORE/ICD	Q:	10.47	144235	126405	14.11
	V:	3.98	1,793.41	1,584.08	13.21
	\$:	3.98	281.54	278.45	1.11
OTHERS	Q:	6.30	86,798.21	64,207.52	35.18
	V:	4.73	2,133.84	1,757.96	21.38
	\$:	4.73	335.01	265.01	26.41
Total	Q:	100.00	1377244	1134949	21.35
	V:	100.00	45,106.89	37,870.93	19.11
	\$:	100.00	7,081.54	5,777.62	22.57





Diseases of Cultured Shrimp and Prawn in India

THE MARINE PRODUCTS EXPORT DEVELOPMENT AUTHORITY (Ministry of Commerce & Industry, Government of India)
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Black Clam is all set to go places

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Clams, oysters and mussels are shelled molluscs, which are sedentary beings found in inshore waters. They move very little during their lifetime, but they can change fortunes of many lives. Many fishing communities sustain their livelihood on these organisms.

Clam contribute to nearly 72.9% of the total bivalve production in the country. The total clam production reported from the country in 2016 was 64,105 metric tons (CMFRI, 2016). About 73.8% of clam landings in India is consisted of Black clam, whose scientific names is *Villorita cyprinoides*. And in this, Vembanad Lake in Kerala contributed 81.7% to the fishery during 2016 (CMFRI, 2016). The other important clam species exploited from lakes and estuaries of Kerala included short neck clam (*Paphia malabarica*) and yellow clam (*Meretrix casta*).

Clam marketing today

Yellow clam led the international export, touching 721.88 tons valued at Rs.10.67 lakhs during 2016-'17 (MPEDA, personal communication, 2018). Most of the yellow clam, targeting international markets at Japan and Thailand, came from a few processing plants in Kollam, Thiruvananthapuram and Kozhikode. Despite

having an equally good potential in the export scene and arrival in large quantities, black clam did not make a similar impact (Fig. 1). The export of black clam to Thailand at a quantity of 1.3 mt from a processing plant in Kollam was reported in 2016. A few processing plants in Kollam and Ernakulam were processing and exporting black clam meat in block frozen form.



FOCUS AREA

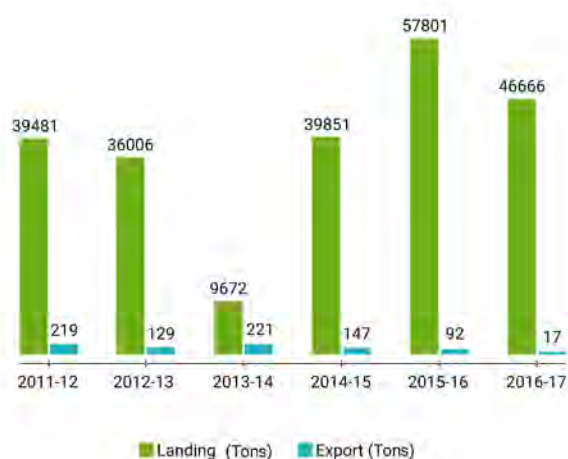


Fig. 1. Comparison of landing and export data during 2011-2017

Date source: Publications of MPEDA, ICAR-CMFRI

The international markets for clam are countries like China, Korea, Europe and USA, of which China also has bivalve culture to meet the demand of the domestic catering industry (WHO, 2010). Many countries have regulatory standards for maintaining food quality of bivalves and the processing units of these countries adhere to these standards. India has so far not been able to capture the market of bivalves, primarily because the focus has been on shrimp and cephalopods as well as the no compliance issues with regard to food safety. Most developing countries also do not have established bivalve culture, though it is practised in localised pockets through institutional support (Mohamed et al. 2016).

The bivalves are generally harvested from natural waters and consumed locally. The coliform counts in clam meat should not be above the acceptable limits of 230 *E. coli* per 100 g flesh for consumption in live condition (<https://www.eicindia.gov.in/> accessed 8 May 2018). If the *E. coli* count in the clam meat exceeds this limit it should be subjected to depuration and heat treatment as per the EU standards (WHO, 2010). Since the clams are harvested from lakes and estuaries, the efficiency of checking the contamination of clam harvested waters at the sources of pollution is limited. The periodic closure of clam harvested waters during possible periods of build-up of toxins, proper depuration before processing, awareness on the need to adhere to the quality standards from harvesting to final consignment etc. are the suggested ways to counter this (WHO, 2010).

In Kerala, black clam (*Villorita cyprinoides*) meat is

mainly marketed domestically. Majority of the clam processed in the State comes from villages, mostly along the Ashtamudi and Vembanad lakes. These are sold in the nearby wholesale or retail markets by fisherwomen. The clam is crudely processed by boiling and manual shucking by fishermen, which is usually a homestead based activity (Gopal et al., 2014). Currently the harvested clams are boiled in aluminium containers and the meat is separated using iron meshed sieves. The meat is stored in aluminium containers till it is marketed and the fisherwoman spend up to 8 hours for the clam processing activities.

Those involved in the process are susceptible to respiratory problems due to exposure to smoke and other ailments due to drudgery involved. The knowledge level in productive manufacturing practices and value addition is much less. The fishery supports the lime industry through supply of shell which is a by-product after the meat is separated.

Even though most of the meat is marketed locally, the clam from the State has started to get markets in Karnataka and other neighbouring States since 2015. Clam meat is fetching better prices in these new markets compared to what they fetch in Kerala (CMFRI, 2016). In Kerala the clam cooperative societies have also come up to promote the trade of clam shell (Suja and Mohammed, 2011).

Interventions by ICAR-CIFT

The prospects of clam in the domestic and export market is directly connecting to the awareness among fishermen on quality standards to be maintained. Once the processing of clam in areas where it is richly bred and the quality of the meat processed are ensured to be of accepted standards, the prospects of the industry will improve significantly. The fishermen should be made aware about hygiene in processing and packaging at the source itself.

In Vembanad lake fishermen of eight fishing villages are actively involved in clam fishing, processing and marketing of clam resources. Perumbalam is one such village, an island located in Vembanad Lake. About 250 families are engaged in clam fishery in Perumbalam Island (Gopal et al., 2014) and hence this was identified as an ideal location for the implementation of a project by the ICAR-CIFT, Cochin, to cluster the clam fishers and create a facility for processing of the harvested clam hygienically. This was carried out under a project funded by the Department of Science & Technology's (Science for Equity Empowerment and Development

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(SEED) Programme), Government of India. Suitable protocols and technology inputs were developed by the Institute, which included depuration of clam meat and the standardisation of post harvesting technology including processing and packaging.

Fisher Clusters

The clam fishers (women and men) of the Perumbalam village were grouped into clusters and training was imparted to equip the cluster members in hygienic handling practices, scientific methods of processing and preparation of value added products from clam meat. Hands-on training on Good Manufacturing Practices (GMP) were given to about 90 clam fishers. The centralised clam processing facility with the depuration unit and industrial cooking and boiling unit will be established at Perumbalam. This processing facility can serve as the model for other clam processing villages of the Vembanad Lake.

Standardization of processes

The processing plant will have a well-equipped depuration system comprising customised to meet the requirements for processing about 1 metric ton of raw material in a day. The cooking time was standardized at 10 minutes per batch (each batch can handle 100 kgs of raw, depurated clam). Industrial cooking and boiling unit fabricated for the purpose will be used for cooking the whole clams using steam generated in the boiling unit. The boiling chamber can produce continuous steam with an initial burning biomass of around 7 kgs for 40 minutes. The cooking unit is comprised of two chambers, each of which can accommodate 50 kg of clam in 5 trays at a time. The unit is also provided with a chill room for short term storage of the clam meat that can then be marketed locally or for export or alternatively used for preparation of value added products. The clam meat is amenable to value addition and through the project seven products have been tried which include popular read-to-eat products like cutlets, rolls, balls, samosa etc. as well as clam pickle, which can be popularised for small scale entrepreneurs. Standardisation under various storage conditions like chilled and frozen storage in appropriate market friendly packaging is under progress.

The manual separation of meat from the shell expends time and effort which is reduced by shucking in an improved design of manually operated rotary meat and shell separator. This also reduces the chances of microbial contamination of meat as it minimises the manual handling of clams. The rotary motion of the unit separates the meat from shell and the meat is

collected in the shallow steel tray fixed at the bottom of the drum and the shell collected separately at one end of the machine.

New Marketing Strategies

The processed meat is often marketed without suitable processing and packaging by the market commission agents, which reduces the marketing margin accrued to the producer in the existing conditions in India. If the product is marketed after proper branding and with suitable quality specification to the consumer directly, the market acceptability of the product will be improved. The consumers will be ready to buy clam meat if guaranteed of improved quality and palatability by depuration and processing in hygienic conditions. Simultaneously, promotion of clam culture is also essential as this improve the availability of clam resources from harvesting areas free of pollution as care may be taken in site selection of aquaculture farms.

Conclusion

The future prospects of clam trade from countries like India requires assistance in improving practices of harvesting and post harvesting to produce product of good quality which is safe for the consumer. There should be strong liaison between the stakeholders, processing industry and the competent regulatory authority for adherence to quality standards. The improved quality will enhance the remuneration of clam meat in domestic market with a subsequent increase in export market.

References

1. CMFRI, K. (2016). CMFRI Annual Report 2016-2017.p.103
2. Gopal, N., Jeyanthi, P., & Chandrasekar, V. (2014). Production and marketing of the black clam (*Villorita cyprinoides*) in Perumbalam Island, Alappuzha District, Kerala. *Indian Journal of Fisheries*, 61(4)
3. [https://www.eicindia.gov.in/knowledge_repository/legal/BM/Notification_no_SO.668\(E\).dated_10th_June_2003.pdf](https://www.eicindia.gov.in/knowledge_repository/legal/BM/Notification_no_SO.668(E).dated_10th_June_2003.pdf)
4. Mohamed, K S and Kripa, V and Asokan, P K and Sasikumar, Geetha and Venkatesan, V and Jenni, B and Alloycious, P S and Chinnadurai, S and Ragesh, N and Prema, D (2016)Development of bivalve farming as a source of income generation for women's self-help groups in coastal India. In: Sustainable intensification of aquaculture in the Asia-Pacific region. Documentation of successful practices. Food and Agriculture Organization of the United Nations, Thailand, pp. 82-92. ISBN 978-92-5-109065-7
5. Pawiro, S. (2010). Bivalves: global production and trade trends. *Safe management of shellfish and harvest waters*, 11-19.
6. Rees, G., Pond, K., Kay, D., Bartram, J., Santo Domingo, J., & World Health Organization. (2010). *Safe management of shellfish and harvest waters: minimizing health risks from sewage-contaminated shellfish*
7. Suja, N., & Mohamed, K. S. (2011). Role of co-operative societies in black clam fishery and trade in Vembanad Lake. *Marine Fisheries Information Service*, (207), 6-8
8. WHO (2010) *Safe Management of Shellfish and Harvest Waters* (Eds. G. Rees, K. Pond, D. Kay, J. Bartram and J. Santo Domingo), ISBN: 9781843392255, IWA Publishing, London, UK.

Highlights of marine fish landings in selected harbours of India during May 2018

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

NETFISH has been collecting information on marine fish landings and boat arrivals occurring at the major harbours of India as part of the Catch Certification scheme of MPEDA. The analysis result of Fish landing and Boat arrival data obtained for the month of May 2018 is presented in this report.

Data Collection & Analysis

The harbour Data Collectors stationed at selected major landing sites across the country (see Table 1) recorded fish catch and boat arrivals information on a daily basis, both from primary and secondary sources.

Approximate quantity of various fish species landed in a day at the harbour was obtained by on the spot 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 estimations. The harbours along East coast of India are opted out for this analysis, due to trawling ban prevailing along the East Coast during the period.

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

Sl. No.	State	Fishing harbour
1	Kerala	Bey pore
2		Puthiyappa
3		Thoppumpady
4		Munambam
5		Sakthikulangara
6		Thottapally
7		Kayamkulam
8		Vizhinjam

9	Karnataka	Mangalore
10		Malpe
11		Gangoli
12		Tadri
13		Karwar
14		Honnavar
15	Maharashtra	Harne
16		New Ferry Wharf
17		Ratnagiri (Mirkarwada)
18		Sasson Dock
19	Gujarat	Veraval
20		Porbandar
21		Mangrol
22	Goa	Cutbona
23		Malim
24	Tamil Nadu	Colachel

Evaluation on fish landings

The fish catch data obtained from 24 landing sites during May 2018 totalled to a quantity of 32,153.82 tons. This total catch was composed of 13,330.59 tons (41%) of Pelagic finfishes, 11,185.97 tons (35%) of Demersal finfishes and 7,637.26 tons (24%) of Shellfishes, whereby the Pelagic resources contributing the maximum quantity (Fig. 1).

The total catch was comprised of 91 varieties of marine fishery items, of which the top five contributors in the chronological order were Japanese thread fin bream, Indian mackerel, Squid, Ribbon fish and Lizard fish (Fig. 2). These 5 fishery items together formed 50% of the total catch. The other major fishery items were Horse mackerel and Indian scad, each contributing

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more than 1000 tons to the total landings. The Indian salmon, which recorded a quantity of 0.10 tons, was the species which registered the least landing during the month.

The quantity of various fishery items recorded during May 2018 is given category-wise in Table 2. Indian mackerel, Ribbon fish and Scads were the pelagic fin fish varieties, which recorded the highest landings whereas in the case of demersal fin fishes, the major contributors were Japanese thread fin bream and Lizard fish.

The molluscan stock mostly comprised of Squid, Cuttlefish, Octopus and Whelk formed about 62% of the shellfish landing and the rest 38% were of Crustaceans. The Crustaceans were mainly comprised of Penaeid shrimps.

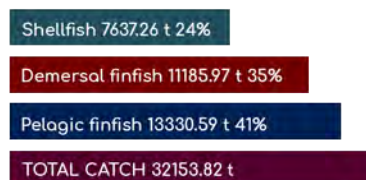


Fig. 1. Category-wise fish landings during May 2018

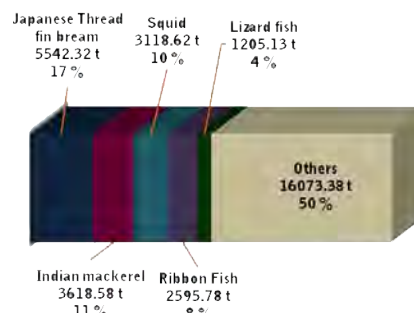


Fig. 2. Major fishery items landed during May 2018

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

Fishery item	Quantity in tons	% of Total Catch
Pelagic finfish		
Indian mackerel	3618.583	11.25
Ribbon fish	2595.781	8.07
Scads	1926.800	5.99
Tuna	1201.933	3.74
Horse mackerel	1084.328	3.37
Indian oil sardine	751.965	2.34
Anchovies	452.371	1.41
Trevally	383.580	1.19
Barracuda	244.660	0.76
Leather jacket	232.707	0.72
Seer fish	154.320	0.48
Dolphin fish	140.856	0.44
Lesser sardines	124.787	0.39
Oriental bonito	106.000	0.33
Sail fish	80.600	0.25
Bombay duck	36.527	0.11
Marlins	34.575	0.11
Queen fish	29.090	0.09
Cobia	28.640	0.09
Mullet	25.300	0.08
Indian thread fish	18.650	0.06
Herrings	16.825	0.05
Needle fish	15.668	0.05
Hilsa	15.604	0.05
Flat needle fish	7.235	0.02
Indian ilisha	3.100	0.01
Indian salmon	0.100	0.00
Total	13330.585	41.46
Demersal finfish		
Japanese thread fin bream	5542.317	0.17
Lizard fish	1205.133	0.04
Croaker	856.226	0.03
Bull's eyes	778.148	0.02
Moon fish	721.849	0.02
Sole fish	674.414	0.02
Cat fish	401.278	0.01
Snapper	343.050	0.01
Reef cod	278.283	0.01
Pomfrets	104.488	0.00
Pony fishes	89.835	0.00
Eel	73.715	0.00

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Goat fish	56.500	0.00
Rays	42.650	0.00
Emperor bream	6.500	0.00
Indian halibut	3.845	0.00
Long spine sea-bream	2.700	0.00
Black tip shark	1.300	0.00
Glassy perchlet	1.250	0.00
Filefish	1.200	0.00
Tiger perch	0.889	0.00
Parrot fish	0.400	0.00
Total	11185.970	0.35
Shellfish		
Crustaceans		
Penaied shrimps	2326.815	7.24
Non-penaied shrimps	206.585	0.64
Sea crab	376.545	1.17
Mud crab	1.580	0.00
Lobsters	2.335	0.01
Total Crustaceans	2913.860	9.06
Mollusc		
Squid	3118.622	9.70
Cuttlefish	877.524	2.73
Octopus	577.258	1.80
Whelk	150.000	0.47
Total Mollusc	4723.404	14.69
Total Shellfish	7637.264	23.75
Grand Total	32153.819	100.00

Region-wise landings

The South West coast, comprised of 16 selected harbours in Kerala, Karnataka, Goa and the Colachel harbour of Tamil Nadu recorded 66% of the Total Catch during the month, which was to the tune of 22,123.10 tons (Fig. 3). This was followed by the North West coast, comprised of 7 selected landing sites in Maharashtra and Gujarat coasts, where 11,030.72 tons (34%) of fishery resources were landed.

In South West region the Pelagic finfishes dominated



Fig. 3. Region-wise landings recorded during May 2018 the landing whereas in North West the landing was dominated by Demersal finfish resources (Fig. 4).

The five major fishery items which had contributed

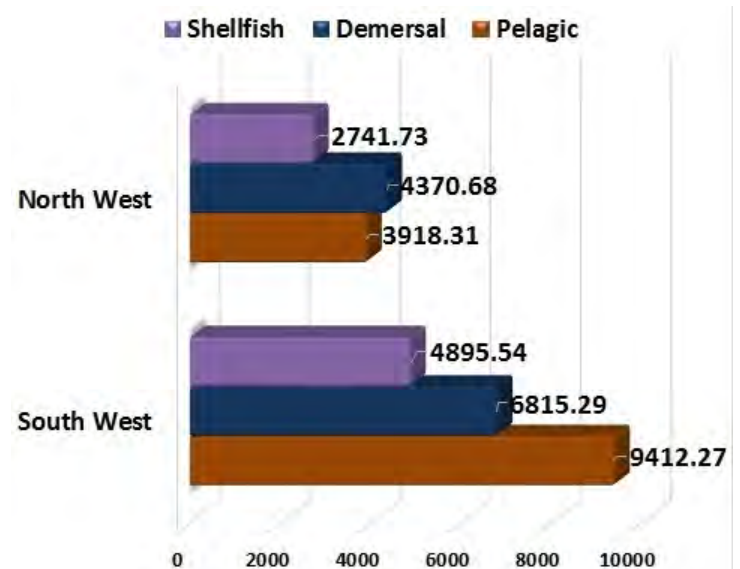


Fig. 4. Comparison of category-wise contribution (in tons) to the total landings of each region

predominantly to the landings in each region are given in Table 3.

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Table 3. Major items landed in each region during May 2018

Item	Quantity in tons	% of total landings of the region
South West		
Japanese Thread fin bream	3186.51	15.09
Indian mackerel	2950.76	13.97
Squid	2038.53	9.65
Ribbon Fish	1035.10	4.90
Indian Scad	1017.89	4.82
North West		
Japanese Thread fin bream	2355.81	21.36
Ribbon Fish	1560.68	14.15
Squid	1077.79	9.77
Horse mackerel	716.64	6.50
Croaker	676.24	6.13

State-wise landings

Karnataka recorded the maximum marine fish landing during May 2018, which was to the tune of 11,151.65 tons, forming 35% of the total catch (Fig. 5). The subsequent

position was held by Kerala, where a quantity of 7,045.01 tons (22%) of fish landing was reported. Maharashtra held the third place with a total landing of 5,910.44 tons (18%).

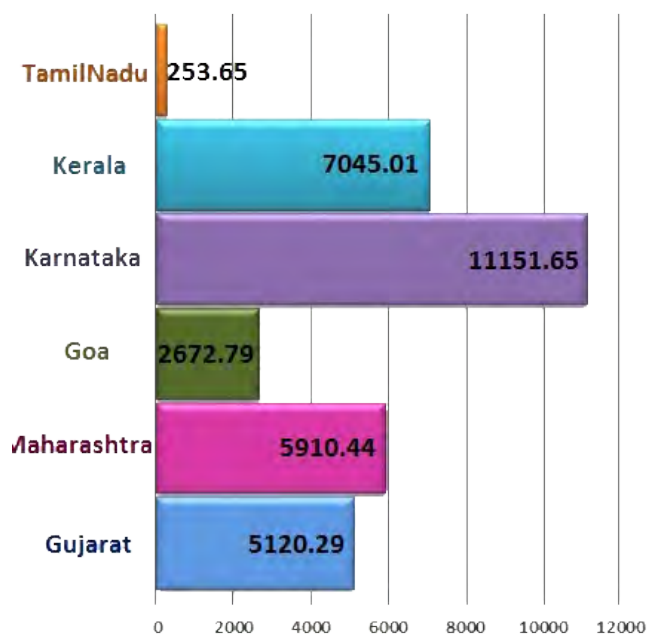


Fig. 5. State-wise fish landings (in tons) during May 2018

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

Table 4. Major items landed in various states during May 2018

Item	Quantity in tons	% of total landings of the state
Kerala		
Indian mackerel	684.56	9.72
Indian Oil Sardine	653.68	9.28
Layang Scad	543.00	7.71
Japanese Thread fin bream	516.20	7.33
Squid	482.42	6.85
Karnataka		
Japanese Thread fin bream	2436.56	21.85
Indian mackerel	1534.71	13.76
Squid	1301.25	11.67
Ribbon Fish	892.20	8.00
Lizard fish	797.70	7.15

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Goa		
Indian mackerel	731.50	27.37
Moon fish	523.30	19.58
Squid	254.86	9.54
Japanese Thread fin bream	233.75	8.75
Tuna	152.50	5.71
Maharashtra		
Japanese Thread fin bream	2076.41	35.13
Horse mackerel	715.94	12.11
Squid	415.99	7.04
Brown Shrimp	313.79	5.31
Ribbon Fish	309.18	5.23
Gujarat		
Ribbon Fish	1251.50	24.44
Squid	661.80	12.93
Indian mackerel	463.40	9.05
Croaker	416.50	8.13
Cuttlefish	310.40	6.06
Tamil Nadu		
Tuna	138.50	54.60
Indian goat fish	39.50	15.57
Lizard fish	30.50	12.02
Indian Scad	17.50	6.90
Cuttlefish	13.70	5.40

Harbour-wise landings

Figure 6 represents the fish landings recorded during the month at the selected harbours along West coast of India. Of the 24 harbours, Mangalore harbour registered the maximum landing of 5,753.61 tons (18%) and it was followed by Malpe harbour with a contribution of 4,862.20 tons (15%). Sassoon dock harbour with a quantity of 3,174.32 tons (10%) and Munambam harbour with a quantity of 2,189.00 tons (7%) held the subsequent positions. The least quantity of landings was recorded from Karwar harbour (35.13 tons).

Evaluation on boat arrivals

A total of 15,538 boat arrivals were recorded during May 2018, of which the highest number of boat arrivals was registered at Veraval harbour (2429 nos.).

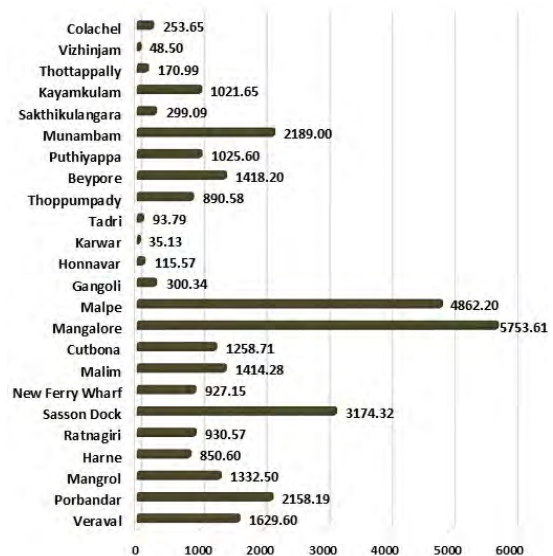


Fig. 6. Landings (in tons) at harbours along west coast during May 2018

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The Mangalore harbour with 1876 boat arrivals held the next position. Only 5 out of the 24 harbours had recorded more than 1000 boat arrivals during the period, the details of which are given in table 5. Around 65% 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, Gill netters, Long liners and Traditional crafts.

Table 5. Fishing harbours which recorded > 1000 boat landings during May 2018

Sl. No.	Fishing harbours	State	Number of boat arrivals
1	Veraval	Gujarat	2429
2	Mangalore	Karnataka	1876
3	Porbandar	Gujarat	1732
4	Mangrol	Gujarat	1268
5	Harne	Maharashtra	1055

Comparative analysis

Table 6 presents the comparison of the data of May-2018 with that of previous months. The total fish catch has decreased by more than 20,000 tons during May when compared to that of April. The Pelagic finfish continued as the top contributor with 2% increase in percentage share than that of previous month.

The percentage share of Demersal finfish resources

too increased by 2% and thus the percentage share of shellfish landing had decreased by 4% during May. Japanese thread fin bream registered as the topmost contributor among the various fishery items landed, with a 17% share of total catch and the squid was moved to the next position. Karnataka recorded the highest landing during the period and Kerala was placed second.

Among the harbours, the Mangalore harbour accomplished the topmost position whereas the Bepore harbour was moved down to seventh position. The total number of boat arrivals recorded had decreased in May by more than 6000 boats when compared to that of April.

Summary

In May 2018, a total landing of 32,153.82 tons of marine fishery resources were recorded from the 24 major fish harbours of India, wherein pelagic finfishes contributed more quantity than demersal finfishes and shellfish stocks. Considering the fishery item-wise landings, Japanese thread fin bream was the major contributor during the month. Landings from the South West coast formed more than 66% of the total catch and Karnataka recorded the highest catch.

Of the 24 selected harbours, 12 harbours recorded more than 1000 tons of fish landings and the Mangalore harbour registered the highest landing. In terms of boat arrivals, the Veraval harbour registered the maximum boat arrivals.

Table 6. Comparative analysis of the data

	March 2018	April 2018	May 2018
Total Catch	62,203.72 t	52,184.40 t	32,153.82 t
Landing of Pelagic finfishes	24,254.18 t (39%)	20,374.36 t (39%)	13,330.59 t (41%)
Landing of Demersal finfishes	20,134.22 t (32%)	17,128.26 t (33%)	11,185.97 t (35%)
Landing of Shellfishes	17,815.32 t (29%)	14,681.78 t (28%)	7,637.26 t (24%)
Species recorded highest landing	Squid (9%)	Squid (10%)	Japanese thread fin bream (17%)
State recorded highest landing	Gujarat (28%)	Kerala (30%)	Karnataka (35%)
Harbour recorded highest landing	Bepore (18%)	Bepore (21%)	Mangalore (18%)
Total Boat Arrivals	27,512	21,677	15,538

*Percentage of total catch



Training on 'Fabrication of square mesh cod end'



CIFT Scientist explaining on the advantages of square mesh

Large scale destruction of young ones of fishes, either as by-catch in trawl nets or through intentional catch, is considered as one of the major reasons for sharp decline of marine fish catch from the seas. Since trawl net is a non-selective fishing gear, it is difficult to avoid juveniles from the catch completely.

But the percentage of the juveniles caught can be reduced considerably by making some modifications in the fishing net, especially in the cod end.

Usage of square mesh cod ends in trawl nets instead of diamond mesh cod ends has proved to be a successful measure for reducing the by-catch of juveniles in trawl nets to a great extent. Hence with an aim to conserve the marine resources, NETFISH is popularizing the use of square mesh cod ends among fishers through regular awareness classes and trainings.

The fishers, mainly the net menders were imparted the CIFT technology of fabrication of square mesh cod ends, by organizing training programmes at major harbours, with the technical support from CIFT.

Two hands-on training programmes were organized at Veraval and Porbandar on May 22 and 24 respectively, with coordination of officials of CIFT Veraval. Around 61 fishers, including boat owners, skippers of vessels and net mending workers, were trained during these programmes.

The officials of CIFT, through presentations, explained the participants about the various types and patterns of nets used in fishing and the merits of square mesh cod end in the escapement of juvenile fishes.

Mr. Jignesh Visavadia, State Coordinator, NETFISH, told the fishers that it is most essential to use square mesh cod end in trawl nets to conserve the marine resources. After the theory sessions, the technology to convert diamond mesh nets to square mesh cod ends was demonstrated to all participants. Later, the trainees were split into different groups and each group was made to prepare square mesh cod end themselves. The President of B A Yadav Education &



Giving hands on training to fishers on square mesh fabrication

Rural Development Foundation Trust (BAYERDFT), member NGO of NETFISH, took the initiative to conduct these programmes successfully.



Awareness on 'Safety at sea for fishermen'



Trainees with CIFNET faculties

To ensure the safety of fishermen at sea and make coastal communities more resilient to disasters at sea, NETFISH initiated awareness training programmes for fishers. A training programme on "Sea Safety and Navigation" was arranged at Nilpur, Purba Medinipur, West Bengal on May 31. This was attended by 39 skippers/drivers of mechanized fishing vessels from the locality.

Mr. Atanu Ray, State Coordinator, NETFISH, elaborated on the safety and security at sea, importance of registration and licensing of fishing vessels, use of different life saving equipment such as life jacket, lifebuoy, life raft, Distress Alert Transmitter (DAT) machine etc., VHF, HF & MF transmission system, different communication measures during distress etc.

He also explained to the participants the 'Rules of the Road' and about various day time signals and night signals for safe navigation at sea. Essential training materials were also provided to the participants. The programme proved beneficial for the trainees, as these awareness is not only very essential for safe fishing but also for safe navigation of boats. The skippers who attended the training appreciated the effort taken by NETFISH in organising the programme.

In the beginning of May, the NETFISH staff that included Chief Executive, State Coordinators and Research Assistants had participated a training programme on "Sea Safety, Navigation and Use of Electronic equipment" at CIFNET, Kochi. The objective of the session was to enhance the knowledge on 'Safety at

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Sea and Safe Navigation' and to gather new information on the topic.

The two-day programme, held on May 7 and 8, covered Marine Communication Systems, navigational equipment, marine signals, rules of the road and sea safety equipment. The training also included demonstrations on a few of the marine electronic equipment and lifesaving equipment.

Later, the trainees were taken for a visit to the CIFNET vessel – Pratikshani, where the captain of the vessel explained the functioning of various navigational facilities available in the vessel. The trainees also got the opportunity to visit the simulation system established at CIFNET for providing virtual training to the students. The training provided a very good exposure to the

subject and equipped the NETFISH team with self-reliance to execute sea safety training for fishers.



Sea Safety programme by NETFISH in West Bengal





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Stakeholders meet on aqua farm enrolment



The stake holders meet at Contai, West Bengal in progress

A meeting of the stakeholders was held at Contai, the hub of scientific aquaculture in West Bengal, on June 22 to sensitize them about traceability requirements becoming mandatory in export consignment and the enrolment programme initiated by MPEDA. More than 50 people participated.

Traceability is one of the mandatory requirements for exports to EU along with PHT. Of late, traceability has become the ultimate necessity for safeguard of exports interest from the country. Especially after shrimp was included under SIMP for exports to the USA.

Mr. Archiman Lahiri, Deputy Director, MPEDA, Regional Division, Kolkata, inaugurated the seminar and explained about the present problems faced by the aquaculture industry. Dr. Debashish Roy, Junior Technical Officer, Sub Regional Division, Contai; Mr. Ramkrishna Sardar, Assistant Director, Department of Fisheries, East Medinipur District; and Mr. Johnson, Assistant Director, Regional Division, Kolkata, spoke.

Later, Mr. Archiman Lahiri explained about the causes that led to fall in shrimp prices globally. He also explained about the traceability of aqua products. He gave a detailed account of scheme of enrolment

of aqua farms undertaken by MPEDA. He also talked about rejection of containers due to detection of antibiotics in aqua products by importing countries. He urged all the participants to make the enrolment drive a big success by active and massive participation. He also displayed the model of aquaculture enrolment cards to the gathering.

The presentations were followed by active discussion by the participants.



Mr. Archiman Lahiri, Deputy Director, MPEDA, RC, Kolkata explaining the enrolment programme to the Stakeholders



MPEDA expansion aiming to improve shrimp farming

The Marine Products Export Development Authority (MPEDA) is poised to expand its Aquatic Quarantine Facility (AQF) for imported Pacific White Shrimp (*L. vannamei*). This move is expected to increase shrimp farming production in the country by up to 3 to 3.5 lakh metric tons per annum and generate higher revenues from seafood exports.

Prawn, is an exotic species widely in demand in US, Europe and other global markets. Its brood stocks are imported mainly from the USA and the AQF at Neelankarai was set up in 2009 to facilitate a regulated mode of introduction of this non-native species into India.



Foundation laying ceremony for the phase IV of the AQF at Neelankarai in Chennai

Mr. Tarun Shridhar, Secretary, Department of Animal Husbandry, Dairying and Fisheries, Government of India, laid the foundation stone for the Phase IV of the AQF at Neelankarai in Chennai on June 13.

The phase-IV of the AQF, which will be set up by the Rajiv Gandhi Centre of Aquaculture (RGCA), the Research & Development arm of the MPEDA, will have six cubicles, three receiving areas and one packing area including one fumigation room. The additional capacity will help to quarantine up to 1,23,750 brooders per annum.

L. vannamei, also known as Whiteleg Shrimp or King

Mr. Tarun Shridhar said that the Ministry of Agriculture has given funds to the AQF as part of the "Blue Revolution" to prioritize and promote aquaculture in India. He said it will help farming of *L. vannamei* in other potential states, like Gujarat, Odisha, Maharashtra and Kerala.

He also assured that all necessary assistance will be given to MPEDA and RGCA to achieve substantial growth in the production and export of seafood from India.

Dr. A. Jayathilak IAS, Chairman, MPEDA, and President, RGCA, said the AQF has successfully

quarantined more than 11 Lakh *L. vannamei* brood stocks so far, and the additional capacity will significantly strengthen the industry and shrimp exports.

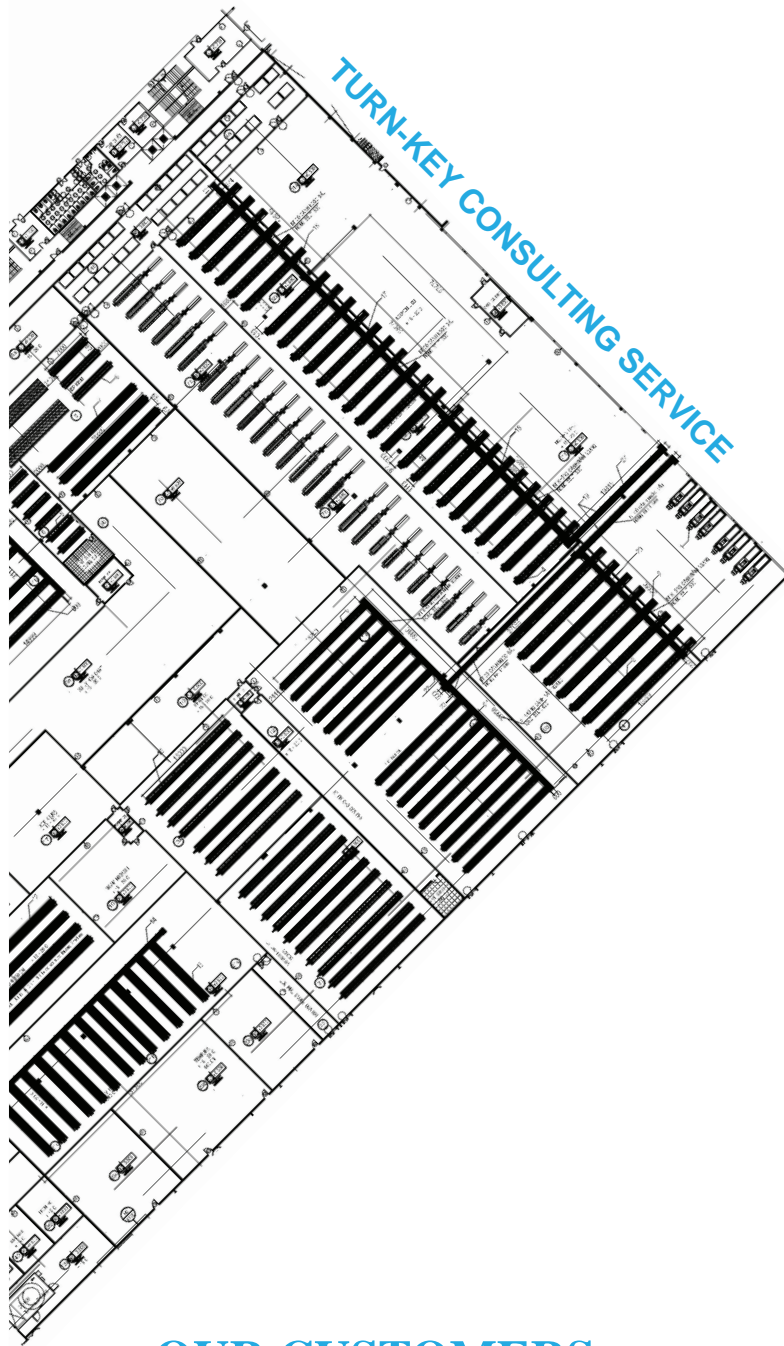
He noted that marine exports from India are expected to touch an all-time high of more than 6 billion US dollars, with volumes reaching a record 1.27 million tons. Newer initiatives in aquaculture, such as the AQF expansion, will be key to achieving the target of 10 billion US dollars from marine exports by 2022, he added.

Dr. K. Gopal, IAS, Principal Secretary, Department of Animal Husbandry, Dairying and Fisheries, Government of Tamil Nadu, assured full support from the state to the AQF.





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Awareness campaign on use of banned antibiotics in aquaculture farms


MPEDA Sub Regional Division, Karwar organized two campaigns to spread awareness among the farming community about the use of banned antibiotics in aquaculture farms on June 28 at Makkeri and Sultanpur of Karwar taluk, Uttarkannada district.

Mr. G. Ramar, Junior Technical Officer, MPEDA Sub Regional Division, Karwar presented the list of the banned antibiotics as notified by the Department of Animal Husbandry, Dairying and Fisheries, Government of India. He explained how the use of these drugs could have an impact when the export is made to another country. He also clarified how to identify such antibiotics contents in a particular

product such as feed binder, probiotics, water quality enhancers, immune- stimulants, feed and health boosters which are available in market for aquaculture utilization.

Mr. S. M. Shirodkar, Junior Technical Officer, explained the importance and necessity of these programmes to be conducted at the pond level. He explained the impact of such drugs in animals' health as well as on the consumers.

As many as 15 and 14 active farmers/entrepreneurs attended the workshop at Makkeri village in the forenoon and Sultanpur village in the afternoon respectively.



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AQUACULTURE SCENE

Awareness campaign held at Krishna district



Enrolment card distribution by Mr. B. Narasimha Rao, Assistant Director, MPEDA

In another attempt to check the use of antibiotics in aquaculture, the MPEDA, Regional Division, Vijayawada organized a workshop at Bavadevarapalli village of Nagayalanka Mandal of Krishna District on May 16. Fifty farmers attended the meeting.

Inaugurating the campaign, Mr. Bondada Ganapathi Rao of MPTC (Mandal Parishad Territorial Constituencies), spoke on issues related to antibiotic residue and latest developments in Best Management Practices in shrimp farming and cautioned the farmers on Bio security methods to combat diseases.

Mr. B. Narasimha Rao, Assistant Director, MPEDA, explained about the risks of using antibiotics in shrimp farming and explained to the farmers about the alternative species available for aquaculture such as sea bass, mangrove crab.

Mr. Naidu Nancharaiah, president of the society, requested MPEDA to establish a cold storage for keeping their harvested shrimp material in Avanigadda area. Nearly thousands of acres in this region are under shrimp farming and this will help farmers to sell their material whenever they get reasonable rate.

Mr. Rajesh, Field Manager, NaCSA explained about NaCSA activities and the importance of forming societies in shrimp aquaculture. During the interaction session,

farmers pointed out that during emergency harvest, the exporters are forming syndicate and reducing the price drastically, resulting in heavy loss. During such occasions, they found it hard even to break even. The farmers requested MPEDA officials to interact with the exporters and arrange to fix a minimum guaranty price. The officials present explained to the farmers that prices are determined market on the basis of supply and demand.

After farmer's interaction session, Aqua Farm Enrolment cords were distributed to Aqua farmers along with guideline booklet and antibiotic brochure.



Lecture given by Mr. B. Narasimha Rao, Assistant Director, MPEDA

MPEDA to launch multi-species aquaculture complex

The Marine Products Export Development Authority (MPEDA) is all set to launch its sprawling multi-species aquaculture complex at Vallarpadam near here, with an aim to revolutionise fish production in the country.

Spread over 8.5 acres, the facility will produce seeds/fingerlings of 6-7 commercially important species, which are of high export demand. The species includes Tiger shrimp, Asian Seabass, Pompano, Cobia, Genetically improved Farmed Tilapia (GIFT), Mud crab etc.

MPEDA Chairman, A Jayathilak said a unique feature of the facility will be its Tiger shrimp hatchery with a production capacity of 20 million disease-free high health seeds per annum.

"This effort will revive the Black Tiger shrimp farming after a gap of two decades and will certainly bring about huge returns, as demand and price for good quality tiger shrimp is very high in international markets, especially Japan and European Union," he said.

One of the major impediments while undertaking black tiger prawn farming is the lack of healthy, disease-free seeds. Serving as a model, the facility at Kochi

will pave way for establishing similar facilities in other parts of the country.

Black tiger shrimp is in demand as the best species for culture in the traditional farming systems of Kerala, named 'pokkali padashekarms', during the off season of paddy cultivation. Jayathilak said the hatchery would immediately produce disease-free seeds of 'P monodon' by using SPF broodstock.

The hatchery is designed in an innovative model such a way that depending on demand, the facility can be utilised for the seed production of other freshwater/ marine fin fish or shell fish like seabass, cobia, pompano, grouper, scampi, GIFT etc.

The entire bio-secured hatchery has all the essential facilities such as reservoirs, water filtration unit, microalgae labs, artemia section, maturation section, larval rearing and post-larvae rearing units, and effluent treatment system.

A quarantine unit to collect the disease-free wild broodstock will be established soon.

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Joint skill enhancement programme by EIC and CIBA for fisheries officials

Indian export earnings from fishery products reached an all-time high of ₹ 37,871 crores (5.7 billion USD) during 2016-17, keeping the growth trajectory, meeting the stringent food safety standards put forward by the importing countries and keeping with the Sanitary and Phytosanitary (SPS) ecosystems. Farmed shrimp is the major commodity of our export basket contributing 70% of the total export in terms value worth ₹. 25,000 crores.

Therefore, it is essential that our shrimp farmers need to be educated on adoption of better management practices (BMPs) of farming enabling

control by State and UTs Fisheries Departments' during 7-11 May, 2018 at ICAR-CIBA Chennai. A batch of 16 fisheries officials from the states of Andhra Pradesh, Tamil Nadu and Puducherry participated in the programme. The participants were trained on the quality requirements in the primary production chain, processing centres and standards enforced by the major importing nations.

Addressing the participants, Dr. K. K. Vijayan, Director, CIBA emphasized the working together of fishery research institutions and promotional agencies in addressing the issues related to

the production and food safety of aquaculture products. He further emphasized that fishery officials at the field level have to play a major role in ensuring the quality of aquaculture productions, creating awareness by developing a bridge between the farmers and the processors. Dr. S. K. Saxena, Director, EIC, in his valedictory



Release of manual during CIBA-EIC training

the production of quality shrimps. Fisheries being the state subject, the fisheries departments of the States and Union Territories have the major responsibility in undertaking the capacity development.

In this context, Export Inspection Council (EIC), Govt. of India, in coordination with ICAR-CIBA, conducted a five day 'trainers-training' course on 'Skill enhancement in the marine sector (SEMS) for sustainable export opportunities: Enhanced Official

address to the participants highlighted that, elimination of contaminants from the primary production systems ensures higher acceptability of our farmed aquatic products in the domestic and export markets. He acknowledged the efforts of CIBA in advocating BMPs in brackishwater production systems and joining hands with EIC in enhancing the skills of fishery extension officers. The programme was coordinated by Dr. P. K. Patil, Principal Scientist, CIBA and Dr. J. S. Reddy, Joint Director, EIC- EIA Chennai.

Technological support and launch of table top fish descaling machine at seafood delivery and retail outlet by ICAR-CIFT

ICAR-Central Institute of Fisheries Technology, Cochin has developed a motor operated table top fish descaling machine (5 kg capacity) for easy removal of scales. This machine can remove scales from almost all species/sizes of fishes ranging from marine to freshwater species like Sardine, Tilapia, Rohu etc. The body of machine is made up of stainless steel (SS) square tube and the rotating drum is fabricated with food grade steel (SS 304). It has the 0.5 hp AC motor with proper belt reduction mechanism to achieve required drum speed of 20-30 rpm. The total cost of the descaling machine is about Rs 35,000/- excluding GST which is affordable for

small scale and retail fish processors/sellers/vendors. The table top descaling machine was launched by ICAR-CIFT at the sea food delivery and retail outlet, The Town Harbour, Madom Junction, Edapally, Cochin

on 11 June, 2018. In addition, ICAR-CIFT provided technological support for sea food processing and



Dr. Ravishankar C.N. Director, ICAR-CIFT inaugurating the sea food delivery and retail outlet

packaging. The sea food delivery and retail outlet was formally inaugurated by Dr. Ravishankar C.N, Director, in presence of Dr. George Ninan, I/c ABI, ICAR-CIFT and other staff members of ICAR-CIFT, Cochin.



Kerala HC upholds Central Govt. notification banning export of shark fins of all species

The Kerala High Court has upheld the Central Government notification that banned the export of shark fins and observed that there cannot be 'wholesale killing of sharks' to cater to the needs of negligible consumers.

A division bench headed by then Chief Justice Antony Dominic upheld the single bench order that dismissed the challenge against a 2015 notification issued by the Ministry of Commerce and Industry, Central Government, prohibiting the export of fins of all species of shark. The ban on catching of all species of shark in India,

treating it as an endangered animal, was first introduced in 2001 and later in the same year it was relaxed because of widespread protests, especially from the fishermen communities. It was re-imposed in 2015 banning the export of all shark fins, of whatever species.

Marine Finns, a marine produce exporter, had challenged the ban contending that it affects its fundamental right to trade as it cannot buy shark fins from fishermen in the local market due to the ban imposed. Justice A Muhamed Mustaque dismissed the writ petition observing that there is no scope to sit upon the wisdom

NEWS SPECTRUM

of the policy-making and that the Central Government has taken into account the relevant factors before re-introducing total prohibition.

Upholding the notification, Justice Dama Seshadri Naidu, in his judgment observed: "Granted, India may not have, at any stage, indulged in shark finning or killing sharks in a genocidal proportion. But environmental protection, the preservation of flora and fauna, and the maintenance of ecological balance demand zero-tolerance."



It was further observed: "We cannot say the Government is insensitive to the demands of those who rely on fishing. Nor has it adopted an alarmist approach. First, the Government imposed a total ban by a notification, dated 11.7.2001; later it modified it: the revised notification, dated 05.12.2001. The export of only nine species of shark and ray was banned. After a gap of over 13 years, the Government re-introduced a total prohibition, once again. The reasons for the ban on reintroduction are apparent. In high seas, it is impossible for the fisherman to identify one species of shark or ray from another."

The court further observed that the notification does not prohibit hunting of shark for domestic consumption, though it bans export of shark fins. It opined: "Shark meat, we must acknowledge, is no staple food for Indians. Even among the fish consumers, those that prefer shark meat are minuscule. So, to cater to the needs of such negligible consumers, there cannot be the wholesale killing of sharks. The culprit is finning, and the result is the species thinning, to the extent of disappearing—almost."

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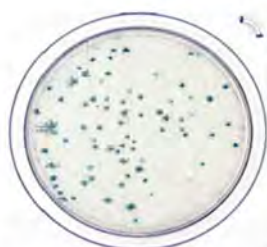


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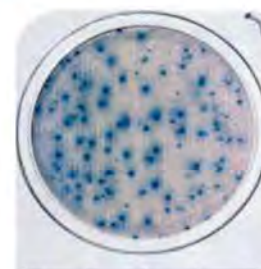
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ICAR-CIBA inaugurated its first Aquaculture Research Centre on the west coast in Gujarat at the Navsari Agriculture University campus

ICAR-CIBA has inaugurated its Navsari-Gujarat Research Centre (NGRC) in Navsari Agricultural University (NAU) campus, Navsari, on 7th June, 2018 by Dr. J.K. Jena, Deputy Director General (Fisheries), ICAR, in the presence of Shri. R.C. Patel, Member of Legislative Assembly, Navsari, Dr. C.J. Dangaria, Vice Chancellor, NAU and Dr. K.K. Vijayan, Director, ICAR-CIBA, Chennai.

Mr. R.C. Patel, Member of Legislative Assembly, Navsari, in his presidential remarks, expressed his happiness on establishing CIBA's centre in Navsari and sought the help of CIBA to bring the technologies for quality

nutritional security and job opportunities. Advantage of brackishwater aquaculture is that this water resource is not competing with drinking or agriculture water.

ICAR is working on building synergy between the organizations in the development of the aquaculture sector and urged the scientist of CIBA and NAU to work with farmers so that the objective of FISH FOR ALL FOR EVER is achieved. Dr. C. J. Dangaria, Vice Chancellor of NAU underlined the opportunities in working together of CIBA and NAU in addressing the needs of the aquaculture farmers, also called for the cost-effective technologies for the benefit of the farmers.



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Highlighting the importance of CIBA centre in the west coast, Dr. K. K. Vijayan, Director, CIBA articulated that CIBA has the expertise in quality seed production, feed technology and aquatic animal health and underlined the importance of having partnership between fisheries college of NAU and CIBA in extending the technological support to the aqua farmers in the region.

He wished that the entrepreneurial acumen of the Gujarat aquafarmers with CIBA's support would contribute for realising the potential of Gujarat state to double their aquaculture production and progressive development of brackishwater aquaculture. He expressed that the exponential growth in

seed, cost-effective and quality feed and diseases management products to the shrimp farming sector of Gujarat, so that the cost of production can be reduced.

He requested ICAR for recommending the state government to give agriculture status to aquaculture so that the benefits available to agriculture can be availed by the fish farmers. He urged the farmers of the region to make the maximum benefit from CIBA centre established in NAU campus.

Dr. J. K. Jena, Deputy Director General (Fisheries) in his inaugural address thanked Vice Chancellor and all the officers of NAU for hosting the NGRC in Navsari Agricultural University campus. Aquaculture is the sector that gives food security along with financial and

seafood export reaching Rs. 37,000 crores during year 2017 is a milestone.

During the occasion, Dr. C. Gopal, Member Secretary, Coastal Aquaculture Authority, Govt. of India, Chennai, Dr. Pravin Puthra, Assistant Director General (Fisheries), ICAR and Dr. N.H. Kelawala, Dean, Veterinary College, gave their facilitations and offered support for the newly established centre. Brackishwater farmers interaction meet was organised in collaboration with Navsari Agricultural University. Soil and Water Health cards were distributed to selected farmers of the region.

Earlier Dr. P. K. Patil, Principal Scientist, ICAR-CIBA, Chennai welcomed the guests and Shri.Pankaj Patil, Scientist, ICAR-CIBA presented the vote of thanks.

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Annual marine fish landings in 2017 up by 5.6 percent



India's marine fish production shows a sign of revival with the annual marine fish landings in 2017 registering 5.6 per cent increase compared to the previous year. According to a release by Central Marine Fisheries Research Institute (CMFRI), the total marine fish landings in India (excluding Andaman and Nicobar and Lakshadweep islands) in 2017 was 3.83 million tons. Gujarat remained at the top position for the fifth consecutive year contributing 7.86 lakh tons (20.5 per cent of total landings) followed by Tamil Nadu and Kerala, it said.

This is the highest catch after a record-high landings in 2012.

Marine fish landings improved in all maritime states other than Tamil Nadu and a palpable dip in the Union Territories of Puducherry and Daman and Diu.

Revival of oil sardine in the western coastal states especially in Kerala played a major role in improving the country's marine fish production this time.

However, the east coast witnessed a decline in the oil sardine catch with 83 per cent drop in Andhra Pradesh and 36 per cent in Tamil Nadu compared to 2016.

A total of 788 marine fish species were landed this time along the Indian coast with maximum numbers landed along the Tamil Nadu coast followed by Kerala and Maharashtra.

Indian oil sardine, which was showing a decreasing trend for the past few years, topped the list of marine fishery resources this time with a landing of 3.37 lakh tons (8.8 per cent of total landings) registering an increase of 38 per cent all over India. In what must come as a good news to Kerala, the landings of oil

sardine recorded a massive increase of 176 per cent in the state compared to the catch in 2016 which was the record-lowest within the last two decades.

At all India level, catch of Indian mackerel also increased whereas the landings of Hilsa shad, threadfin breams and tuna dropped this year. Significant increase of mackerel was recorded in West Bengal, Karnataka, Goa and Maharashtra, the CMFRI said.

The Cyclone Ockhi that hit during the end of 2017 had a devastating effect on the marine fisheries sectors of Kerala and Tamil Nadu.

The two states suffered an estimated drop of around 35,000 tons of fish due to Ockhi disaster in December 2017 with an estimated economic loss of Rs 585 crore at landing centre level and Rs 821 crore in retail level. Compared to the previous year, 57% fishing efforts were reduced owing to the cyclone which caused the loss in December last year.

According to A Gopalakrishnan, Director of CMFRI, the present marine fish catch is the second historical highest in India.

The upsurge in the marine fish production is a promising trend and it is observed that some new resources are emerging as the major fishery in many maritime states, he said.

"The landing data also shows that the recent fishing regulations such as Minimum Legal Size (MLS) and other regulatory measures suggested by the CMFRI have greatly helped Kerala and other maritime states to improve their fishery," he added.



ANALYSIS: Ecuadorian shrimp exports continue to advance

Looking at Ecuadorian shrimp export figures from April. Data indicates that record volumes were exported adding 106 million pounds; this is 14 million pounds more from the previous record which was reached in December 2017.

Shipments to Asia also reached a record-high compared to year ago levels-crossing the 70-million-pound mark in April, which is an increase of over 25 million pounds.

Shipments to the U.S. also advanced in April compared to March, but only modestly and retreated compared to April 2017 by 3 million pounds. On a year-to-date basis, shipments over the last three years to the U.S. have remained flat hovering at 50 million pounds through the first months of the year.

In conclusion, Ecuadorian exports continue to hit record-highs with the only significant growth seen in shipments to Asia.



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