Kerala News Articles compilation
by ICSF
Kerala: Its baiga harvest season for Neendakara fishermen


Over 250 boats from Neendakara are currently busy harvesting ‘baiga’ and it will take you some time to figure out that the word fishers use so casually is the Japanese for sea snail. An export-oriented gastropod mollusc, it is endemic to Kollam with a two-month season ending in May. “It’s a species of sea snail abundant in Neendakara. We cannot say it’s totally endemic as its sporadic presence is seen in other places too. But Neendakara is the only place where it’s available in huge volumes,” says Fisheries Deputy Director H. Salim. The fishers say they take daily trips, though not too far from the coast considering the current weather conditions. “These two months we focus on baiga and since it has to be brought live to the shore, we take daily trips. Before taking it to the processing plant, we keep it in fresh seawater for around five hours to clean the flesh.

This species has no local market, so the entire catch goes straight to processing plants. In Kerala, Neendakara is the only region where you get this variety,” they say. Priced up to ₹130, the fisherfolk consider it a good option just before trawling ban starts. According to exporters, Japan, Taiwan, and China are the main markets of the product where it is used in many traditional delicacies. “It’s a seasonal market operating hardly two months a year and an average of 1,000 tonnes is exported each time. In Kerala, all the export units get the product from Neendakara. Since it has to be cleaned live, it’s not possible to take it to faraway places for processing. It’s usually exported as a raw product without any value addition,” says Peter Austin of Capithan Exporting Company. He adds that Pakistan is a major competitor in the field as the country has a larger harvest window.

“Karachi-based exporters ship the product for over six months.” Mr. Salim says the Fisheries Department is trying for a Marine Stewardship Council (MSC) certification for the species. “Currently, the yellow clam (Paphia malabarica) from Ashtamudi Lake is the only product from India to get that recognition. In the case of baiga, it is a very short harvest and the rest of the year we leave the species to breed, which is a very sustainable practice. So we are really hopeful of getting the certification,” he adds.

Kerala: Fishers seek zone-specific warnings


In the wake of the warning issued by the India Meteorological Department (IMD) about the season’s first cyclone Fani, fishermen have demanded more specific reports on such events. According to them, natural calamities severely affect the livelihood of fishermen in coastal
States. Cyclone Ockhi at the end of 2017 resulted in job losses for more than 30 days across the
coast of Kerala, said Charles George of the Matsya Thozhilali Aikya Vedhi. He called for “zone-
specific warnings” that are more accurate. A fresh round of a natural disaster warning means that
fishermen will have to stay away from work, and a proper compensation package is needed for
them, Mr. George said.

The current scenario is that of a fish drought, and the most common varieties of fish are now
imported from the neighbouring Tamil Nadu. Expressing concern at the developing cyclone,
K.V. Thomas, MP, said here that the State should leverage the expertise of various institutions to
handle natural disasters. Holding that coastal residents, including fishermen, would be bearing
the brunt of the cyclone, he called for shore protection measures. Mr. Thomas said though
several studies had been conducted on shore protection measures on the stretch between South
Chellanam and Munambam, nothing had come of them. Though breakwaters had been proposed,
none has been built along the stretch.

The effectiveness of breakwaters has been proved by the system off the coast of Fort Kochi, he
added. Meanwhile, Swathanthra Matsya Thozhilali Federation State general secretary V.D.
Manjendran said the government’s announcement of a month’s free ration was not substantial
enough. Most fishermen switch jobs during natural calamities and take up other work to make
both ends meet. He also called upon the government to come forward to provide relief in the
form of compensation for the loss of fishing vessels and equipments.

Kerala: Cyclone Fani: Many fishers yet to respond to yellow alert

https://www.thehindu.com/news/cities/kozhikode/many-fishers-yet-to-respond-to-yellow-
alert/article26975059.ece

Several fishing boats are yet to come back to shore despite the Kerala State Disaster
Management Authority (KSDMA) issuing a yellow alert in Kozhikode district for Monday. The
Fisheries Department has also issued a warning. “It has been a lean season for fishers with the
unfavourable climate and subsequent depletion of fisheries resources. They are naturally
disinclined to cooperate with any directive that can upset their means of livelihood. However, we
hope that many of them return to the harbours by Monday,” said C. Musthafa, a boat owner from
Beypore. He added that around 500 fishing boats had left the Beypore harbour alone. Yellow alert
is generally meant for those exposed to risks due to the nature of their activity or location.
Fishermen have been advised not to venture into the sea off the Kerala coast in the next two days
as the conditions are likely to be rough in view of Cyclone Fani lashing the region.

Wireless messages Fisheries Department officials said they had already sent wireless messages
to all fishing boats on the situation, and that they were all expected to cooperate for their own
security. The alert messages were sent frequently, apart from holding discussions with all
prominent fishermen’s associations and their welfare committees, they added. On Sunday,
several rounds of public announcements were made on the premises of all fishing harbours to make fishermen families aware of the situation. Officials said it would continue on Monday for covering the maximum number of people. “We have been doing everything possible on our part since we received the message from the higher authorities. We are also confident that the message has already reached all fishers, and they can take the appropriate decision,” said Fisheries Assistant Director P.K. Ranjini. She also pointed out that there was some reluctance on the part of fishers to follow safety instructions.

**Kerala: Unlicensed nets in Kochi to be dismantled**


The Fisheries Department is taking a count of the Chinese fishing nets in the Kochi backwaters as part of an effort to dismantle unlicensed nets. An official said that the department had stopped issuing licences to fixed nets and devices from the 1980s. Fishing nets operating outside the jurisdiction of the Cochin Port Trust operate without licences and paying compensation for the loss of nets is not within the purview of the department. According to an early estimate, there are around 175 Chinese fishing nets in the Kochi backwaters. They use lights to attract fish during the night and the Regional Accreditation Committees, which issued licences in the past, have been dissolved, said the official. He also said that the department would not be able to act against nets that are operated with licence from the Cochin Port Trust. The Port Trust issues licences on a yearly basis and each year they are renewed. Sources said that the Port Trust had issued licences to 153 nets last year. However, the Kumbalanghi nets do not come within the port’s jurisdiction.

**Kerala: Making the most of fish waste**


When Maheshwari strolled on Cherai beach several years ago, the stench of rotting fish waste struck her nostrils, and she recognised the smell. "There is a certain scent of decayed fish waste, one which is all too familiar," she says. Maheswari grew up in the coastal regions of Vadanappally in Thrissur, where she watched her father deal with fish remains in the most efficient manner. "He would mix it with salt and use it to fertilise our coconut trees," she says. Needless to say, the trees bore fruit aplenty, thereby ingraining in Maheswari's mind, the goodness of fish waste. Around 23 tonnes of fish waste is generated from Vypeen to Munambam, as per Maheswari. "It has been 28 years since my marriage, after which I shifted base to Munambam. I've seen seafood companies and fishermen deposit fish waste in the seas or dump it on land, polluting both. The sight of this took me back to my childhood and I was reminded of my father converting the same," she says.
After a week or two in 2011, the Central Institute of Fisheries Technology (CIFT) had developed a training course which comprised utilising fish to the maximum, generating value-added products sans waste. "They primarily taught us to make edibles but the thought of creating systematic fertiliser, which consists of ingredients more than salt, struck me," she says. Using her bare hands, she collected fish waste from the Munambam harbour, and merged them with formic acid in drums. "To one kg of fish waste, one can add 35 ml of formic acid. After two weeks, silage is formed," she informed. Silage is a product liquified by the action of fish enzymes in the presence of an added acid. "The results are fabulous. I've used this fertiliser for my plants - bananas and vegetables. The yield generated is enormous," she says.

Maheswari does not use machines, just her bare hands. 'Having a pulveriser would make things easy. Formic acid solely dissolves flesh, not the fish bones. But it is alright," she says. Not one to stop right there, she went ahead and marketed her fertiliser. Titled 'Fertifish', it is sold at her shop in Ernakulam called 'Jaiavasree'. Maheswari has tried obtaining a licence for her product to export it to other states but her efforts are in vain. "I'm unsure why it has not happened yet. Except for two elements, the rest are tested at the university. I've waited for ages for a Government appeal. There is so much that can be done with fish waste, and the nutrients are exceptionally great for plants," her voice trails off.

**Kerala: The life of labour: conflicts on the rise between fish workers and Pokkali farmers in Kerala**

https://thewire.in/labour/life-of-labour-agrarian-distress-andhra

Yet again, tradition is in conflict with the present in Kerala. This time it is centered around the livelihood of fish workers and paddy farmers. Pokkali, the saline water paddy crop, has hitherto offered a unique opportunity for fish workers and farmers to enjoy a synergy. The farmers allow their lands to be used for aquaculture during the non-cultivation season. The prawns and crabs – raised in these farms – use the remains of the paddy crop to survive, while also enriching the land with its waste. Before the cultivation begins, the traditional fish workers enter the fields to catch prawns. The right to enter the fields in the fag end of the season to collect the remaining catch, has been a traditional custom in these areas known as Kettukalakkal. However, the declining revenue from paddy cultivation and a rising assertion of farm landowners of their lands, is leading to conflicts between the fish workers and the farmers.

While the farmers seem to argue that they have rights over the property, the fish workers argue that they have a generational claim over the aquaculture grown in these farms. This is yet another example of a modern legal private property based system coming into conflict with the traditional livelihood system based on the concept of commons. How will the modern State and a progressive government resolve this conflict? To which side with the scales tilt?
Kerala: LED lights; a bane for traditional fishermen

https://kadapuram.com/2019/04/16/led-lights-a-bane-for-traditional-fishermen/

Michael from Vizhinjam in Kerala has a sad tale to tell when coming to fish catch during the famine season that usually falls from November to June. Back from the sea, he finds it hard to get a good catch and thereby laments of how to feed his family. “It is only a few years that we have come across such shortage. We have only a few fish out there but when we go there, we never get a good catch and the few fish that is left has been caught by those using Led lights, which has become a deadly affair here,” he said. This is not just Michael’s tale but it is the sad story of almost all the traditional fishermen in the entire shores in the country. Talking to kadapuram.com, Ronny from Goa also has the same tale to say. “One of the main issues here is that of LED lights that is being used by many of the fishing vessels. Though we have given many representations and also held many agitations, no solution has been found,” he said.

Stating that this illegal fishing using lights could harm the fish wealth, Kerala Matsyathozhilali Aikya Vedi president Charles George said that the trend has been widely spread across the fishing community. He called for a national policy as well as policy at the state level for curtailling such menace. “What we need is a consensus among every one so that the marine future is safe,” he said and added that over exploitation would also lead to a collapse of the food chain. Charles George said that though 12 nautical miles was exclusively reserved for traditional fishermen, there is a trend now for using LED light among traditional fishermen in Kerala that has cropped up new issues.

As far as Kerala is concerned, he said that the KMFR Act stipulates formation of state level as well as regional fisheries management committees for overseeing such issues. These committees should be strengthened, he added. He also mentioned that trawling vessels are now using these lights to catch fish, which is illegal. Meanwhile, National Fish Workers Forum general secretary T Peter opined that marine enforcement should be strengthened to curb such illegal activities. He also demanded that the laws should be strictly implemented and no one should be spared.

Kerala: Banned fishing practices spread net in Kerala


Banned fishing practices like light fishing, juvenile fishing and use of fish aggregating devices are aplenty and the marine enforcement and Fisheries Department are struggling to catch the culprits. As many as 172 boxes of juvenile fish were caught the other day by the Fisheries Department in the district. At a time when South Indian states are also trying to follow the policies related to juvenile catching implemented by Kerala so as to put an end to the practice, the state authorities have miserably failed to implement the same here. Last month, a boat was...
caught doing light fishing in Kochi and was fined a whopping Rs 2.5 lakh. However, rarely do the enforcement agencies catch them during the act.

When it comes to light fishing by traditional fishermen, the department has many limitations in curbing it. “We use rented boats and most traditional fishermen have old boats and we should always be wary of any accident that can happen. This gives them time to get away. Also, this is done in a large scale by bigger boats and they always evade our detection systems. While the department is better equipped than before, we still lack the manpower and expertise to curb these issues,” said an official of the Fisheries Department. In Thiruvananthapuram, light fishing happens mainly in the Mariyapuram- Anchuthengu region and Vizhinjam. T Peter, president, National Fish Workers Forum, said, “Though there are sufficient laws, the government has lost the spirit to implement the same.

The Fisheries Department is aware of various landing points in the coast and if they take the effort the law-breakers can be caught. However, there are many outside interferences to prevent such actions. Though juvenile fishing has been banned, it’s the very government that has come up with nets with small mesh through Matsyafed. A lack of perspective and efficiency in implementation from the part of government have been leading to the elimination of the marine wealth.” The Kerala Marine Fisheries Act allows the government to make rules/issue orders to ensure the protection of marine wealth. Many government orders were issued in due course of time, including a ban on night trawling and fish aggregating devices. However, the ill-equipped guards and understaffed department are no way keen on implementing the orders.

**Kerala: Safety checks at fishing harbours, markets to continue**


Fishing harbours at Thoppumpady and Munambam will be under the surveillance of the Food Safety Department as part of efforts to curb sale of adulterated fish. The move is a follow-up to statewide checks at fishing harbours and fish markets on sale of formalin-laced fish since the last week of March. Around 80 samples collected from Munambam and Thoppumpady and fish markets at Vypeen, Perumbavoor, Kothamangalam, Angamaly, and Aluva over the last two weeks were tested negative for ammonia and formalin, according to senior officials of the department in Ernakulam. However, the department will continue its vigil over harbours and fish markets as well as outlets across the district in the coming days against the possible sale of adulterated fish. “Even though the samples were tested negative for ammonia and formalin, surveillance will remain active,” the officials said. Among the 80 samples tested, 12 were collected from Thoppumpady and Vypeen.

A spot-testing kit developed by the Central Institute of Fisheries Technology (CIFT) was used by food safety officials to test the samples. Those requiring additional testing were sent to the
Regional Analytical Laboratory at Kakkanad. While collecting samples, care was taken to pick varieties where chances of adulteration were high. The kit developed by CIFT to detect the presence of ammonia and formalin in fish comes with a colour-changing strip and two reagents for the two chemicals. On rubbing against the fish sample, the strip will change its colour when reagents are dropped if the sample has traces of harmful chemicals.

If samples test positive, the department will collect four statutory samples from the same market and register a case before a first-class judicial magistrate court under Section 50 of the Food Safety and Standards Act. According to the Act, if chemical presence is detected in a food item, it should be classified as “unsafe”. It will also entail both imprisonment for terms varying between six months and three years for the seller and fine ranging from ₹1 lakh to ₹10 lakh. Meanwhile, Food Safety officials said the surveillance would continue throughout the month. The public can alert the department if they come across sale of adulterated fish by dialling toll-free number 18004251125. They can also contact 0484-2784807 or use dfiernakulam@gmail.com to report violations.

**Kerala: Fishing in polluted waters**


The marine products exporters in Kerala are in troubled waters with discouraging trends on the export front due to various reasons, including the central government's policies and the poor quality of the products exported. The processed marine products export from the state has dipped by nearly 40 per cent making it one of the worst-performing in the country, say exporters. The exports suffer due to the wrongly-implemented export codes for finished products as well as the strict sanitation checks employed at ports which lead to rejection of export consignments, they say. According to the statistics with the Marine Products Export Development Authority (MPEDA), the total value of exports from Kochi port during 2017-18 was Rs. 5805.11 crore, a slight improvement from the previous Rs. 4860.98 crore. However, as per unofficial records, the exports dipped by over 25 per cent in the last quarter in Kerala region.

"The official records published might not reflect the actual picture as this is a seasonal business. The published values are average while the reality is a stark decline in our business," an exporter told DC. The consignments shipped to the European Union (EU) are rejected during sanitation checks as the inspection process was recently intensified to cover over 50 per cent of the consignment from an earlier 10 per cent. This is owing to India's recent policy of hundred per cent sanitation check employed for the products imported from the EU. The EU has intensified the sanitation checks apparently as a tit for tat to the Indian government's attitude of denying relaxation for imports from the EU. The free trade agreement between the EU and India has not come through either. The balance of trade in this case is favourable, but has not yet evolved into
a complete form. This has adversely affected the marine products exports from the country with high rejection rates of products, including shrimp, which used to earn the highest foreign exchange earlier.

"We have no control over what we get from the sea. We export the products after certifying them in government laboratories and the approved labs. These are getting rejected in foreign shores due to diehard standards imposed, though sanitation checks are done batch-wise and code-wise by us," a top exporter told DC. The government is not ready to take the responsibility for these consignments being rejected. In foreign countries, they have research teams to identify spots in the sea where the concentration of heavy metals, including lead, is on a high. This is not done by the authorities here as they blame exporters for the flaws in sanitation checks instead of tackling it at the source. In aquaculture, use of antibiotics has turned out to be a menace due to lack of proper monitoring.

In marine exports, the cephalochordates sent to EU should get the clearance on the presence of heavy metals in its meat. The exporters demand that the government agencies conduct inspections at the source of these marine products, including the harbours, taking responsibility for the quality of marine products. Instead, they confine inspections to the processing centres, the exporters say. "The brunt of rejection is faced by the exporters with zero support from the government," they say. Sea pollution a reason? Kerala is experiencing a dip in exports due to the policy change and the strict sanitation checks abroad. If a consignment is once rejected, the company is listed in the internal chart and it cannot continue the exports further. Another reason cited is an obvious increase in the presence of heavy metals in the seas due to pollution, which cannot be prevented by the exporters.

In foreign countries, the quality of water is checked at the source which is reflected on the marine products. Identifying pollution-free zones in the sea could improve the quality of products which help exporters avoid rejection of their consignments. The major cause for this rejection is the 50 per cent sanitation check on the export products in the EU, which is due to the wrong approach of the Indian government, according to the exporters. The marine products, including squid and octopus, are exported from India to countries like China, Thailand and Vietnam. These are then reprocessed and exported to the EU without any rejection. Here, we have issues in exports of finished products from the country only due to diplomatic issues of the government. Policy change also to blame Until 2015, the marine exports were based on the foreign trade policy 'Vishesh Krishi and Gram Udyog Yojana' (VKGUY) which was replaced by the Merchandise Exports Incentive Scheme (MEIS).

During the pre-MEIS period, the exporters were given incentives as subsidies based on the chapter-wise criteria in the VKGUY. With the MEIS, the exports of marine items were made code-specific. This has unsubsidised a considerable number of marine products affecting the income generation of the exporters. Ironically, after the introduction of MEIS, the exporters were
even asked to repay the entire subsidy received by them for certain products like 'conch' under the VKGUY during pre-2015 period. The exporters or the authorities are not yet clear on the ITC-HS codes or the Indian Trade Clarification based on Harmonized System of Coding adopted for import-export operations, the exporters say. With all these, the government, from its position of a facilitator, has become a dictator over foreign trade.

Kerala: Ajanur fishers in Kerala threaten to boycott polls in Kasaragod


The fishing community of Ajanur coastal area near Kanhangad has threatened to boycott the Lok Sabha election to protest against the snail’s pace progress of Ajanur Fishing Harbour. The fisherfolk said they are behind the government to build a harbour for the past 12 years. “There is absolutely no political will (to build the harbour). That is why we have decided to boycott the election,” K Rajan, convenor of Ajanur-Chittari Fishing Harbour Action Committee, which was formed 12 years ago, told Express. The lack of a fishing harbour keeps around 1,000 families in utter poverty, said Bindu Kunjikrishnan, 44, a member of Ajanur Kadapuram Fishermen Cooperative Society. “The choppy waves prevent our men from going to sea almost throughout the year. They are able to go to sea only for around two months in a year when the sea is calm. And our women are forced to travel a long distance to get fish to sell,” she said.

The last time the fishermen of Ajanur hit the sea was in November. On Thursday evening, a small group of men and women gathered near the office of Ajanur Kadapuram Fishermen Cooperative Society to discuss the mode of protest. They belong to a group called Theeradesha Thanal Kutaimma, a collective of fisherfolks started two years ago to provide financial support to poor patients of the community. “Now, we have joined the struggle for the fishing harbour,” said Sumesh AP, 35. The group has 50 members and 500 supporters. Rajan said the then Chief Minister Oommen Chandy initiated the project and commissioned a study by the Pune-based Central Water and Power Research Station (CWPRS). The study was completed in 2016 and the report submitted to the government.

“When the LDF came to power, Revenue Minister E Chandrasekharan took some interest in the project. But after 2017, there is no movement,” he said. He said he had taken up the matter with Fisheries Minister J Mercykutty Amma. “When I met her two years ago, she said Ajanur harbour was top of the government’s priority. Today, she may not even remember Ajanur,” he said. June to September is the windfall season. But fishermen from Ajanur stand as spectators as fishing boats from the southern districts make a killing off their coast. “The sea will be rough and we cannot take our boats inside. We helplessly watch as they take away our catch,” said Sumesh. The fishermen are also hurt by the tightening of kerosene ration. Red-tape In a letter to Rajan, the Department of Fishing Harbour said the CWPRS report-2016 did not take into account the
change of course of Chittari River at the estuary. “We have asked CWPRS for a new report taking into account the change in course of the river. We are waiting for it,” said the reply sent to Rajan in the first week of April.

Kerala: 172 boxes of juvenile fish seized in Thiruvananthapuram


Marine enforcement has launched a probe into the seizure of 172 boxes of juvenile fishes from the Muthalapozhi harbour in Chirayinkeezhu here on Thursday. All 172 boxes had 40 kg of fish, including sardine, in them. The fish were later dumped in the lake so that they can be food to other fish. As per two existing orders, 58 different fishes have a legal size, only after it exceeds this size can they be caught. Catching them prior to it is a punishable offence with fines varying from Rs 25,000 to Rs 2.5 lakh. For sardine, the measurement is 10 cm. “These fish were to be sneaked to various parts of Tamil Nadu to be raw material for products made for animals in some units there. Usually this is done by trawling boats. But now we are noticing such a trend from traditional boats in Thazhampally, Anchuthengu and Kollam registration boats,” said Rajeev SI, assistant director, Fisheries Department.

Kerala: Poor catch, high operational costs leave fishers in distress


The steep fall in daily catch due to adverse climatic conditions and high fuel costs are forcing small fishers in Kozhikode district to keep off the sea. With the returns coming down, many of them have taken a break from their traditional vocation and are hunting for odd jobs. The current problems are similar to those that the fishers face during the annual trawling ban period, say fishing community leaders. They have urged the government to devise a relief package for the fishers as the situation is likely to continue until May-end. However, the Fisheries Department is reportedly unable to announce any relief measures as the model code of conduct is in place. Summer package “To survive lean periods like this, the fishers are in need of free ration, treatment aid and a one-time allowance. The lack of such planning by the authorities has been creating trouble for fishers for more than three years,” says K. Rajan, vice-president of a State-level fishermen’s association.

He points out that the fishing community is badly in need of a summer package in the years to come besides aid during the trawling ban period. In Kozhikode district, there are about 20,000 fishermen and over 5,000 mechanised fishing boats. Though the Fisheries Department claims that the majority are covered under various government welfare schemes and insurance packages to manage adverse situations, fishermen’s organisations say there are no helpful schemes to
address unexpected seasonal challenges. Migrant workers Fishers from the Vellayil harbour say that the continuing crisis in the sector has forced many migrant labourers, earlier employed by local boat owners, to leave the district.

They attribute it to the increasing operational costs and the declining profit as a result of poor catch. Irfan Habeeb, the leader of a fishermen’s organisation, says there are no initiatives on the part of the Fisheries Department to carry out a scientific study taking into account the new challenges in the field. “Their field surveys and studies are all carried out in a very conventional format with no advanced criteria,” he says. A district-level fishermen’s coordination committee led by him is planning to take up their demands with the State government. “We have prepared a memorandum in consultation with various organisations. It will be soon be submitted to the State government,” he adds.

**Kerala: Fishing vessels in Kerala to bank on holographic plates**


Considering the emerging challenges to coastal security and for faster identification of vessels during sea rescue operations, the Fisheries Department has decided to introduce holographic registration for fishing vessels. Officers with the department said 300 mechanised fishing vessels will be asked to install tamper-proof holographic registration plate (HRP) in the first phase. An amount of Rs 62.3 lakh has been sanctioned for the same. Of the total amount, Rs 56.07 lakh will be the state’s share, while Rs 6.23 lakh will be the beneficiary’s share. “HRP will prove extremely helpful in ensuring coastal security and vessel identification. It will also bring in uniformity,” said S Venkatesapathy, director, Fisheries Department. “The department will seek C-Dit’s aid for the preparation and installation of HRP. The project will be implemented through fisheries stations and is expected to be completed within five months,” he said.

Sources said the department is also looking into the practicality of creating an HRP networking system for real-time monitoring of sea-going vessels by embossing the HRP with GPS and GPRS facilities. A microchip containing the details of the vessel and of the sailors/fishers in it is also likely to be fitted with it. The project concept note submitted by the Fisheries director to the government in February mentions that besides aiding authorities in identifying fake fishing vessels quickly, HRP will also come in handy for ensuring coastal security and identifying unregistered fishing vessels. It says such a system will also help in conducting sea rescue operations effectively. “The total cost of the project is pegged at Rs 62.3 lakh. That means the unit rate for design fabrication and installation of the security registration board is Rs 20,768 (Rs 17,600 with 18 per cent GST of Rs 3,168),” officers said.

Move welcomed Welcoming the move to install HRP, All Kerala Fishing Boat Operators Association president Peter Mathias said the decision will not only strengthen maritime and
coastal security but also allow faster identification of vessels during mid-sea mishaps. “As part of ensuring national security and fishers’ safety, various measures are being taken up by the authorities. This includes vessel monitoring and data collection of fishermen going to seas. The implementation of HRP will help bolster such efforts,” said Peter.

**Kerala: Post-deluge, cage-fish farming comes alive again in Kerala**


Last year’s devastating floods have not dampened the hopes of cage-fish farmers in Kerala. The majority of such fish farming ventures, which were badly hit in the deluge, are back on track, thanks to efforts initiated by the Central Marine Fisheries Research Institute (CMFRI) with the financial support of the National Fisheries Development Board. Cage fish farming enterprises, which were taken up as they offer better livelihood options for coastal communities, suffered a loss of Rs.2.16 crore, and saw the coastal pushed into distress. However, the CMFRI project is playing a crucial role in reviving such projects and preventing a complete collapse. Ever since the project was launched, several people have been approaching CMFRI expressing their willingness to be part of the programme, said Imelda Joseph, Head of the Mariculture division of the institute, which oversees the project.

The National Fisheries Development Board (NFDB)-funded project was timely to lend a helping hand to the coastal community, which lost everything in the deluge. CMFRI reached out to the community with awareness programmes and training to get them to pursue cage fish farming. CMFRI is still looking for people interested in this specific occupation, she added. The CMFRI project envisages setting up of 500 cage-fish farming units by providing technical and financial assistance to farmers struggling to earn a steady living. A total of 179 cage units have been launched so far and around 163 farmers, most of them women, are now associated with the project. Nearly 4.5 lakh fish seeds have been stocked in as many as 179 cages set up at Ernakulam, Alappuzha, Thrissur, Kollam and Kannur.

According to Joseph, farmers are now waiting for the first harvest of their fish after the floods during the third week of this month. Profitable business A net average profit of more than Rs. 3 crore is expected from these farms. Asian Seabass and Pearl Spot are the species that are stocked in the cages for farming. Another batch of 150 people will start cage-fish farming soon. Besides technical support, CMFRI is providing 40 per cent of the total expense to launch the cage farming unit as a subsidy to the farmers. The rate of subsidy for women and those from the reserved category is 60 per cent.
Kerala: Fisherwomen seek stoppage of port work


Fisherwomen under the aegis of the SEWA Union took out a Secretariat march and dharna here on Tuesday demanding stoppage of Vizhinjam port construction. The march, against the backdrop of the Lok Sabha elections, was aimed at bringing the problems faced by the fisherwomen and their families to the attention of the candidates and initiating discussions on them. Inaugurating the dharna, SEWA Union secretary Sonia George said despite the prolonged protests against Vizhinjam port, no political parties or groups had expressed their clear support for the people’s cause. The initial hopes from the port were development and improvement in the lives of the coastal people, but with the construction work under way, there was a lot of apprehension about the project. The women feared that the sea, the fish wealth, their livelihood, and their way of life were in for an upheaval.

Rough sea The port work had destroyed the marine ecosystem, resulting in a sharp drop in the catch. The piling work had led to cracks in houses, making them uninhabitable. The sea had become rough, leading to accidents at sea. Dredging for the port was causing coastal erosion from Poonthura to Veli. Vizhinjam would no longer be safe for fishermen to set out to sea. The project, Ms. George said, would affect fisherwomen the most. Wrong policies of successive governments that focussed on rehabilitation of the coastal people instead on reviving the fish and other natural wealth of the sea had to be questioned, she said. No-fishing zones She spoke of concerns about construction of an airport runway at sea and of traditional fishing areas such as Adimalathura being demarcated as no-fishing zone to facilitate port tourism. The fisherwomen would continue to submit their demands to the candidates when they arrived for campaigning, she said.

Kerala: Hundreds of dead fish wash up on Malappuram beach


The searing summer heat is likely taking a toll on the marine life as hundreds of dead fish washed up on the beaches here in Malappuram district of north Kerala. Last month, two dolphins and three sea turtles were found dead, and the local people buried the carcasses after rotten smell emanated from them. The beach cleaning staff said that hundreds of dead fish are found on the beaches. The mass fish deaths were reported to the authorities concerned. Heat pushing fish to deep sea The local fishers said that they had to suspend their fishing activities as the blistering heat was forcing schools of fish to move towards deep sea from areas near land which has warmed up considerably as summer commenced. Even hose using large fibre fishing boats can't net a profitable catch.
Fish such as squid, prawns, mackerel, sardines and soles, which are usually caught during summer, are also very scarce these days. Extreme heat has made fishing in the sea an uphill task for the fishermen. Fearing sunstroke, the fishers now go to sea early in the morning and return before the mercury rises. Meanwhile, those who were fishing in shallow waters near to the shore have also suspended their work. The fishermen staying between Purathur Padinjarekara and Kuttayi have stopped fishing a few weeks ago and are now doing odd jobs to make ends meet.

Kerala: No reply to fishers’ TM call for communication gadgets in Kerala


It has been eight months since Oceanic, a fishing vessel, sunk into the depths of the Arabian sea around 27 nautical miles off Kochi coast leaving three dead and nine fishermen missing. The fishermen community has been clamouring to regulate the ship traffic and provide communication gadgets to fishing vessels. Though the state government had promised to distribute Navic, a satellite-enabled communication gadget developed by ISRO, to all fishing vessels, the project is yet to be implemented. With incidents of mid-sea collisions occurring at regular intervals, the fishermen are in anguish. On March 30, three fishermen from Munambam fishing harbour were lucky enough to survive a mid-sea collision as an unidentified ship hit their boat snapping its bow.

“The Fisheries Department has launched a project to distribute Automatic Identification System (AIS) to mechanised fishing boats. The equipment costs around Rs 50,000. There is another project to distribute satellite phones to fishing vessels. The cost of the gadget is Rs 6,000. Mechanised boats have to pay 50 per cent of the cost while traditional fishermen are eligible for a 90 per cent subsidy. Around 100 AIS have been distributed already. Navic costs around Rs 9,000 and traditional fishermen will get it for Rs 1,500. Around 50 gadgets have been distributed,” Fisheries Deputy Director S Mahesh told Express. The Union Government had introduced the National Marine fishing policy in 2017, providing guidelines to usher in Blue Revolution. The policy included recommendations for distribution of safety equipment and communication gadgets to the fishermen. Two years on, the fishermen are yet to get the equipment.

The Kerala Government had given a similar assurance to the fishermen community after Cyclone Ockhi claimed 60 lives on November 29, 2017. Though the project was launched with much fanfare only a few Navic gadgets were distributed. “The ships entering Kerala coast have to inform the Coast Guard as per the code of conduct introduced by the International Maritime Organisation. There are around 35,000 fishing boats in Kerala which cross the shipping channel in the east-west direction. More than 500 cargo ships pass through the shipping channel close to Kerala coast everyday in the north-south direction. “This increases the chances of mid-sea
collision. On Saturday, the fishermen were casting their nets when the ship rammed the boat. The Mercantile Marine Department should ensure the ships follow the code of conduct,” said Matsya Thozhilali Aikya Vedi president Charles George.

Assurance sought from candidates The mid-sea collision on March 30, in which three fishermen sustained minor injuries, has prompted fishermen to release a 13-point charter of demands. The community members will cast their votes only if the candidates assure to implement the demands. “We are demanding an assurance from the candidates to implement our demands if they are voted to power. We will cast our votes only in favour of the candidates who accept these demands,” National Fish Workers Forum general secretary T Peter told Express. Fishers’ demands Formation of an independent Fisheries Ministry, scrapping of the Coastal Regulation Zone (2018) notification and steps for protection of coastal resources, protection of the livelihood of traditional fishermen, shifting of the shipping channel outside the continental shelf, ban on destructive fishing practices and distribution of safety equipment to fishermen.

**Kerala: US team visits Kerala’s harbours**


A two-member team from the US visited fishing harbours in Ernakulam and Thrissur this past week, considering a request to lift the ban on Indian wild caught shrimp in US markets. Comprising US Department of State environmental officer Joseph A Fette and US National Marine Fisheries Service (NMFS) equipment specialist Kendall Falana, the team studied the activities at the harbours and the types of fishing nets used by trawlers. The US had banned import of wild caught shrimp from India after the US Department of State found the fishing practices followed here non-compliant with US regulations to protect sea turtles. After India’s plea that adequate steps to protect sea turtles during the course of commercial shrimp fishing had been initiated, a team had inspected harbours in the eastern coast last year.

India had maintained the population of sea turtles was low in the Arabian sea and the US then deputed another team to inspect the harbours in the western coast. TED necessary The US has insisted on equipping fishing gear with Turtle Excluder Devices (TED) to ensure no turtle is harmed during fishing. Though the Central Institute of Fisheries Technology (CIFT) developed a TED, it is learnt Falana, who develops innovative TED technology for NMFS, suggested a few modifications to the device. Big nets a no-no - The US team also visited harbours at Nellur in Andhra Pradesh, Chennai, Kanyakumari and Mumbai. - Fisheries deputy director S Mahesh said the team members discussed the need to avoid big fishing nets. The team members said Washington is considering a protocol for the protection of the marine mammals.
Kerala: Cage fish farm in dire straits


Greater Cochin Development Authority’s (GCDA) Mundamveli cage fish farm project, which has been lying dormant for the past three years, continues to be in a pathetic condition as the proposed public private partnership (PPP) model plan to revive it remains on papers. Private players, who have expressed interest in the project, alleged that authorities were delaying the tender works unnecessarily. Though GCDA had invited a tender to lease out the 1.5-acre fish pond on December 6, not even a single bidder appeared at the auction citing that leasing out the pond alone would not help in the revival. Following this, GCDA chairman V Saleem said that a new tender would be invited before January first week to lease out the four-acre property, which consists of the pond, a power generator room, 24 fish cages, 33 aerators and the land surrounding the pond, but no initiatives were taken in this regard.

“The plan is to follow the same method used in GCDA’s laser show project at Rajendra Maidan, which was revamped through PPP model. Leasing out the entire property will allow lessees to explore the possibilities of ecotourism in the area. Many have approached GCDA with proposals to revamp the Rs 4.5-crore project, one of the loss-making projects of GCDA. But no response was there from departments concerned. Now, they are making excuse citing election code of conduct,” said an official of an agency which has submitted a proposal. GCDA has almost shelved the fish farm project in mid-2016 which incurred heavy financial loss and kicked off corruption controversies.

Kerala: Fisherman died after a trawler hits boat at Thangasseri sea


A 45-year-old fisherman died when a trawler hit the boat he was travelling in at Thangasseri sea on Wednesday morning. The deceased has been identified as Baiju. Two persons suffered injuries in the incident that took place about four kilometres from the coast at 4 am. The boat carrying Baiju and two other fishermen was on its way for fishing when the trawler hit it. The boat was completely damaged and the portion carrying the engine got submerged in the sea. The trawler did not stop after the accident and it could not be identified. "The rank of the boat might have dozed off while steering. We are trying to locate the boat." said the Circle Inspector of Neendakara, Baiju L J Nair. The injured have been shifted to a hospital. The body was taken to the District hospital for a post-mortem examination.
Kerala: Fisherfolk in Kochi put forth a sea of woes


They were tagged 'Kerala's Own Army' during the floods for their selfless work, saving thousands of lives. But, fisherfolk say the successive governments did nothing for them, be it compensating for cyclone Ockhi damage or addressing their job security woes. As campaigning peaks across Kerala for the Lok Sabha elections, the coastal regions of the district expect Central intervention at least this time. The many demands raised by the fisherfolk include the formulation of a dedicated Fisheries Ministry to address their issues. In the wake of the Munambam trafficking issue, security concerns are also high along the coastal belt. "Fishermen's lives have always been in a dilemma. We have been raising the issue of forming a Fisheries Ministry on the lines of Agriculture Ministry in the Centre for some time."

Considering the recent collisions between merchant vessels and fishing boats, the proposed change in the shipping canal should also be binned. Instead, they should bring back the earlier system," said T Peter, general secretary, National Fish Workers Forum. Many allege lack of governmental support, which is forcing them to back out of the profession. "Both the Centre and State Governments were unjust to us. Ockhi compensation is yet to be distributed. Compared to other states like Karnataka, we do not get the diesel subsidy. Besides, we are being charged heavily for processes like license extension. When many are moving away from the field due to debt, a comprehensive plan is needed to better coastal life," KB Kassim, state treasurer, All-Kerala Fishing Boat Operators Association.

The proposed changes in the trawling ban by the Central Government has had repercussions in the area. "We implemented the trawling ban to preserve our fish varieties. But the proposed plan to unify the trawling ban across the country will adversely affect us. We are demanding an area-wise trawling ban according to the weather of those respective regions," added Kassim.

Kerala: The unheard cries of the fisherfolk in Thiruvananthapuram


The fishermen community across the district feels they have been given the least importance by the Centre and State Governments. Citing their difficulty, Moses Robert, a fisherman from Mariyanadu, said, "Due to the reduced availability of fish and change in fishing grounds after cyclone Ockhi, we need to venture into the deep sea for fishing. But the kerosene provided by the government per month is not sufficient even for a week's fishing." Kerosene provided from the Central Government is given on subsidy. While boats with nine HP engines receive 140 litres, 25 HP engines receive 190 litres. The cost of a litre of kerosene varies from Rs 65 to Rs
From this, the subsidy amount of Rs 25 will be given back to the fishermen within four months. They have resorted to buying kerosene off the black market operating in the coastal regions, because of high demand.

"We want the upcoming MP to help us in this regard. We cannot afford to pay the subsidy money. The black markets can be avoided if the government takes immediate measures to allocate kerosene without subsidy at a reduced cost," said Moses. According to social worker Magline Philomina Yohannan, there are a lot of fisherwomen in the district. "Fisherwomen are not given equal importance as fishermen. They are not eligible to receive benefits including insurance. Also, there is no facility available on the local train or buses to transport the fishes, unlike states such as Maharashtra and Tamil Nadu," she said. Magline raised her concern over the priority given to the children of fishermen. She urged the union government to provide 75 per cent priority to fishermen family in coastal jobs including coastal force. "They have been born and brought up in the coastal area and there is none else who knows the geography of the coastal region," she said.

"They can act immediately in case of a mishap. Thus the children of fishermen must be given importance," she opined. According to T Peter, secretary, National Fishworkers Forum, coastal villages must come under 'Coastal wards' to highlight their issues. "We had already spoken regarding the implementation of a Ministry for Fisheries. The Modi Government promised to facilitate the same soon after Ockhi but no actions have been taken," he said. Post the cyclone, fishermen were restricted from fishing on all days. "The government should compensate the days we do not go for fishing" says Jose Josadima from Puthiyathura. A beneficiary of the Matsyafed Net Factory in Muttathara said, "We are getting Rs 15,000 per month. We need to pay back our loans which is impossible with this amount."

**Kerala: Workshop on 'safety in sea' held in Puthiyappa**


‘Life and Livelihood Safety at Sea’ a one-day awareness programme, was organised by Kerala University of Fisheries and Ocean Studies (KUFOS), State Fisheries Department and International Women Seafarers Federation (IWSF) at Puthiyappa Harbour on Saturday. The programme was conducted with the financial support of Indian National Centre for Ocean Information Services (INCOIS). The Potential Fishing Zone (PFZ) mapping technique developed by INCOIS incorporating the satellite data and images pertaining to sea surface temperature (SST), Ocean Colour Monitoring (OCM) and other ocean parameters is a milestone achievement and boon for fishers, said Dr Raffi SM, principal investigator of KUFOS- INCOIS research project. He emphasised that these advancements will ultimately reduce the time and fuel cost to a greater extent.
According to him, the real time information dissemination through internet-based mobile applications about Ocean State Forecast (OSF) such as tsunami/cyclone prediction, forecast and warning, wind, wave and current direction and speed will be of immense use for saving the valuable life and property of fishermen, seafarers and coastal populace. The do’s and don’ts to be practiced in sea, avoiding the collision of shipping cargo vessels with fishing boats and distress calls were discussed by Captain Radhika Menon, the first Indian women captain of Indian Merchant Navy and the founder of International Women Seafarers Federation (IWSF).

**Kerala: 3 fishers hurt in sea collision off Ponnani**


Three fishermen, all of them hailing from Rameswaram, have been admitted to the Ayampilly Government Hospital with minor injuries after the fishing boat they were on was hit by an unidentified ship in the early hours of Saturday. The injured fishermen have been identified as Arumughan, 58, Pandyan, 52 and Subhan, 57. Sources in the Fisheries Department said that the fishermen were found in a state of shock and injuries were minor. The bow of the fishing boat ‘Sylvia’ snapped on impact of the collision with the ship. However, the boat was in a condition good enough to sail back to the Munambam fishing harbour. The boat belongs to Munambam native Franco Panakkal. Department sources said the accident was reported around 12 midnight on Friday, 14 nautical miles off Mangalore. It is suspected that the vessel, registered in Singapore, was involved in the accident.

The vessel had reported the incident. Fishermen said they could not identify the vessel in the dark as it sailed off from the site. Meanwhile, Coast Guard sources said there seemed to be some inconsistencies in the place and time of the incident as reported by the ship and as related by the fishermen. “This is being verified by the police and the Fisheries Department,” the sources said.

There were 11 fishermen on the boat that left Munambam on March 23 on an expedition. Eight of the fishermen hailed from Kolachal and neighbouring areas in Tamil Nadu, while three of the other workers were from other States. Fishers union Kerala Matsya Thozhilali Aikya Vedhi said Kerala coast had become a venue for frequent accidents. Saturday’s accident was the third in six months, said president of the Vedhi Charles George.

Three fishermen were killed and nine went missing after a merchant vessel and a fishing boat ‘Oceanic’ collided off Munambam in the first week of August last year. In another incident a fibre boat ‘Divine’ was hit by a merchant vessel in which there was no death or serious injuries, Mr. George said. The union called for immediate government intervention as well as coordination among maritime safety agencies for better security for fishermen.
Kerala: Boat owners to protest against unfair practices


The All Kerala Fishing Boat Operators’ Association will hold a series of protests across the State to highlight what it calls ‘‘persecution and discriminatory action’’ by the State Fisheries Department. “Our demand is that the State must consider the fishing community across India as one,” said Joseph Xavier Kalapurakal, president of the association, here on Saturday. The grievance is that while fishers in other States are not subjected to heavy licence and registration fee, Kerala boat owners end up paying heavily. Kerala fishers are also subjected to restrictions that are not applied to fishers from other States. Mr. Kalapurakal said that while fishers from other States engaged in juvenile fishing, Kerala fishers were punished even if they were within the law ruling catching juveniles. He said the Central Marine Fisheries Research Institute (CMFRI) recommended that only fishing boats with more than 50% juvenile catch should be punished.

However, indiscriminate action was being taken by the Fisheries Department, he said. He said that boats from neighbouring States such as Tamil Nadu engaged in juvenile fishing and took their catch out of Kerala to be sold to fish meal factories. However, a department official said that it was not engaged in persecuting local boat owners and that action was being taken only against those flouting the rules. The State government has issued a notification specifying the legal size of some of the commercially important species to be caught and marketed. The official said that juvenile catch was comparatively low now given the lean fishing season but the department was on vigil against the practice. The boat owners will march to the office of the Deputy Director of Fisheries in Kozhikode on April 2 to highlight their grievances. Protest march will be taken to offices in Kannur, Kochi and Kollam on the following days, said Mr. Kalapurakal.

Kerala: A stumbling block for fishermen


Along with the hassle of sea erosion at Valiyathura coastal region, the fishermen community at Valiyathura are facing a new dilemma. The debris from the demolished buildings are accumulating on the shoreline, damaging their boats in the process. According to residents, the buildings which had been damaged during the sea erosion had to be demolished because it was becoming a haven for anti-socials. However, the debris was not removed. "Owing to pressure from the church and the locals, the Corporation decided to demolish the buildings. However, the debris including iron rod and bricks were left at the site. In the course of time, it flowed into the shoreline," said Francis, a fisherman. The debris, according to fishermen is causing damage to
the boats made of plywood. "Whenever we anchor the boats, it is hit by the debris," said Joy David, a fisherman. Owing to this, several of the fishermen have shifted their workstations away from Valiyathura.

"Now, I am fishing from Shankumugham. Several of the fishermen travel to Vizhinjam and other shores to embark on fishing, because it is not safe at Valiyathura. Halting our boats is turning out to be a major issue," said fisherman Clement Carmel. Speaking on this, Jessy M V, Matsya Bhavan officer with the Fisheries Department said the corporation has demolished the houses recently. "The decision regarding the rest of the debris can be taken only after elections," she said. Meanwhile, Suma Roch, a Valiyathura native, said the debris is a blessing in disguise for them as it protects their homes from sea erosion.

"At least four lanes of houses have been swiped out in the erosion in the past five years at Valiyathura coast. The debris is a blessing in disguise as it protects us from sea erosion. However, that is not a permanent solution as the presence of the debris is also affecting the livelihood of the fishermen. Instead, the Fisheries Minister should take up measures to ensure the setting up of a sea wall or a breakwater to protect our homes," she said. Francis opined that instead of spending crores of money for building a new settlement for the fishermen, the government should take immediate action to protect the shore from the erosion.

Kerala: Munambam harbour lacks basic surveillance system

https://timesofindia.indiatimes.com/city/kochi/munambam-harbour-lacks-basic-surveillance-system/articleshow/68552936.cms

Two months after the human trafficking via Munambam harbour was reported, the harbour still lacks basic surveillance system. Though Munambam Fishing Harbour Management Society (MFHMS), which runs the harbour, had proposed to install 17 high-resolution surveillance cameras on the premises of the 7.15-acre harbour around 4 years ago, it remains on paper. “We have been demanding authorities to install CCTV cameras on the harbour premises for the past few years, but to no avail. Anyone can enter the harbour premises after paying a toll. There is no mechanism to monitor in case if anyone enters the harbour with explosives,” said a member of MFHMS. “There are three high-mast lights on the harbour compound and none of it are functional. Activities of the day starts around 4.30am at the harbour. We have to depend on lights from vehicles to walk around. There are lights only in areas where auction takes place,” said another MFHMS member.

“We want marine enforcement to conduct regular patrolling in the coastal areas. Besides two securities at the gate, two more people are there to ensure security inside the harbour. The gate closes at 10pm and opens in the early morning when the usual business starts,” said society president T A Sudhan. “Following the human trafficking issue, everybody finds fault with Munambam harbour. Frankly speaking, the trafficking took place at Maliankara where private
people facilitate anchoring facilities for boats,” added Sudhan. “Following the trafficking incident, investigation agencies often visit the harbour. They had asked us to enhance security measures. Keltron has promised to the fisheries department that it would install surveillance cameras at the earliest and would carry out maintenance works regularly,” he added. According to ward members of Pallipuram panchayat, installing cameras on the harbour premises alone would not solve the security lapses.

All boats, including country boats, can reach Munambam and Maliankara via the estuary between Muziris and Azhikode beaches. “If high resolution cameras are installed on both ends of the beaches, it would help to keep a tab on all boats passing through the estuary,” said Sunil Devassy, ward member at Pallipuram. Meanwhile, fisheries officials raised concern over sustainability of the cameras, which are being proposed at the harbour. “Moisture combined with salt will corrode electronic accessories at the harbour. We have to wait and see whether the cameras would withstand the corrosion,” said a fisheries official.

**Kerala: Fishermen should try this low-cost boat made from waste**


Floods last year taught Keralites a hard lesson. Marooned people realised a boat could make all the difference. Hereafter, don’t throw away those hardboard, wood and fibreglass pieces left behind by workmen. They are ideal materials to build a strong boat that can carry three people. It is the South Indian Federation of Fishermen Societies (SIFFS) that is behind the initiative of turning such items of waste into 12-foot-long boats named ‘Poombatta’ (buttery). Vincent Jain, head of the boat building yard at SIFFS, is in charge of the work. The small boat is suitable for fishing in inland waterways as well as near the seashore. While such a boat normally costs between Rs 40,000 and 45,000, Poombatta is available for less than Rs 20,000. The low price makes the boat an attractive option for fishermen and helps fulfill their dreams of owning a boat. SIFFS uses wood pieces of packing items for building the boat, which has sufficient strength to be used in the water bodies.

It is also pointed out that women also could get the necessary training and start boatbuilding units. persons can travel comfortably in Poombatta. Bigger boat Apart from Poombatta, SIFFS has built Sea Dragon, a bigger boat with 44 feet length, 26 hp inboard engine and solar panels. It is also equipped with safety lights, life jackets and re extinguishers. In addition, Sea Dragon comes with LED lights and indicator. Many big boats have such equipment, but they are often never used as the batteries would drain easily. But this problem is overcome in Sea Dragon by installing solar panels. Yet another safety feature in Sea Dragon is the Lifeline system. Sea Dragon’s design ensures that it does not turn upside down easily. Polyurethane foam is used in the construction, which ensures that the boat remains afloat even if it meets with an accident.
Kerala: El Nino threat likely to land Kerala’s fishermen in a Catch-22 situation


Struggling to wriggle out of the livelihood crisis caused by dwindling catch, fishermen are staring at another catastrophe as the rising temperature, triggered by El Nino, is expected to adversely impact the availability of fish stocks in the Arabian Sea. With the Australian Weather Department predicting 70 per cent chances of formation of El Nino, scientists at the Central Marine Fisheries Research Institute (CMFRI) opine it can impact the climatic conditions in the Indian Ocean adversely. This can influence the South West Monsoon also. CMFRI senior scientist Grinson George said El Nino can affect pelagic fish species like oil sardine. “Our observations have indicated El Nino impacts Indian Ocean more through atmospheric circulation than ocean currents,” he told Express.

“The atmospheric bridging mechanism connects the Indian Ocean and Pacific Ocean through Walker Circulation. So, if El Nino forms in the Pacific Ocean by December, it will reach the Indian Ocean after four months. A study conducted by the CMFRI has found El Nino has impacted the spawning and recruitment of oil sardines,” he said. Apart for El Nino, another oceanographic phenomenon Indian Ocean Dipole (IOD) has also been impacting climatic changes in the region. IOD causes difference in sea surface temperature between two areas – a western pole in the Arabian Sea and an eastern pole in the eastern Indian Ocean south of Indonesia. It is a significant contributor to rainfall variability in the region. The stochastic trajectory of succession of these extreme oceanographic events has impacted our climate adversely, said Grinson.

“Though the sea surface temperature has been increasing over a period of time, we have noticed annual fluctuations in the cycle. There was an increase in these extreme events in the 1990s and the present decade. However, the period between 2000 to 2010 was relatively calm. We have noticed a -3 to +3 anomaly in sea water temperature in the Indian Ocean during this period,” he said. A study conducted by CMFRI principal scientist E M Abdussamad had highlighted the changes caused by rising temperature have been adversely affecting the spawning and recruitment of oil sardine along the Kerala coast. The oil sardine is a sensitive pelagic fish which migrates when temperature or salinity increases. The climatic changes had resulted in the reduction of size and early maturity among pelagic fish species. According to the fishermen, there is a decrease in egg formation in the sardines.

“The looming threat of El Nino is causing concern among the fishermen. We are facing a fish drought in the Arabian Sea and the government should declare a package to support the fishermen. Under the package, the government should declare the minimum procurement rate, projects for value addition, formation of cooperative societies to support the fishermen and a
scheme to write off their loans,” said Matsya Thozhilali Aikya Vedi state president Charles George.

Kerala: Fishermen, govt in a tangle over juvenile catch


Kerala’s mechanised fishing boat operators and Fisheries department are at loggerheads over the seizure of fishing boats and imposition of fine after the discovery of small fish in their deep-sea catches. The boat operators have sought the intervention of the Chief Minister seeking an end to the alleged harassment by Fisheries officials. Joseph Xavier Kalappurackal, General Secretary, All Kerala Fishing Boat Operators Association, said that officials at the Munambam Fisheries Harbour had recently confiscated a boat and fined ₹2.5 lakh after finding small fish in the catch. Under CMFRI rules, such catches are considered a violation only if more than 50 per cent of the samples are composed of fish below the prescribed minimum legal size (MLS). At the meeting conducted for “determining MLS violations”, it was agreed that the sampling should be carried out in the presence of fisheries department officials, marine scientists and the boat owner. The penalty can be imposed only if the catch contained more than 50 per cent of small fish, Kalappurackal said.

To determine MLS violations, the Fisheries Department was advised to take a random species-wise sub sample of the catch, take appropriate measurements and consider the catch as a violation if 50 per cent of the sample is composed of fish at or below the prescribed MLS. Such inspections should be carried out at sea or in the landing centres using an unsorted sample, he added. Refuting the allegation of harassment, State Fisheries Minister J Mercikutty Amma said that the department is implementing the CMFRI recommendations on MLS to protect exploitation of all juvenile fish and to prevent overfishing. A strict implementation of the rule has started yielding results, which is evident from the 12 per cent rise in the catch at 6,42,580 tonnes in 2018 compared to previous years. Rule for all Coastal States Moreover, the Southern Fisheries Ministers’ Conclave held in Kochi in November last year had unanimously decided to implement CMFRI recommendations in all the coastal states, the Minister said.

“We are committed to implement the order to improve the fish wealth and maintain healthy stock of marine fish off the Kerala coast. This will ensure a better income to fisher folks on a sustainable basis. The department will take stern action against mechanised fishing boats only if 50 per cent of the catch is below the prescribed MLS,” she told BusinessLine. The boat operators association convened a meeting at Beyapore recently and decided to organise a march and mass dharna before the Joint Director of Fisheries at Kozhikode on April 2 followed by similar ones in Ernakulam and Kollam. They have also threatened to hold a one-day token strike or an indefinite strike if the government does not take a favourable decision in the matter.
Kerala: Gone with the sea erosion


‘I had spent all my savings on the house which is now unfit to live in, after the sea erosion. We've been requesting the Fisheries Department to provide a replacement since the last sea erosion. Until Tuesday, nothing had been done. Right after this erosion, department officials took the list of the houses on the verge of collapse," said Steven Vinny, a fisherman from Valiyathura who had lost his house partially in the sea erosion which lasted from Sunday night till Tuesday. The erosion had affected eight houses on the coast. “The erosion happens every year and the promises made by the government remain unkept,” he said. The shoreline retreat had destroyed two houses partially leaving another six houses at the verge of collapse. According to Steven, two lanes of houses along the coast have been wiped out in the past four years.

The residents of the eight houses have been shifted to the Buds Rehabilitation Centre. However, fishermen families are not provided with basic amenities or food in the centre. Mani, a Tamil fisherman who has been residing on the coast for the past 20 years was seen cooking in the ravaged house. "The thought of cooking here terrifies me but I've no choice. The officers did not enquire about our food or basic amenities. I didn't want to leave my kids starving, thus I came to cook food for my children," he said. "Currently, the centre is not recognised as a rehabilitation centre. Post recognition, the department will provide food to the centre," said one of the members from the Latin Archdiocese of Thiruvananthapuram, who visited the affected area. The space provided at the Rehabilitation Centre is insufficient for eight families. Therefore, some families were asked to move to a temporary shelter at a godown in Valiyathura Junction by the village officer.

"How are we supposed to stay in a godown in the soaring heat? Also, the godown neither has proper facilities nor is it a safe place for ladies and kids," said Sebastian S, a fisherman. The Matsya Bhavan Office functioning in Valiyathura has listed the houses. "We have listed 14 houses. Eight are in the front lane and the rest, the second lane. The same has been submitted to the Department of Revenue and the Department of Fisheries," said Jessy M V, Matsya Bhavan officer. Fishermen question the delay taken by the government. "They will wait for the next erosion to evict us. Why can't they do something to prevent erosion," asks Perial Phebians, a victim of the erosion. “The government has no humanitarian consideration. The Fisheries minister who had come to the church for Ockhi relief did say that the government had no plans in building breakwaters to protect the coast from erosion," she said. Those included in the list of houses destructed by the erosion in June have not been facilitated with houses. "We pay a hefty rent now."
No action has been taken yet," complained Vasantha Benedict. Citing the actions taken by the government the deputy director of Fisheries, Thiruvananthapuram, P Beena Sukumar said, "Though there are five vacant flats at Muttathara, the same must be allocated to those who have lost houses in the last erosion and Ockhi."

**Kerala: Better safety features for new fishing boat**


In the aftermath of Cyclone Ockhi, one question that rattled fishermen was this: how safe are our fishing boats? Perhaps, Sea Dragon-44 is the cost-effective solution everyone has been searching for. Sea Dragon-44 is the new, and reportedly safer, fishing boat model built by the South Indian Federation of Fishermen Societies (SIFFS) with help from TAFE Motors and Tractors Ltd (TMTL). The model is 44 metres long and its below-deck spaces have been packed with polyurethane foam to improve buoyancy. The model will be unveiled at the Veli boatyard of SIFFS at 11.30 a.m. on Thursday. Post-Ockhi “After Cyclone Ockhi, fishermen had complained about the safety of their fibreglass boats. The new model has polyurethane foam packed below the deck, while ensuring adequate storage space for the catch and fishing nets.

The safety features increases buoyancy,” said J. Vincent Jain, Deputy Chief Executive and head, SIFFS Boatyards. Powered by a 28 hP inboard engine, Sea Dragon-44 is also an energy-efficient model, drawing power from the sun for auxiliary functions, excluding propulsion. “The boat has a 200-watt-capacity solar power unit which powers the life-saving equipment, fish finder and the lighting and navigation systems,” Mr. Jain said. A smaller craft SIFFS is also planning to unveil another interesting model on Thursday. This is a smaller, sea-going 12-footer fishing craft made from packing material. “We’ve used material used to pack boat engines and generators. It is usually discarded after unpacking the contents. The material has been laminated with fibreglass for the hull,” Mr. Jain said. This model can seat two fishermen. Leela Edwin, head of Craft and Gear Division, Central Institute of Fisheries Technology (CIFT), is the chief guest at Thursday’s function.

**Kerala: Where have all the fish gone in Kerala?**


The rise in temperature across the state stands as an obstacle for fishermen to eke out a proper living. The rate of fish landings have considerably dropped, said scientists with the Central Marine Fisheries Research Institute (CMFRI), Vizhinjam, based on a study conducted. Fish landing refers to the number of fish that are found and caught from the sea. Although December to March is considered to be a lean time period for fish landings, the decrease is notable. Surplus
fish usually found in the sea in close proximity to the land have reduced, heat playing the pivotal factor. "Fish species like keri chala (a type of sardine) and mene maculata, which are generally lesser in number have increased. On the contrary, ney chala and pollal choora (a type of tuna), found in large quantities, have decreased," said a CMFRI scientist. The study also reveals the damage afflicted by cyclone Ockhi, which minimised fish landing. "Most days, we return with empty fishing nets.

Even if we are lucky enough to get fishes, they aren't big fish," said Thomas Levis, a fisherman at Shankumugham. Due to changes in the fishing ground, fishermen travel deep into the sea for fishing. "We spend more kerosene for deep sea fishing and yet we return empty-handed," said Francis Xavier, a fisherman from Poonthura. As per the study, fish landing along the Thiruvananthapuram coast in 2016 is estimated to be 45,000 tonnes. It expanded to 53,000 tonnes in 2017 and further swelled to 57,000 tonnes. However, this year shows no visible increase.

The soaring temperature has also affected the hatching ability of fish as the optimum temperature required for fish wealth has changed. Thus, scientists assume temperature as the primary reason for reduced fish landing. Further research is being conducted at the headquarters of CMFRI in Kochi. According to fishermen, increased use of fishing lights have impacted the fishing ecosystem. “The lights attract smaller fish, thereby trapping them in nets. This is one factor for the reduced fish wealth near land. The Government should take immediate action against fishermen engaged in light fishing,” said Jelastin Manoj, a fisherman from Valiathura.

Kerala: Sanction for modern seafood processing plant at Vizhinjam


The state government has given sanction to the proposal of fisheries department to start a modern sea food processing plant and a sales outlet at Vizhinjam port area as part of helping the fishermen community who had been badly affected by Ockhi. The project aims at providing a sustainable source of income for fishermen families. The processing unit will ensure production and distribution of value-added ready-to-cook and ready-to-eat fish products. The project will be executed at a cost of Rs 4 crore. Fisheries director had earlier submitted a concept note on the proposal. The amount required for the project shall be met from Ockhi fund. The state government had earlier launched a scheme to provide educational aid for children of Ockhi victims. As per the scheme students from LKG to Class V will get a yearly aid of Rs 10,000.

For those from Class VI to X, an amount of Rs 25,000 will be given. Plus Two students may be given Rs 30,000 and degree students will get yearly assistance of Rs 1 lakh. Thirty one students of LKG and UKG classes, 65 students of Class I to V, 50 students of Class VI to X and seven higher secondary students have been included under the scheme. As many as 194 out of 318
identified beneficiaries were pursuing undergraduation and 124 persons had completed graduation. It was estimated that an amount of Rs 13.92 crore would be required to fund their future education and training for employment.

As per the statistics with the revenue department, an amount of Rs 18.9 crore was spent in Thiruvananthapuram as part of various relief measures following Ockhi, the highest amount of relief fund to be spent in the past few decades in the district and the highest across Kerala. In the capital, relief fund had to be spent under nine different components. Apart from allocations like aid for the dependants of the deceased and missing persons, the relief fund was spent on persons who were seriously injured, those who lost houses, aid for the injured persons and compensation for agricultural loss.

**Kerala: Weathermen: Listen to the fishers, it works**

https://indiaclimatedialogue.net/2019/03/18/forecasting-with-kerala-fishers-for-safe-fishing/

Marine weather forecasts are getting popular slowly and steadily on the Arabian Sea coast of Thiruvananthapuram in south India, home to one of the largest and most diverse concentrations of artisanal (small scale) fishers. Amid this newfound interest in marine forecasts, research by the University of Sussex in Britain — in collaboration with Indian forecasters and Kerala State Disaster Management Authority (SDMA) — seeks ways to fill the gap between what forecasters offer and local fishers demand. In a policy brief released in February, researchers noted that there is often a gap between what marine weather forecasters provide and artisanal fishers accept as useful information to decide whether or not to go to fish, especially in rough weather. To fill this gap, the forecasters need to listen to the fishers, the interdisciplinary Sussex team said.

Accessible forecasts Besides, forecast dissemination needs to be easily accessible in local languages to the last mile through different media. The forecast has to be precise, clear, timely and locally relevant and actionable. It requires teamwork — involving forecasters, media, local popular science groups and forecast users, the researchers pointed out. At one of the field study sites, in Anchuthengu village north of Kerala’s capital city of Thiruvananthapuram, the forecast for late February sea usually involves moderate breeze, and slight to moderate waves with occasional crests, or ‘white horses’ in sailors’ slang. “One-metre waves and 30 km per hour (kmph) wind is safe for us,” said Michael Joseph, a local fisherman with a 32 ft boat fitted with two outboard engines.

“Still, fishers diligently listen to forecasts,” said his colleague Susa Melkias. Melkias leads the fishers’ disaster risk reduction committee of Anchuthengu that tried to make the local fishing harbour safer with a fishers’ own, makeshift signal system — a work still in progress amid red tape and a general disinterest among government harbour engineers about artisanal fishers’ safety issues. On the brighter side, Melkias’s efforts to popularise marine weather forecasts — an outcome of the Sussex research — found many takers in Anchuthengu as well as his native
village Poonthura, another study site. Poonthura fishers often sail south towards the shores of Kanyakumari, where seasonal easterlies turn around the cape, gusting to 60 kmph, generating enough waves to capsize a 32 ft boat.

Fishers’ interest in forecasts has been kindled by two developments, said Baiju K.K., a social scientist based in Kerala’s trade hub Kochi, but researching on fishing communities in Kanyakumari and elsewhere. “One reason is Cyclone Ockhi of 2017 that shook the confidence of many fishers,” he said. “Then there is increasing technology penetration that demands and opens up avenues for accessing forecasts.” Over the past year, there has been an increase in marine forecast dissemination in Kerala. For the tech-savvy, there are regular forecasts available mostly online though their penetration to the last mile is often hindered with language and technology barriers. Forecasts tend to be in English. Though there are local language text services of ocean forecasts that are short and to the point, the fishers said they prefer voice.

India Meteorological Department (IMD) has opened a new Cyclone Warning Centre (CWC) in Thiruvananthapuram in October 2018, in view of a trend of extreme weather events over the Arabian Sea. IMD’s regular coastal weather bulletins are picked up by local radio stations, but not regularly. IMD scientists said they were looking at better ways to interact with more users. Meanwhile SDMA, on its part, is considering services for fishers over All India Radio’s medium wave channels. There is also an effort to make wireless radio services more easily available. Making forecasts relevant The bigger challenge, however, lies in making and keeping forecasts relevant. “To make better forecasts, forecasters need to regularly update, interact, and gather feedback from user groups,” said Abhilash S., assistant professor at the Department of Atmospheric Sciences at the Cochin University of Science and Technology (CUSAT), Kochi.

“A group of scientists, forecasters and social workers are now trying to promote boundary organisations to overcome the barriers between science and society. Sussex research came as a catalyst for these efforts.” As Sekhar Lukose Kuriakose, member-secretary of SDMA, an outspoken scientist critical of forecasting traditions, said at the recent Kerala Science Congress: “Forecasters need to listen to those who listen to their forecasts as well.” At the Congress that focused on better disaster risk reduction measures, J. Sundaresan Pillai, head of climate change informatics at the National Institute of Science Communication and Information Resources, called for a network of boundary organisations that interface closely with different communities promoting climate and weather knowledge.

The yearlong pilot field study by Sussex Sustainability Research Programme (SSRP), School of Global Studies, and Sussex Asia Centre tested ways to do precisely that — bridging barriers between science and society. Their work allowed forecasters to listen closely to the fishers, and produce forecasts they wanted in the style they preferred, together with them. Good start The work has produced some early outcomes. INCOIS started talking about ocean currents, and fixed
their forecast boundaries as the fishers preferred. SDMA limited the number of days when they restricted fishing on account of bad weather forecast by the IMD.

On their part, IMD started giving more details on offshore systems, their track, timing and impact. IMD has acknowledged that better user interface design of forecasts helps in making them more relevant to user groups. It is a good start, as a top official noted. While Sussex researchers were designing their field study, Cyclone Ockhi devastated local fishing livelihoods. Midway through the study, a set of unusual oceanic and atmospheric phenomena led to a series of extreme rainfall events, leading to Kerala’s worst flood in a century, its impact amplified by denuded hills, clogged drainage basins, and discharge of water from many dams. “Extreme weather events which have affected the south-west coast of India during the last months have made it apparent that accurate and timely weather forecasts are of crucial importance for ensuring the safety of the local population,” said Filippo Osella, Professor of Anthropology and South Asian Studies at Sussex, who led the study.

“Our research has focused on fishing communities in south Kerala, and suggested ways to improve risk communication by promoting the co-production of weather bulletins with fishers and forecasters. The persistence of weather-related accidents calls for urgent action to provide artisanal fishers with accurate, accessible, and actionable forecasts as a means to foster safety at sea.” Co-production has become a buzzword of late. As the UK Met Office notes, it promotes collaborative approaches in weather and climate services that meet standards of scientific credibility, while also being considered trustworthy, relevant, and legitimate among users. The new policy brief elaborates on how co-production can lead to more accurate accessible and actionable forecasts.

The context is artisanal fishing becoming more predictable with modern technologies; still becoming riskier due to financial pressures that stretch the limits of fishing operations, even in rough weather. The research team is now looking at a follow-up involving different coastal geographical features, fishing techniques, and traditions. As Osella puts it: “Save one life, and our work will be worth the effort.”

Kerala: Sustainable fisheries: â€˜Kerala modelâ€™ lauded


At a time when sustainable utilisation of marine resources has become a hot topic globally, the ‘Kerala model’ of curbing destructive fishing practices and protecting marine ecosystems has found takers at the national level. The Department of Fisheries under the Union Agriculture Ministry has advised coastal States and Union Territories to consider adopting conservation measures already introduced by Kerala. One measure that has found special mention is the State Fisheries department’s ‘Suchitwa Sagaram’ (Clean Sea) initiative meant to keep the marine
environment clean. The Centre has asked coastal States to enforce Minimum Legal Size for catch, a recommendation originally made by the Central Marine Fisheries Research Institute. It has also asked the States and UTs to strengthen fishermen cooperatives and to equip them to undertake deep-sea, resource-specific fishing.

Monsoon trawling ban They have also been asked to enforce the monsoon-season trawling ban and prevent illegal, unreported and unregulated fishing. Further, the Centre has called for a ban on destructive fishing practices such as bull trawling/pair trawling and the use of toxins and chemicals for fishing. Again, States and UTs have been asked to restrict fishing based on Fish Aggregating Devices (FAD) and the use of LED lights for fishing, except for squid jiggling. Coastal States have been asked to emulate Kerala and Tamil Nadu in regulating fish building yards and net manufacturing units by enforcing registration and licencing under the Marine Fishing Regulation Act.

**India: Wild-caught shrimp exportation: US team to arrive in Kerala on March 29**


Paving the way to break the eight-month-old impasse in the export of Indian wild-caught shrimp to the United States, a team of officers from the US Department of State will arrive in Kerala on March 29 on a week-long visit to assess the steps initiated by the country to conserve turtles. The team will visit various harbours along the west coast and will also interact with the Fisheries officers, exporters and representatives of various government agencies. The US Department of State had on May 1, 2017, certified 39 nations and one economy and granted determinations for seven fisheries for their initiatives to protect sea turtles during the course of commercial shrimp fishing. Only these permitted countries are allowed to export wild-caught shrimp to the US under Section 609 of Public Law 101-162.

As India failed to make it to the list, the US banned the import of wild-caught shrimp from the country from July 2018. According to industry sources, the ban has landed many seafood export houses in deep trouble and the country has suffered a 15 per cent to 20 per cent decline in export revenue. Concerned over the ban, the Central Marine Fisheries Research Institute (CMFRI) has issued an advisory urging the fishing regulators in the country to make turtle excluder devices (TED) mandatory on all nets used by trawl vessels. “The US Department of State has brought in stringent regulations to ensure the protection of sea turtles, as the species is in danger of extinction due to destructive fishing practices. The US is a major market for Indian shrimps. We have convinced them that there is no presence of turtles in the west coast. We hope the visit of the team will help remove the ban,” Seafood Exporters Association of India Kerala chapter president Alex K Ninan told Express.
Meanwhile, a team of officers from the Marine Products Export Development Authority (MPEDA), led by chairman K S Sreenivas, left for the US on Friday to participate in a seafood trade fair at Boston. The team will interact with the US authorities on various issues, sources said. Allaying the fears of the industry, the MPEDA issued a statement that the US decision to withdraw the benefits extended to India under the Generalised System of Preferences programme (GSP) will not affect the export of seafood from India to that country. “There is widespread apprehension that the decision will affect the seafood exports from India to US market. The MPEDA made a detailed analysis and found that there will not be any immediate setback due to the withdrawal of GSP benefit in seafood exports,” the statement said.

India exports seafood worth $2,300 million to the US per year with frozen shrimp as the principal item of exports. However, frozen shrimp currently enjoys zero tariff and is not covered under the GSP. Moreover, other items such as frozen fish and frozen cephalopods do not enjoy benefits under the GSP. Hence, the withdrawal of GSP will not affect our seafood exports to the US, said a senior officer. - $2,300 million worth seafood exported from India to US per year - Indian wild-caught shrimp banned in the US from July 2018 - 15% - 20% decline in export revenue recorded due to ban

**Kerala: Caught in Kerala, bound for fishmeal factories**


Can you name the fish that is caught mostly off Kerala shores over the past three months but still not a popular delicacy? The question is posed by Friends of Marine Life (FML), a Thiruvananthapuram-based NGO involved in marine life protection activities, that works for welfare of fishermen communities. Fishermen call it ‘Kaakkaklaathi’ while marine scientists prefer red-toothed triggerfish (Odonus Niger). Strangely, this fish has never been a part of Kerala’s delicacies nor is it popular. Then where does the daily catch of around 10,000 tonnes (figure provided by FML) go? Kochi, Munambam and Beyapore are the major landing centres of this variety and the catch is transported to fishmeal factories in Mangaluru and Tamil Nadu each day, said FML coordinator Robert Panipilla.

But his real concern is this unprecedented phenomenon and its environmental impacts and possible damage to reefs due to ‘targeted fishing’ by trawlers. “By targeting this fish, which lives on the bottom of the sea, trawlers are targeting the reefs. By targeting this reef-associated fish, the trawling destroys reefs that are crucial for sessile organisms (one that cannot move freely) in the sea. These reefs will be ridden with ‘ghost nets’ soon,” he said, adding that authorities concerned were ignoring this dangerous trawling activity. However, Kochi-based CMFRI (Central Marine Fisheries Research Institute) is aware of the increase in population of this fish
off Kerala coast and it has initiated a study to find the reasons and possible impacts. “It seems to be a prey-predator issue.

The particular fish might be enjoying a successful reproductive period due to a decline in the population of its predator,” said an official. Though the official too confirmed that the catch was sold to fishmeal companies, he ruled out the possibility of damage to reefs due to large-scale trawling or alleged ‘targeted fishing’. “The sea off Kerala coast doesn’t have much reefs except Thiruvananthapuram. Besides, trawlers will be careful not to lose their nets on reefs,” he said. Though there’s no demand for this thick-skinned and bony fish, it’s being used as dried variety in several places like Vizhinjam and Poovar. Beautiful while alive in deep waters with its striking blue colour, triggerfish turns black when it dies.

Kerala: Fish farms have become a model for ecotourism


When Matsyafed introduced eco-tourism projects in its fish farms in 2010, there were several doubts whether farm tourism has any potential in Kerala. However, now these fish farms have become a model before private and government entities on utilising the full potential of farm tourism in the state. Matsyafed offers eco-tourism packages at its fish farms located at Njarakkal and Malipuram in Vypeen island in Ernakulam district and Palaikari in Kottayam district. Njarakkal and Malipuram fish farms have become a popular hangout place for Kochi residents. While people from Kochi and Kottayam also visit Palaikari fish farm to enjoy the boat ride in the Vembanad lake. “As the people do not have time to travel to Munnar and Thekkady for one-day holiday, they come to our fish farms.

We have various attractions at the farm, including speed boats, pedal boats, traditional rowing boats and boats in the shape of a basket, fish jumps, kayaking, angling and cycle boats. Tourists are provided with breakfast and lunch at the bamboo hut constructed in the middle of the fish farm surrounded by water. We also have a tree house at the farm. So the tourist coming in the morning can spend time till evening. We also provide lunch and tea here which are part of the package,” said Nisha P, manager of Njarakkal fish farm. The Njarakkal fish farm has been operational for the past 10 years, and it was turned into an eco-tourism centre three years ago. Located 14 km from Kochi city, the 45-acre area was converted into three ponds to nurture various varieties of fish, including thirutha (grey mullet), karimeen (pearl spot), poomeen (milkfish) and tilapia.

According to Nisha, in the current fiscal more than 40,000 tourists have visited Njarakkal fish farm. This has happened when Ernakulam district witnessed the worst flood during the Onam season. “In fact, we expected a low number of tourists in the current financial year. The farm is mostly visited during the season starting from Onam to January. Due to the flood, the number of
tourist during the season time was low. However, it was quite surprising that people started coming to the farm in numbers in the past three months and due to which the tourist arrival at the farm has overtaken the arrival recorded in the last financial year. We are expecting a good number of tourists during summer vacation,” she said. As these farms are becoming popular among tourists, Matsyafed has introduced new packages - Pravahini and Bhoomika - connecting three farms.

**Kerala: Divers discover wreck of vessel near Vizhinjam in Kerala**


Divers have discovered the wreck of a vessel, reportedly Iranian, which sank off the Thiruvananthapuram coast during Cyclone Ockhi in 2017. The announcement was made by Friends of Marine Life (FML), a Valiyathura-based research forum, whose divers and those of SCUBA Cochin made the discovery. The submerged wreck was discovered on the seabed near Poonthura, although the vessel sank further south near Vizhinjam, FML convener Robert Panipilla said. Strong undercurrents in the region are believed to have dragged the wreck northward. Earlier attempts made by the owner to trace the sunken vessel with government help had not succeeded, according to Mr. Panipilla and Justin Jose of SCUBA Cochin.

The wreck has now been discovered at a spot 2.5 km west of the Poonthura church. Here, the water is 36 m deep, according to estimations made by the divers. Ghost nets Listed to one side, the wreck has run aground on the seabed with its bow facing southeast, according to Mr. Panipilla, who was also one of the divers. The mast of the vessel, however, appears to be intact, rising up to a height of five metres. But the divers could not enter the vessel that is covered by ‘ghost nets’ — fishing nets abandoned or lost in the sea that continue to be a threat to marine life. On the other hand, the divers noted the presence of different species of fish around the wreck.

**Kerala: Strategic plan to revive flood-hit fisheries sector**


A Kerala State Strategic Plan is on the anvil to give thrust to the fisheries sector that is slowly recovering from the double whammy of Ockhi and floods. The plan that envisions sustainable development of the sector with a three-phased approach also aims to boost the state’s contribution in the field of aquaculture. The proposed plan will be chalked out as part of the Rebuild Kerala Development Programme that outlines a road map for rebuilding the flood-hit state. “Cyclone Ockhi followed by the floods had affected the fisheries sector severely. But it was the floods that caused extensive damage to the sector as inland fisheries and the aquaculture sectors were badly affected,” said a Fisheries Department officer. According to the officer, the said plan was devised based on the understanding that only a strategic plan with a phased approach could rescue the sector from the current stagnation.
While short-term measures will focus on the revival of aquaculture and fisheries system and cleaning of water bodies, the medium-term will give priority for strengthening the Kerala Inland and Aquaculture Act, development of fisheries co-management in the marine sector, systematic management of aqua farms, and others. At the same time, in the draft Rebuild Kerala Development Programme, it has been proposed to introduce modern fish culture-cum-capture technologies in 47 reservoirs. There are also proposals for introducing the system of artificial reefs in feasible areas along the coastline as they can enhance per capita fish catch, setting up 50 hatcheries along the coastline, introducing year-round production model using fish prawns, promoting open ocean aquaculture, promoting Bio-flac (a protein-rich macro-aggregate of organic materials and microorganisms), encourage fish production along with paddy production and others.

The floods had resulted in the aggregate loss of `10,304 lakh in aquaculture and inland capture fisheries. More studies The draft also proposes certain studies including data on water bodies available for aqua farming, detailed study on various aspects like basic human needs, coastal infrastructure, social security, disaster management and others by Tata Institute of Social Sciences (TISS), Mumbai, and Institute of Rural Management Anand (IRMA). It also proposes studies on strategies to increase visibility of the inland capture, disaster response and impact of the exotic fishes released to the open water system from the aquaculture farms due to the floods.

Kerala: Women soar high in fisheries sector


From the deep sea-fishing Rekha Karthikeyan near Chettuva to mussel farming Praseela Shaji at Moothakunnam, there is in these women a spirit of determination and readiness to take on the challenges of life in their battle for survival. If you thought fishing came easy to these women entrepreneurs living close to the sea and backwaters, it is not true. “It was so frightening initially,” says Ms. Karthikeyan, about her first venture into deep-sea fishing. “But the fright did go away. I was never intimidated,” she adds. She has been recognised by the Central Marine Fisheries Research Institute as the lone woman in the country actively engaged in deep-sea fishing. She and her husband Karthikeyan use their boat for fishing ventures on a daily basis. The couple with four children, routinely take to the seas to feed the family.

Undeterred by deluge For Ms. Shaji, the mid-August 2018 flood was a life-changer. It threatened to derail her life. The floodwaters washed away the mussel farming ventures of dozens of women entrepreneurs like her. While some of them gave up, she did not. Ms. Shaji her friends have put the pieces together and is now fast on the road to achieving normality in mussel production. The major fishery based micro-enterprises being taken care of by women self-help groups include bivalve farming (mussel and edible oyster culture), seaweed culture, ornamental fish culture,
cage culture, Chinese dip-net units, fish amino acid units, fish fertilizer units, clam processing, fish drying, fish pickling, ready-to-cook and eat fish products, aqua-tourism, seafood kitchen units, dry fish procuring, fish vending, prawn culture, crab processing, aquaponics and fish feed production, says a CMFRI scientist.

Kerala: Coastal Pallithottam fishers oppose eviction


While people of Alappad are on a hunger strike against illegal sand mining, another community along the Kollam shore is struggling to protect their land. The residents of coastal Pallithottam who mostly live in fishermen colonies close to the port now face the threat of eviction in the name of development without any alternative. The government has already initiated works to construct a cement terminal, waste treatment plant, natural gas unit, and tourist facilitation centres on the 33.98 acres of land adjacent to the port. These are people evicted from Kollam - Eravipuram areas some four decades back during the construction of the port complex. "The demand was to construct a fishing harbour for the traditional fishermen, but disregarding their concerns the port for cargo transport and tourism was set up then," said Samson Johny, secretary, Theera Desa Avakasha Samrakshana Samiti.

The people lost their shore and were evicted, which forced them to move on to Pallithottam where colonies were set up. The fishermen have conserved the remaining land area close to the sea for various purposes including securing their fishing equipment. Several people are yet to be rehabilitated. While the authorities proceed with their project for commercial complexes, no studies on environmental impact have apparently been conducted in the area chosen for construction. The development of the port demands extensive dredging that might also affect the existence of fishermen colonies along the shore, the Samiti alleged. In the land records, the state has allegedly altered the land title from 'coastal poramboke' to 'government poramboke' in a suspicious move to grab land from the possession of fishermen community.

This is also a violation of 'voluntary guidelines for securing sustainable small scale fisheries in the context of food security and poverty eradication' - VGSSF norms passed by the United Nations in 2015. The residents demand the cancellation of GO 447/2018 based on which the 33.98 acres were handed over to the port authorities by the revenue department. As these people face the threat of another eviction, fishermen residing in colonies in Port Kollam - Pallithottam areas have not yet been issued with title deeds for the land they pay land tax for nearly two decades.
Kerala: CMFRI teams up with Korampadam Co-op Bank to promote cage fish farming


In a major effort which is beneficial to hundreds of families in Kadamakkudy panchayat, the Central Marine Fisheries Research Institute (CMFRI) has partnered with the Korampadam Service Co-operative Bank, Kothad, to promote cage fish farming in the backwaters of the panchayat. In a joint initiative aimed at helping the villagers become small-scale entrepreneurs through cage fish farming, CMFRI and the bank conducted a skill development programme to train them in practicing the less-expensive farming method. As many as 114 villagers attended the training that covered various stages of cage fish farming, such as cage fabrication, site identification, species selection, feed management, harvest and marketing. Visits to cage farming sites and practical training were also included in the three-day programme.

In a further step to promote the cage farming enterprises in the backwaters of the panchayat, CMFRI will offer all the technical guidance to the villagers, while the bank will give them loans as initial capital to carry out cage fish farming. “CMFRI would extend technical support to the farmers in each phase of the cage farming process to empower them to become entrepreneurs in the field,” said A Gopalakrishnan, the institute’s director, adding, “This will act as a source for additional income to the fishermen, and it will help increase the domestic fish production as well.” Species such as cobia, seabass, snappers, mullet and pearl spot will be used for cage farming.

The collaborative programme has been linked with CMFRI’s ongoing project, which was launched last year and aims to train 5,000 fishermen across the country in practicing cage fish farming with the financial assistance of the National Fisheries Development Board (NFDB). “The CMFRI has so far trained 2,500 fishermen all over the country, and about 2,500 cage fish farming units are currently operational across the coastal states under CMFRI’s technical guidance,” said Dr Imelda Joseph, head, mariculture division, CMFRI. CMFRI is also part of a joint initiative with NFDB to set up 500 cage fish farming units in Kerala by providing technical as well as financial aids to the fish farmers.

Kerala: Periyar pollution killing our livelihoods, say fishers


Foreseeing a threat to their livelihoods due to the unabated pollution of the Periyar, fishermen from Varappuzha have made it clear that they will be left with no choice but to end their lives if the condition does not improve. Worry was writ large on the faces of more than 150 fishermen from the region who marched on the State Pollution Control Board (PCB) office at Eloor from
the nearby Companypady Junction on Thursday. They were protesting peacefully against the dwindling catch and fish kill caused by the rampant pollution of the river. Raising slogans such as ‘Free the Periyar from pollutants’ and ‘Let us live’, they stopped at the entrance to the PCB office, after which fishermen and members of the Bharatiya Mazdoor Sangh (BMS) spoke at length about problems facing fishers.

They highlighted issues with shrimp and fish farms taken on lease by fishers from pokkali farmers. During the six-month period, water from the Periyar flows into the pokkali fields, nourishing small fish, crabs, and shrimp harvested by fishers. “Crabs and shrimp die after water released from the Pathalam bund flows in. All that remains are just shells,” said Venu C.S., 58, a fisher. Most families pledge their homes and property to take paddy fields on lease, and a poor harvest of fish, crabs, or shrimp puts their livelihoods in jeopardy, said K.C. Rajan, vice president of BMS, Varappuzha unit. He added that health issues were also a matter of concern. “Fishers use several methods to catch fish, and there are a few who submerge themselves in the water for the purpose. But of late, the water has been causing skin infections necessitating medical treatment,” he said. While fish catch slumped due to the polluted water, the floods in August last year made the situation worse, added Mr. Venu. Incidentally, debris that came along with the floods has accumulated in the backwaters, making it shallow. As a result, nets cast also get damaged.

“The Periyar has become a stage for pollutants to be dumped. The PCB should prevent industrial units from dumping hazardous pollutants into the Periyar,” said BMS district chief P. Jayaprakash. After the two-hour-long protest, BMS members submitted a written request to the PCB office to look into the matter. Meanwhile, environmental engineer Sreelekshmi P.B. said the PCB had not been informed of the issue at all, and that it was not aware of the impact of pollutants in the backwaters and the stretches further downstream of the river. However, she added that the request would be forwarded to the higher authorities for immediate action. “A detailed study will be necessary to assess the issues,” she said.

**Kerala: Fisheries control room inaugurated**


Fisheries minister J Mercykutty Amma inaugurated the new building complex for fisheries training centre and fisheries control room here on Thursday. The minister said all information on fishermen venturing out to sea would be available that once the centre becomes operational. The minister also urged the fishermen to make use of biometric cards and Sagara mobile app. The government has set aside an amount of Rs 1 crore as insurance premium, she said. The minister also distributed certificates for 40 fishermen of sea rescue squad who returned after completing training in Goa.
Kerala: The catch is linked to climate!

https://timesofindia.indiatimes.com/city/kochi/the-catch-is-linked-to-climate/articleshow/68211586.cms

The fluctuations in oil sardine landings can be connected to the El Nino phenomenon in Indian waters. After every El Nino year, there has been a drop in fish catch, despite environmental and exploitation factors, said a study conducted by the pelagic fisheries division of central marine fisheries research institute (CMFRI) titled Enigmatic Indian Oil Sardine. Oil sardines roughly account for 17-20% of the total marine fish landings. At the national level, it is the top ranked species in terms of ‘landing volumes’ in most years. Among marine fishes, its importance – as a favoured fish and rich source of fish oils – creates a unique position for oil sardine in terms of economic value. It is prone to sudden volume fluctuations that makes it an enigma to researchers and fishermen, said the study. If the catch peaked in 2012, the slump began after 2015. Fishermen and researchers added the fish has now become smaller. “It has always recovered every few years.

As CMFRI develops fisheries management plans for maritime states, it has become important to record all aspects of this species. After the compilation of an annotated bibliography on oil sardine and a national level stock assessment published in 1992, several changes have taken place in the distribution, utilization and marketing,” said EM Abdussamad, principal scientist, CMFRI. One of the changes noted was the link between catch and climate. On analyzing the data on catch fluctuations over the past 60 years, the study found a co-relation between the two. When India recorded a huge catch of 7.20 lakh tonnes of oil sardines in 2012, the figure in Kerala – which incidentally was the largest producer and consumer of the fish – was 4 lakh tonnes. A gradual decrease was recorded in landings in the following years owing to the development of El Nino. The first sharp decline was around 46,000 tonnes in 2016 following a strong El Nino year in 2015.

As the intensity of El Nino decreased, the catch increased in 2017. He said the catch in 2018 was low. The climate prediction centre of national oceanic and atmospheric administration – an international agency focusing on the conditions of oceans – warned in December 2018 that El Nino is expected to strengthen in the coming seasons. World Meteorological Organization and India Meteorological Department have stated that 2019 may be warmer due to El Nino and global warming. Interestingly, sardines caught across the country have a different flavour and hence the taste varies across coastal states.

Kerala and Karnataka like their sardines fresh and even dry. But for the rest of India, sardines are fishmeal. They now send it to Kerala and Karnataka because of the fall in catch down south. There are three variants of oil sardines. Variant one is the normal sardine. Variant two is leaner and abundant along the east coast. Variant three is bigger in size and comes from Oman and are
caught off India’s northwest coast. Since 2019 is expected to be an El Nino year, the study said that the biological cycle of this fish will be easily disturbed. “The impact of El Nino is more evident along Kerala’s coast. Hence, fluctuation in catch is high along southwest coast,” he added.

Kerala: 231 families get new houses under Care Home project


As many as 231 families, who lost their houses in the August floods that battered the state, were given newly-constructed houses by the government. The keys of the houses, provided under the Care Home scheme of the cooperative department, were handed over to beneficiaries at functions held simultaneously in all 14 districts in the state on Tuesday. Chief minister Pinarayi Vijayan inaugurated the programmes in the state capital, where 16 beneficiaries received the keys of new houses from him. The construction of 231 houses was completed in three months' time. Cooperation minister Kadakampally Surendran, who presided over the function held here, said the target of the department was to complete 2,000 houses by April.

"Once that is achieved, we will think of taking up the work of another 2,000 houses under the Life Mission, the flagship housing scheme of the government. The successful completion of the first phase of the Care Home project shows how the strength and trust of cooperative department can be channelized towards the larger good of society," he said. The Care Home project was announced by the chief minister at Chengannur in December last year. The cooperative department contributed Rs 4 lakh while state disaster management authority put it Rs 1 lakh for each house. In some areas, fund mobilised locally was used additionally for houses with more facilities. MLA V Joy, state cooperative union convener Koliyakode Krishnan Nair, state cooperative bank MD E Devadasan and cooperation department secretary Mini Antony spoke at the function.

New housing projects for fishermen: In another function held later in the day, Vijayan launched two new housing projects for fishermen at Valiyathura and Beemapally. The apartment complexes, which will come up on 32 cents at Beemapally and 294 cents at Valiyathura, will be used to rehabilitate fishermen residing coastal areas facing the risk of coastal erosion. Fisheries minister J Mercykutty Amma said the target is to complete the housing complexes within a year. A total of 168 families could be rehabilitated once the projects are complete.

Kerala: Fishers’ union alleges neglect by Union government

The Kerala Matsya Thozhilali Aikya Vedhi has protested against what it called the neglect of the State’s marine fisheries sector by the Union government in its implementation of the deep sea fishing policy. The fishers’ union has said while Kerala had submitted a Rs. 7,340 crore package for the marine fisheries sector in the State in the aftermath of the Ockhi cyclone in 2017, it was sanctioned a tenth of the money (Rs. 74 crore), whereas the Union government had accorded preferential treatment to Tamil Nadu. While welcoming last week’s delivery of the first batch of deep sea fishing vessels by the Cochin Shipyard to fishermen in Tamil Nadu, the fishermen’s Aikya Vedhi said Kerala was being punished for its consistent stand against foreign trawlers. The fishers’ union also called for a strong protest against the Union government stand. State’s demand Kerala had demanded that the Union government provide a total of Rs. 600 crore for 500 boats costing Rs. 1.20 crore each in the wake of the Ockhi cyclone.

However, it went on to sanction only 1% of the total money requested by the State. The scheme submitted by the State government included 28 fishermen’s villages, which were identified to have expertise in deep sea fishing. The scheme proposed building deep sea fishing boats and handing them over to cooperatives in these fishing villages. But, the Union government went ahead to build boats and handed them over to private individuals in Tamil Nadu. Meanwhile, the Kerala fishers’ union has welcomed the move to provide locals with expertise in deep sea fishing and reiterated that the union had consistently opposed surrendering India’s deep sea resources to foreign trawlers.

Kerala: Warming waters heat up fishing costs along India’s Malabar Coast

http://news.trust.org/item/20190225015410-xjr1b/

Thankachan Polayalil has been a fisherman for 42 of his 65 years, long enough to remember when fish were visible from land, brimming just beyond the palm trees of the Malabar Coast. Now his boat is equipped with an echolocation machine, but fish still are hard to find – and the catch isn't nearly as diverse. The anchovies are gone, and the mackerel now often swim in deeper water, making them harder to snare. Joy Valiaparinb, another fisherman at Chellanam Fishing Harbour, said he regularly pushes off at 2 a.m., knowing it can now take hours just to spot fish. Often, according to fishermen along India's southwestern coast, they find nothing. Climate change is making an already difficult search for fish harder, according to scientists at the Central Marine Fisheries Research Institute (CMFRI) in the nearby city of Kochi. Fish populations are always shifting, sometimes drastically, and overfishing has emptied waters once teeming with life, they said.

But as climate change has warmed India's coastal waters by more than half a degree Celsius over the past three or four decades, scientists say, fish populations have sought cooler waters - often away from where fishermen are used to finding them. That has forced fishermen to spend even more on nets, fuel and ice to keep fish fresh as they spend more time at sea. They stay afloat only
because fish prices are rising as shortages grow, and they can find a market for almost anything
that shows up in their nets, they say. Sardines on the Move On a January morning, the Chellanam
Fishing Harbour beach is strewn with silvery oil sardines piled into red and yellow baskets. It's
evidence of a good catch, something now relatively rare.

Traders heave boxes of fish into the back of yellow trucks, to set off on the jostling journey to
buyers. Fishermen say sardines are a favourite because the fish is popular and relatively
affordable for buyers. "Even if other fishes are there, (fishermen) always say if oil sardines aren't
there, there is a shortage of fish," said P.U. Zacharia, a CMFRI principal scientist with expertise
in climate change and marine fisheries. Oil sardines used to swim in India almost exclusively
around the Malabar Coast - but climate change has pushed them east and northeast, into waters
around Mumbai and Kolkata, scientists say. Fish all over the planet are migrating toward the
globe's poles, often seeking the cooler water they are used to as the ocean warms, the scientists
say. With buyers in Mumbai, Gujarat, and West Bengal not as used to eating oil sardines, the fish
caught there are often shipped south, losing value and freshness in transit, Zacharia said.

Fishermen are also struggling to catch mackerel, another long-time staple. More mackerel are
now found at depths where the water is cooler, forcing fishermen on days-long trawling
operations that require expensive nets, more manpower, more fuel, and more ice to keep the fish
fresh. One fisherman, from the coastal city of Kanyakumari, said fuel for an average trip has
risen from around 70,000 to 200,000 rupees ($980 to $2,800) over about the last seven years.
Mijeesh Xavier, a fish trader along the Malabar Coast who serves as a middleman between
fishermen and buyers, says he has felt the sardine shortage in rising prices. As other traders
showered boxes of sardines with crushed ice, he said that just three or four years ago a box of the
fish went for 1,500 rupees ($20). Now, he said, the same box costs 5,000 rupees ($70). The
Malabar Coast's oil sardine catch declined through the 1970s and 1980s, according to data
provided by Zacharia.

It rebounded in the late 1990s, but has again fallen since 2012. Finding a way Forward When
fishermen throughout India pull up a trawl net, about 15-20 percent of what they get is
considered "bycatch" – less valuable species they weren't looking for, according to CMFRI
principal scientist Shyam Salim, who has studied climate change and vulnerability in India's
coastal communities. But with more valuable species disappearing, the market for bycatch is
expanding, he said. "Now there is no fish being wasted," Salim said. "Everything which lands
will be getting a small value or another." Fishermen often sell bycatch to be ground into animal
feed, and higher fish prices have helped many fishermen maintain their income, Salim said.

The unlucky ones have been forced to buy food, nets, and new boats with loans from money
lenders that they then struggle to pay back, according to National Fishworkers Forum General
Secretary Thomas Peter. Fishermen in Kerala mostly don't have other skills to bring in an
additional income or to land another job, Salim said, though some are farming fish for extra
money. As of 2016, according to Zacharia, the number of regional fishermen had fallen to 130,000 from a height of 145,000. The younger generation has skills their parents lack, and many have bypassed the industry for white collar jobs in the city, Salim said. To help fishermen get through the year, the government now provides supplemental food during the monsoon season when trawling is banned, he said. Fishermen can also earn income through a yearly program in which the state and central governments match savings contributions fishermen make.

Hoping to help fishermen adapt to changing conditions, CMFRI scientists are beginning to model the ways climate change may influence the movement of sardines, mackerel, and several other species in decades to come. They hope their models will predict the size and species of future catches so fishermen will know what to expect. But as increases in climate-changing emissions drive higher temperatures, fisheries are likely to see continuing change, scientists warn. "I think there will be no such thing as an equilibrium," said Greta Pecl, a climate change ecology specialist at the University of Tasmania. "Not for our lifetimes."

Kerala: To get first marine ambulance in a year


The State Fisheries Department will soon get three marine ambulances to extend a helping hand to the fishermen at distress in sea. Fisheries Minister J Mercykutty Amma on Monday cut the steel setting of the work for construction of the first of three marine ambulances being built by Cochin Shipyard for the Fisheries Department. Each marine ambulance will cost Rs 6.08 crore. The north, central and south region will get one ambulance each. The BPCL will bear the expenses of one marine ambulance from its corporate social responsibility fund and the Cochin Shipyard will bear half the expense of the second ambulance. The Fisheries Department will contribute Rs 2 crore from its plan and Rs 7.12 crore will be sourced from the Chief Minister’s Disaster Relief Fund. These ambulance boats will have an approximate length of 22.5 m and a beam size of about 6.0 m.

The modern vessel, designed in-house by the shipyard will be of high quality and fuel efficient that can reach a maximum speed of 14 knots. Earlier, IIT Madras had conducted Computational Fluid Dynamics (CFD) analysis and model test to optimize fuel efficiency and firming up the powering requirement. To improve ergonomics and layout, 3-D modelling has been done," said Shipyard spokesperson V Kala. The vessel will be able to accommodate two patients and will have a crew capacity of 7, including the paramedical staff. The vessel will also have various paramedical facilities like examination and nursing room, medical beds, mortuary freezer, refrigerator and medical lockers. There will be a Jason’s cradle to safely rescue people from sea. The first vessel will be ready for delivery by November, 2019.
A team of UK experts are working on enhancing the reach of a radio service to help fishers in India's southern Malabar Coast make more accurate and accessible marine weather forecasts, which would help save many lives in the region. Radio Monsoon, an outcome of University of Sussex's Sustainability Research Programme, is hoping to graduate from a station operating on a shoestring budget to a fully-equipped studio this year. It is designed to ensure safer working conditions for the thousands of fishing families in Thiruvananthapuram, Kerala. The university team, led by anthropologist professor Filippo Osella, involved geographer Dr Max Martin working with artisanal fishers in Thiruvananthapuram, to convert their small tech experiment into a weather knowledge co-production tool.

Martin lived in the fishing villages, conducting interviews, holding focus groups, and tracking boats, and realised that the fishers are the best people to learn from in order to improve forecasting. "We found that there is often a gap between what marine weather forecasters provide and artisanal fishers accept as useful information to decide whether or not to go to fish. To fill this gap, the forecasters need to listen to the fishers," Martin said. He concluded that forecast dissemination needed to be easily accessible in local languages to the last mile through different media, as well as precise, clear, timely and locally relevant and actionable. "All this requires team work involving forecasters, media, local popular science groups and forecast users," he said. As a result, the team decided to set up a weather radio station using Sussex Innovation funding and hope to have Radio Monsoon's proper studio up and running by May, before the rains start this year.

"Extreme weather events which have affected the south-west coast of India during the last months have made it apparent that accurate and timely weather forecasts are of crucial importance for ensuring the safety of the local population. "Our research has focused on fishing communities in south Kerala, and suggested ways to improve risk communication by promoting the coproduction of weather bulletins with fishers and forecasters. The persistence of weather-related accidents calls for urgent action to provide artisanal fishers with accurate, accessible, and actionable forecasts as a means to foster safety at sea," said professor Osella. The South Indian region is marked by high ocean waves, sudden variation and uncertainties of weather cause many accidents. Of late, there has been a trend of extreme events in the Arabian Sea, as marked by the 2017 Cyclone Ockhi that killed 162 fishermen from Kerala and 203 from Tamil Nadu.

The shaken fishing communities blame the lack of timely forecasts for the casualties. University of Sussex said the fishers of the Arabian Sea were engaged in one of the world's most dangerous and precarious jobs, which makes detailed, timely and precise forecasts crucial for them.
However, beyond the range of mobile phones, there is no way for them to receive weather warnings or communicate distress signals. They feel pressured into fishing in bad weather because during the Monsoon, fish are more abundant and competition is less as trawlers are banned.

The radio station is a means of getting accurate information to them well in time. Radio Monsoon is run on the ground by a local society based in a fishers' village, and supported by a few individuals involved in weather-related research, media work, and cultural/social work on the coast of Thiruvananthapuram. The forecasts are given online, over social media, and over free phone calls supported by the Delhi Indian Institute of Technology spawned company Gramvaani. The sound editing comes as a sponsorship from Hindenburg Systems. The University of Sussex project, which also involves co-investigators Dr Pedram Rowhani, Dr Kate Howland and advisor Professor Roderick Stirrat, led to tech tests for the station being done in 2014 and work continuing for a year on a "test basis". Regular operation began properly in 2017 and the station has been giving daily marine weather forecasts ever since, except on fishing days off. Radio Monsoon, which has operated just as a laptop linked to a remote phone server in Delhi, is now set for a proper equipped studio base.

**Kerala: MPEDA starts supply of high-health tiger shrimp seed from Vallarpadam**


Marine Products Export Development Authority (MPEDA) on Monday started supplying high-health black tiger shrimp seeds from its new Multispecies Aquaculture Complex (MAC) at Vallarpadam. The inaugural sale of the seeds was done by MPEDA chairman K S Srinivas by handing over one lakh of them to former Kerala Director-General of Police Hormis Tharakan, who is also a progressive shrimp farmer. MPEDA, a statutory body under the Union Government’s Ministry of Commerce & Industry, has developed these seeds with the help of its research wing, Rajiv Gandhi Centre for Aquaculture. On Monday’s function here, Srinivas noted that lessons from the international market had prompted the MPEDA to promote the production of black tiger shrimp in Kerala. Substantiating, he said black tiger was the dominant cultured shrimp in India till a decade ago.

In 2009, the country began experiencing non-availability of disease-free seeds of this species, prompting aquaculture farmers to shift focus to exotic vannamei species. “The dependence on one species, that too an exotic one, is not sustainable in the long run,” he pointed out. “Figures indicate that major vannamei-producing countries such as Thailand, Vietnam and China have that variety of shrimp facing serious disease problems during the past five years. This dwindles their contribution of shrimp in the international shrimp market.” To avoid any such situation in India, MPEDA has decided to encourage and expand the production of black tiger shrimp
endemic to South Asia. Production of Black Tiger can support the shrimp exports much more in the long run, Srinivas said. Of late, tiger shrimp’s higher price and increasing demand in the international market has led India’s farming community to restart farming of this variety.

To meet that, the country needs more disease-free seeds of Black Tiger. It is for this reason the MPEDA has developed its MAC at Vallarpadam Island here nine weeks ago, with black tiger shrimp as the main species for seed production. The MPEDA head said the nine-acre MAC will pave the way for the revival of black tiger shrimp farming in the country. In addition to this, the ‘7.26-crore facility has begun supplying fingerlings of other fish species such as GIFT, Asian seabass, Cobia, Pompano and Mud Crab. Since December last year, MPEDA supplied a total of over seven lakh fish seeds to farmers in Kerala. The MAC was opened on December 8 to facilitate production of safe seafood from disease-free breeds. Featuring a hatchery for black tiger shrimp and six nurseries, the state-of-the-art facility was inaugurated by Union Commerce and Industry Minister Suresh Prabhu.

Kerala: Twenty seven shipyards in the country will build around 800 boats in the coming yeas


Kerala’s loss is Tamil Nadu’s gain. A scheme initially proposed by Kerala to equip fishermen to take up deep-sea fishing is being implemented in Tamil Nadu by the Centre under its Blue Revolution Scheme. The Rs 200-crore sop has left Kerala’s Fisheries Department sulking. It was the state which first submitted the proposal in 2016 for a Rs 74-crore subsidised scheme to provide 47 deep-sea fishing boats to fishermen cooperative societies. The Centre rejected the proposal citing the high cost involved as the cost of each boat touched Rs 1.5 crore. Though Kerala submitted a revised proposal, the Centre is yet to respond. According to Fisheries Minister J Mercykutty Amma, Union secretary in charge of the Fisheries Department has assured to sanction Rs 16 crore under the scheme. “The Centre has allotted Rs 200 crore of the Rs 400 crore earmarked for the scheme to Tamil Nadu.

Though they assured to give 16 crore to Kerala, no fund has been allotted till date. This is a biased approach. It’s a politically motivated decision in view of the Lok Sabha elections,” she said. On Tuesday, Tamil Nadu Chief Minister Edappadi K Palaniswami will launch the first batch of four deep-sea fishing boats built by Cochin Shipyard. The scheme, aimed at discouraging bottom trawling in the coastal sea, comes with a Rs 40-lakh subsidy from the Union Government. The boats built as per the design created by the Central Institute of Fisheries Technology (CIFT) and fine-tuned by experts at IIT Kharagpur, cost around Rs 1.5 crore. As the Centre has directed to cap the price at Rs 86 lakh, the Cochin Shipyard is digging into its own Corporate Social Responsibility fund to meet the expense for the first batch of 16 boats. CIFT
scientists said the Centre has accepted the design developed by it to standardise the fishing boats’ specifications.

Twenty seven shipyards in the country will build around 800 boats in the coming years to encourage fishermen take up deep-sea fishing in a big way. Tamil Nadu is providing a subsidy of Rs 16 lakh for each boat and has arranged soft loans to the tune of Rs 30 lakh per boat to empower the fishermen. Around 350 fishermen in four coastal districts of Tamil Nadu have registered under the scheme expressing willingness to replace their trawler boats with the new deep-sea boats. “The Centre has given preference to Tamil Nadu in view of the stand off between the fishermen of that state and Sri Lanka over the exploitation of marine resources in the Palk Bay. It’ll be extended to all coastal states in near future,” said CIFT principal scientist Leela Edwin. Longlining is a passive fishing technique that involves use of long mainlines and branchlines with baited hooks.

As bottom trawling destroys the marine ecosystem, many countries have banned it. India too has decided to regulate fishing practices. The Cochin Shipyard has completed sea trial of two boats and four boats are ready for delivery. While there are no standard specifications for boats built by local boat builders, the new design will set the standard for deep-sea fishing boats. The hull and deck are made of steel, which makes them strong and sea-worthy. It is 100 per cent watertight and has bunkers for eight crew members. Ergonomically designed, the boats have hydraulic steering wheels, customised winches and bio toilets. The diesel-powered boats can achieve eight knots speed and are ideal for three-week long fishing expeditions. It has an insulated stainless steel fish hold and refrigerated sea water system.

Kerala: Fishers see a threat to their livelihoods

https://www.thehindu.com/news/cities/Kochi/fishers-see-a-threat-to-their-livelihoods/article26273922.ece

While the Periyar flowed in stripes of black, fisherfolk downstream of the Pathalam regulator-cum-bridge in the Periyar near Moolampilly claimed that the continuous pollution of the river had been affecting their only source of livelihood. “We know it when the shutters at Pathalam are opened,” said Sasi P.P., a fisherman who uses cast-nets (veeshu vala) to catch fish downstream. “Fish disappear, and we are not able to get any significant catch.” A shutter of the Pathalam regulator-cum-bridge was last opened on Tuesday. And his catch over Wednesday night and early Thursday morning amounted to not even ?300, Sasi claimed. On other days, each fisherman obtains a catch worth more than ?1,300, he added. Silver bellies (Kara), which are grown in farms along with shrimps, have been showing stunted growth, he claimed.

According to Stanley D’Silva, who has been fishing in the Periyar for the last 18 years said wounds were also common in tilapia and pearlspot. And yet, these changes, including the dip in catch, are not new, he added. “We have been seeing a fall in catch for over 10 years now. As a

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result, no one wants to take up fishing any more,” he said. Most youths are nowadays opting for other jobs. Moreover, the floods have made the situation worse, D’Silva added. “River beds that offered refuge and habitat to fish that prefer lower depths were damaged by the floods. Crab, pearlspot and orange chromide [pallathi] are some of the most affected fish varieties, and it has hit us badly,” he lamented.

Kerala: Action against those who violate fishing norms: Kerala minister


Fisheries Minister J Mercykutty Amma on Wednesday declared unequivocally that stringent action will be initiated against boat owners who violate fishing norms. However, the minister, who held talks with representatives of fishermen and boat owners on Tuesday, told Express the government will allow 40 per cent juvenile fish in the catch, as recommended by the Central Marine Fisheries Research Institute. “There has been an increase in catch during the past two years and we suspect that the increase in juvenile fishing has contributed to the change in trend. The government will enforce the restrictions in juvenile fishing and impose a fine of Rs 2.5 lakh on the boat owners violating the norms. We rejected the boat owners’ request to reduce the penalty as it will only encourage juvenile fishing. However, complaints regarding harassment by officers will be looked into,” she said.

No unregistered boat The minister said no unregistered fishing boat will be allowed to operate along the Kerala coast after June 2019. “The recent incident of human trafficking is causing concern and we have decided to ensure strict vigil to avoid such incidents in future. All fishing boats should be registered before June 2019 and no new registration will be allowed after the cutoff date. The owners should sell the fishing boats only to fishermen, and the details of the new owner should be handed over to the authorities concerned,” said Mercykutty Amma. Meanwhile, the Fishing Boat Owners Coordination Committee has convened a meeting on Thursday to discuss the government decision to strictly implement the fishing laws and to decide on the future course of action.

“Representatives of Boat Workers Association, Seafood Exporters Association, loading and unloading workers and auctioneers at harbours will participate in the meeting. The meeting will be held at Munambam Auction Hall at 3 pm on Thursday,” said chairman P P Gireesh. Fishermen unions, however, have urged the minister not to give in to the pressure tactics of the boat owners, who threaten indefinite strike. “While the traditional fishermen have been following self-regulation for the past three years to ensure sustained fishing, the mechanised boats are continuing with their destructive fishing practices. They are using pelagic fishing nets and the trawlers are fishing in coastal waters violating norms. Many boats are using nets with smaller mesh size to catch juvenile fish and they are violating the ban on light fishing,” said Matsya
Thozhilali Aikya Vedi president Charles George. - Register all fishing boats before June 2019 - No new registration after the cutoff date - Sell fishing boats only to fishermen - Stringent action against juvenile fishing - 40 per cent juvenile fish allowed in catch

**Kerala: Centre drops Ban on construction in the coastal regions of Kerala**


The state of Kerala will be experiencing more enhanced activities in the coastal regions where any kind of constructions of has been banned for several years. As the Centre has released the gazette notification on Coastal regulation zone (CRZ)-2018. However the state will have to ready coastal zone management plans (CZMP) for all coastal districts and local bodies that come under the purview of the notification, before planning any activity. It could also trigger environmental damage in the coastal region. “We have a lot of strict rules, but we are very poor in implementing them and this is what we will have to look into. But, how can it be done as KCZMA is poorly equipped without enough staff. Most members are nominated,” said senior scientist at National Centre for Earth Sciences KK Ramachandran.

Advocate S Sahasranaman, who is a legal expert on CRZ had said that, “Now, all of it has to be revised. Plans have to be made on a war footing as the notification clearly says that there is no implementation of the new rules without the plan.” The senior fellow at the Bengaluru-based Ashoka Trust for Research in Ecology and Environment Priyadarsanan Dharmarajan had said, “Already over 3,000 acres have been encroached upon in the past seven years, which has impacted the waterbody, marine life and also the wetland area.” One of the areas that has not been addressed is the private mangroves. Around 50% of the mangroves in the state comes under private property. “But the private mangroves don’t seem to attract the buffer clause and we in Kerala are also unaware of the total area of private mangroves here,” Ramachandran said.

**Kerala: New rules bring cheer to coastal residents**


Seventy-year-old Ashokan Erakandathil, an inland fishing farmer from Alappuzha, has been dreaming of constructing a house on the land he owns near Vembanad Lake for long. When approached the panchayat authorities to get sanctions for construction some years ago, they denied him permission citing Coastal Regulation Zone (CRZ) rules. The bank also refused a loan. Now, the relaxation of CRZ norms has brought cheer to Ashokan and hundreds of others. “We all welcomed the news with a sigh of relief. We hope that the new rules will be in place soon,” said Girija Ashokan, a fisherwoman from Kattachira. Of the total 71 panchayats in the district, over 50 share borders either with Arabian Sea or Vembanad Lake. Residents under these
local bodies have been facing several issues regarding renovation of existing buildings and construction of new ones due to the areas’ proximity to waterbodies.

MP K C Venugopal said hundreds of people had approached him and shared their decision to leave their old homes due to CRZ rules. “I have made a lot of efforts many times in the Lok Sabha to get the norms relaxed and it took four-and-a-half years to make an amendment. I had approached ministers Anil Madhav Dave (late) and Harsh Vardhan seeking relaxation in the norms and had raised the issue as submission in Parliament,” Venugopal said. However, fishermen organizations are apprehensive of the new relaxation. “In Alappuzha, around 60% of the coastal belt is in the hands of tourism groups. at the same time, residents occupy only 40% of the total land. With the new relaxation in rules, the tourism lobby may force the coastal people to leave their homes. We are planning agitations demanding special zone for the coastal people,” said Swathanthra Matsya Thozhilali Federation state general secretary Jackson Pollayil.

Kerala: Government eyeing huge increase in fish production: Minister

Kerala: Government eyeing huge increase in fish production: Minister


Minister for Fisheries J. Mercykutty Amma has said that the government is targeting a three-fold increase in domestic fish production. “The government has been implementing innovative projects to expand fish production. Projects worth Rs. 9.5 crore have been implemented in inland fisheries sector. The four hatcheries in the district could produce 2,50,000 freshwater fish seeds and 43,50,000 shrimp seeds. Kulathupuzha and Kanatharkulam hatcheries have already received Rs. 4.9 crore and Rs. 9.5 crore has been sanctioned for the second phase,” she said. The Minister was inaugurating the distribution of financial aid to fish farmers who suffered huge damages during the floods. Various freshwater farming projects implemented by the government with 40% subsidy had yielded 3766 ton fish so far, she added. As part of projects launched by the Fisheries department, all unused waterbodies in the district were being revived to promote fish farming.

“Muttathoru Meenthottam, open water ranching and cage farming will be extended to maximum area. 700 cage farming units have been sanctioned for the district,” she said. Inland farming Implemented in association with Agency for Development of Aquaculture, Kerala (ADAK) Muttathoru Meenthottam is a project recently launched by the department to promote inland fish farming. As part of the project farmers are provided with quality seeds and basic training in aquaculture. Fish farmers in the district had incurred huge losses in the floods and the Minister said a financial assistance of Rs. 11.7 lakh had been sanctioned for the 177 farmers who suffered damages. 68 others who lost the entire crop would receive Rs. 39.3 lakh as part of the revival package. M. Mukesh MLA presided over the function and Munroe Thuruthu grama panchayat president Binu Karunakaran and Fisheries Deputy Director H. Salim also spoke on the occasion.
Kerala: Kole paddy fields must be used as prawn farms: MPEDA


Kerala must use its sprawling ‘Kole’ fields as prawn farms, considering that these wetlands lie submerged under water for about half a year, the Marine Products Exports Development Authority (MPEDA) suggested on Monday. Such an initiative will work effectively in the coastal state that is endowed with water bodies and enjoys high domestic demand for prawns, MPEDA chairman KS Srinivas noted here at ASCEND Kerala 2019 meet, which aims to showcase Kerala as a top-notch investment destination. Fisheries and aquaculture remain important sources of food, nutrition, income and livelihoods for hundreds of millions of people around the world. Overfishing in India has pushed a number of popular target species to the brink of collapse in recent decades.

The state also has a strong segment of labourers with high technical expertise in prawn cultivation, he pointed out at a session titled ‘Opportunities in the MSME and Food Processing Sectors’ of the day-long event organised by the Kerala government’s Department of Industries and Commerce, Kerala State Industrial Development Corporation, Kerala Bureau of Industrial Promotion and Kerala Industrial Infrastructure Development Corporation. For better pisciculture, Kerala must emulate Andhra Pradesh by implementing a law that forbids use of antibiotics, the MPEDA chief said. Kerala’s fishing harbours warrant better infrastructure and such developmental projects can be carried out on PPP or BOT basis, he added. Indian fish landing touched an all time high of 3.94 million tonne in 2012 approaching the recommended potential of 4.4 million tonne from the Indian EEZ, officials said. India stands seventh with regard to marine capture fish production in the world and the sector supports four million fishermen population.

Kerala: Fisherfolk to protest


Dheevara Sabha will organize a one-day satyagraha in front of the secretariat on February 13 alleging that the state government was turning a blind eye towards the issues raised by the Sabha and fishermen community in the state. ‘Dheevara Sabha state general secretary V Dinakaran said on Tuesday that the state government is turning its back on the issues faced by the fishermen community in Kerala. “So, we have decided to stage a satyagraha from 10am to 1pm in front of the secretariat,” he said. According to the Sabha, the state budget did not give any consideration to the fishermen community. “The fisheries department and the state government are ignoring the demands of the Sabha. It should end,” Sabha leaders said. “The state government is ignoring the demands of fishermen such as curbs on mineral sand mining, utilization of sand of
Thanneermukkom bund, finding solution for sea erosion and rehabilitation of fishermen. This neglect forced us to start the agitation against the government,’’ he said.

**Kerala: State bid to reach out to fishers at sea through AM transmission**


After the introduction of satellite phones, now the state government is exploring the possibility of reaching out to fishermen through the medium wave transmission of the All India Radio. The state disaster management authority in association with the Coast Guard and AIR conducted a feasibility survey in the sea to check whether the medium wave signal of AIR is available up to 200 nautical miles in the sea from the coastline. “Since the survey found the medium wave transmission is available in the sea, the state government has sought the Centre’s permission to use the facility for reaching out to fishermen in order to provide regular update meant for fishermen, P H Kurian, former additional chief secretary (Revenue), told Express. “However, the Centre is yet to respond to the request of the state,” he said. According to a senior officer in the AIR, the AIR has four medium wave transmission centres in Thiruvananthapuram (20 kw), Alappuzha (200 kw), Thrissur (100 kw) and Kozhikode (100 kw) in the state apart from a transmission centre at Lakshadweep (10 kw). These medium wave transmission centres can together cover the entire coastline and a distance up to 200 nautical miles in the sea from the coastline in radial distance.

The AIR has also FM transmission centres at Kannur, Kozhikode, Manjeri, Devikulam, Kochi (two stations) Thiruvananthapuram apart from 17 private FM stations in the state. While comparing with the medium wave transmission centres, the reach of the FM stations is limited to 60 to 70 km in normal circumstances. Whereas, the medium wave signals can travel long distance in the sea even two-fold or three-fold, when compared to land, without any disturbance. In the normal circumstances, the AM stations which begin transmission by 5.50 am will continue till 11.10 pm. However, during the August flood, the AIR conducted 24-hour transmission to provide information to the people in the flood-affected areas. Earlier, the state government had distributed navigation gadget Navic and satellite phones to fishermen in order to better equip them at sea. Selected 1,000 fishermen who venture into sea beyond 36 nautical miles would be given the sat phones in the first phase, in association with BSNL which had agreed to provide the phones at a rate of Rs 94,261 per piece.

**Kerala: Fishers seek Central aid for livelihood**

Fishworkers under the banner of the Kerala State Matsyathozhilali Federation (CITU) took out a march to Raj Bhavan here on Saturday demanding increased share of Central assistance for welfare and livelihood support schemes targeting coastal communities in the State. CITU State president Anathalavattom Anandan inaugurated the march. Leaders of the federation said the NDA government at the Centre had suspended the assistance for housing schemes and construction of seawalls and harbours and slashed the quota of subsidised kerosene, forcing fishermen to buy fuel from the market at exorbitant rates. State president of the federation Koottayi Basheer and general secretary P.P.Chitharanjan were among those who addressed the march.

**Kerala: Government decides to insure fishers™ boats**


The rescue operation carried out by the state’s fishermen during the mid-August flood has been invaluable that the government decided to implement insurance scheme for traditional fishing boats. The government has set apart `1 crore for the project, for which the Fisheries Department has begun registration process. Fisheries Deputy Director (Marine) M Thajudheen said: “We’ve signed an MoU with the United India Insurance Company. The insurance is only for traditional boats which are below 16 metres in length. The government will pay 90 per cent of the premium, with the rest levied from boat owners. The vessel’s length will determine the premium.” Though the fishers have been demanding insurance for long, the state governments turned a blind eye to them.

The call turned louder after Cyclone Ockhi, but it took the flood to open the eyes of the authorities. The state government, which had paid compensation for the damage caused to boats involved in the rescue during the floods, now plans to give insurance support to around 1,600 boats in the first phase this year. All traditional fishing boats will be brought under the scheme in the next phase. Alappuzha-based traditional boat owner Antony Kurisunkal welcomed the move. There are more than 20,000 traditional fishing boats in the state and they suffer damage during natural disasters. The Fisheries Department doesn’t normally compensate the loss to fishermen. The insurance scheme, that way, would come as a huge relief to the fishermen,” said Antony.

**Kerala: Budget 2019 proposals on fisheries to boost seafood export**


The seafood industry expects the proposals for separate department for fisheries and the 2% interest subvention for fishery farmers to raise shrimp production and help in boosting the export. India was the top producer of aquaculture shrimps in the world last year with over 6 lakh
tonnes and its seafood export stood around a record Rs 45,000 crore in 2017-18. Separate department may help focus more on fisheries as at present it is clubbed along with animal husbandry and dairy under Agriculture Ministry.

It will help in quicker decisions at administrative level for fisheries and seafood being an export-oriented industry will definitely benefit,” said S Chandrasekhar, president of Society of Aquaculture Professionals. He said it has been a long-pending demand of the industry. We hope that there will be a secretary for fisheries under the department whom we will be able to approach directly. For instance, our demands like quarantine facility for aquaculture can be easily settled,” said V Balasubramaniam, general secretary of Prawn Farmers Federation of India. He said the 2% interest subvention for fishery farmers and 2% interest subvention for farmers affected by calamities will help the industry.

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

**Kerala: Budget allocates Rs 1,000 crore for coastal area development**


Praising the fisherfolks as Kerala’s own army, Finance Minister Dr Thomas Issac announced Rs 1,000 crore for various works at coastal areas and comprehensive development of fishermen communities. Presenting the State Budget 2019-20 in the State Assembly on Thursday, the Minister had a special word of thanks to hundreds of fishermen who rushed to the forefront of disaster to save the lives of their brethren who were trapped in the vortex of flood in the state in last August. While Rs 2,000 crore was earmarked last year, in the aftermath of Cyclone Ockhi, this year this will be expanded into a comprehensive programme in "Rebuild Kerala" and over Rs 1,000 crore will be spent on the development works in the coastal areas

**Kerala: Fishers told to stay off banned practices**


The Fisheries Deputy Director has given instructions to fishermen to stay off prohibited fishing practices as the department has imposed a strict ban on unscientific techniques impacting marine biodiversity. Use of LED lights, explosives such as dynamite, poisonous substances, pair trawling and banned nets will not be permitted as per Kerala Marine Fishing Regulation Act.
Legal action would be taken against those violating the ban and their vessels would be impounded, department officials said. Boats seized During a patrolling session on Tuesday night, marine enforcement had seized boats from Vaady, Moothakkara, Thangassery and Eravipuram for employing prohibited fishing techniques. The officials had strengthened surveillance following a tip off that artificial lights are being used to attract fish. Also seized They also seized batteries, lights, thermocol and other equipment during the inspection. “The monitoring will continue in the coming days and strict legal measures will be taken against owners of seized fishing boats,” said the officials.

Kerala: CIFT to help fishermen turn fish waste to feed


The Central Institute of Fisheries Technology (CIFT), engaged in fish harvest and post-harvest research, will deploy its newly-developed technology to teach fishermen to turn fish waste into poultry and fish feed. The Institute plans a series of training programmes for fishermen in the near future. The inauguration of the training with a live demonstration will be held at Thoppumpady harbour on Wednesday. K.V. Thomas, MP, will inaugurate the programme. The newly developed CIFT technology is aimed at attaining the twin goals of removing fish waste from fish markets and harbours and making value-added products out of the waste. The new technology, if properly executed, can be a boon to making fish markets and harbours clean. CIFT is planning to demonstrate the technology in more than 20 markets and fishing harbours across the country. Financial support for the training programmes is provided through the Union government’s Swatchathaa Action Plan.

Kerala: Rise in migrant fisherfolk at Munambam, a cause for worry


Despite local fisherfolk at Munambam throwing a vigilant eye around the area following the recent incident of human trafficking, the fluid population of hundreds of migrant fishermen to the harbour is posing difficulty. According to native fishing boat operators, about 90% of fisherfolk who work in the harbour are migrants. Boat operators have expressed their difficulty in maintaining proper records about their whereabouts on a regular basis because of the fluid nature of the migrant population. "There has been a steady increase in the number of migrant workers who engage in fishing from Munambam harbour over the past five years along with a dwindling population of native fishers", said K K Pushkaran, a boat operator at Munambam and vice-president of All Kerala Fishing Boat Operators' Association (AKFBOA).
Presence of a proper monitoring mechanism in the harbour might have averted the recent issue of human trafficking, he added. According to native fisherfolk, even owners of the boats are unaware about the identities of fishers who set out to sea. "Functioning of the harbour is quite similar to the ways in which migrant labourers are being hired for construction activities. To meet the count of fishermen required in the boat, migrant fisherfolk who would be present in the harbour are being hired for fishing and there is no guarantee that the same person would be coming to the same boat the next time," said AKFBOA treasurer K B Kassim. Despite the rule by the department of fisheries that identity proofs of fishers should be submitted at the department, fishing boat operators said that it was not being followed effectively in case of migrant labourers because of practical difficulties.

"A strict monitoring mechanism should be developed in the harbour," added Kassim. According to district fisheries department officials, if the mobile application 'Sagara', which was launched by the fisheries department throughout the state, was used efficiently, it could have helped in tracking fishermen who venture out into the sea. Sagara app, which was developed with an aim to monitor data of fishermen who venture out into sea, has provisions for fisherfolk to enter details about people onboard the boat. Fishermen can also enter the expected direction and distance the boat has set its course to. "Though about 1,300 fishing boats in the district have registered through the app, there are only a few who use it regularly before each fishing trip," said an official of fisheries department. The department has also been conducting classes among the fishers to give training on how to use the mobile application. "If the app is used regularly, it could provide a strong database about fishers who venture out into the sea," said the official.

Kerala: Soon, NaVIC handsets to bring fishermen under safety net


In an effort to improve the safety of fishermen and strengthen the capacity to reach out to them quickly in case of unexpected calamities, the Fisheries Department is planning to distribute around 500 NaVIC handsets, the regional satellite navigation system developed by the Indian Space Research Organisation (ISRO), among them. Though the equipment actually costs about ₹8,000, the fisherman will have to spend only ₹1,500 get it. Officials said the NaVIC handsets would help fishers get updates on extreme weather events with the support of regional control rooms and help rescue operators trace their location in case of rescue needs. It would also be helpful for fishers to get update on shoals, they added. The new device with bigger coverage area will help fishers overcome poor signal threat while using mobile phones. On such occasions, the mobile phones could be connected to the device using the bluetooth function.

The device was developed following a request from the State government after studying the impact of Ockhi-related calamities. A decision has also been taken to supply around 500 more
life jackets to fishers in Kozhikode district. Those who have already submitted their applications will get the jackets free of cost as part of the State-wide scheme. The distribution is likely to be completed within a couple of weeks. Biometric details As part of improving the security of fishers, the Fisheries Department has been initiating a number of measures, including the collection of biometric details for issuing identity cards and freely supplying basic safety accessories.

Efforts are also going on in the district to feed the details of about 20,000 active fishermen into a recently designed android application, Sagara, to link them to a better safety alert system. The new application will feature the details of all the 5,306 registered fishing boats, including mechanised, non-mechanised and country boats in Kozhikode district. With the launch of the updated Sagara, the fishing boat owners will be able to get real-time status of their vessels and crew at work. For the Fisheries Department, the data available on a common platform, including telephone numbers and registration details of boats, will help easy coordination of rescue activities in times of emergency situations.

Kerala: Fishersâ€™ housing complex to come up at Purakkad


Construction of a housing complex for homeless fishermen will begin at Purakkad next month, Minister for Fisheries J. Mercykutty Amma has said. She was inaugurating a project of the Fisheries Department to revive the flood-hit fish farming sector here on Saturday. “We have already identified the land for the project. The construction will begin in February,” the Minister said. She further said that the government was committed to doubling the inland fish production in the State. “The flood has damaged fish farming in 1,360 hectares in Alappuzha district. The farmers have suffered loss to the tune of ?1.15 crore.

The State government has sanctioned ?4 crore for reviving the fish-farming sector in the district. Our aim is to expand inland fish farming to 3,000 hectares,” the Minister said. Financial aid The Minister distributed financial aid to fishermen at the function. Alappuzha municipal chairman Thomas Joseph presided. Matsyafed chairman P.P. Chitharanjan, Chathanad councillor Ramishath, Fisheries Joint Director M. Laila Beevi, and Fisheries Deputy Director K. Noushar Khan spoke.

Kerala: Government provides 1,000 satellite phones to aid fishermen in tough times

A paucity in communication facilities has always proven a challenge in rescuing fishermen during natural calamities, but the safety of fishermen who venture into the deep sea is set to be better enabled with the state government allotting global satellite phones to them. The Fisheries Department has decided to provide 1,000 phones to fishermen across the state. According to M Thajudeen, deputy director (marine), Fisheries Department, the state government has decided to allot the phones at subsidised rates to traditional fishermen and mechanised fishing vessel owners. “Traditional fishermen will be given 500 phones at a 90 per cent subsidy and another 500 will be allotted at 50 percent subsidy to mechanised vessel owners,” he said. Poor communication facilities have been a major hindrance in reaching out to fishermen trapped in the deep sea during calamities, such as Cyclone Ockhi.

Earlier, the state government had formed ‘kadalora jagratha samithis’ and distributed funds to deep sea fishermen for recharging their mobiles; but it was found to be ineffective as ordinary mobiles do not work properly due to the lack of range. Fishermen are the main informers of threats from the outer sea, and the Central government and various agencies have been using them as a source of information after the Mumbai terrorist attack in 2008. “The satellite phones will function properly and will provide easy access to the security agencies, such as the Navy, Coast Guard and Marine Enforcement,” said Thajudheen. Jackson Pollayil, state general secretary, Swanthantha Matsya Thozhilali Federation, appreciated the initiative.

“At the time of a crisis in the deep sea, the fishermen are vulnerable with no communication facilities to locate them. The satphone will allow them to establish contact and locate them at sea. Fishermen are the first informers to government agencies about suspicious vessel movements. So the satellite phone will also help national security agencies,” he said. Global access Satellite phone or satphone is a type of mobile phone that connects to orbiting satellites, instead of mobile towers. It has global access from any remote area. The India government permits the use of satellite phone only with special government order; permission from the Ministry of Home Affairs is mandatory. The BSNL is the service provider for the phones being given to the fishers who venture above 36 nautical miles into the sea.

Kerala and Tamil Nadu: The Ockhi tragedy narrated in film


Kerala hasn’t still come to terms with the devastating floods that crippled the economic fabric of the state, not to mention the loss of lives and property. Yes, the wounds are still fresh, yet time will slowly heal them though the scars will, perhaps, remain forever. Like for instance, the disaster that cyclone Ockhi brought in its wake. November 29, 2017, dawned as a cloudy day, but turned ominous, the sea became watery grave for 400 fishermen from Kerala and TN, who had ventured out into the deep sea unaware of the cyclone warnings. In Ockhi’s Wake: Disaster
Preparedness at Sea, a film directed by Shibani Chaudhury and produced for the International Collective in Support of Fishworkers (ICSF) Trust, focuses on the damage that Cyclone Ockhi wrought in the seas of Kerala and TN.

The film is based on grassroots-reporting along with on-the-ground narratives of the affected people, and records different points of view of the victims, who struggled through the trauma of survival. The survivors recount being caught in the rough sea, of being thrown around like rag dolls, of huge waves and winds that howled like a banshee. There are also tales of how survivors tied together bodies of their colleagues to them so that they would not be swept away. The film details tales of despair and hope interspersed with the narratives of the families who have coped with loss and trauma. It also focuses on how disaster managers and government authorities are rising to the post-calamity challenges. The film has been uploaded on YouTube and the ICSF website.

**Kerala: Fishermen families in Kerala grapple with loan reality, a year after cyclone Ockhi**


Even a year after the Ockhi tragedy, loans left by the deceased continue to haunt dependents. Though the government transferred Rs 20 lakh to the accounts of the fishermen's families, they are still struggling to pay back the loans. "The dependents are only receiving the interest amount of Rs 20 lakh which is Rs 14,000 per month. Most of the fishermen families have huge debts which cannot be met with the amount. If the government could give at least Rs 10 lakh directly to the dependents without putting it in the bank, it would have helped them,” said Johny Chekkitta, a social worker from Puthiyathura. Mercy Antony, wife of Antony who passed away in the tragedy has to repay a huge debt that was left by her husband.

“I've Rs 4.56 lakh loan in Indian Bank, Rs 1.55 lakh loan at Uchakkada SBI, Rs 1.5 lakh loan in the cooperative society of Matsyafed. Also, I have to pay Rs 55,000 in two Co-Operative Banks at Chowara,” said Mercy. According to Mercy, other than these loans she has a debt of more than Rs 10 lakh to pay her neighbours and relatives which was needed to construct her house. “I met Fisheries Minister J Mercykutty Amma regarding the loan in July 2018. She had promised me to talk to the bank officials. However, I am still receiving calls from bank officials on a monthly basis," she added. She is staying in her half-finished house at Poonthura along with her four children. "I'm 42-years-old and not eligible to get the job that was offered by the minister. I met the minister twice regarding the issue and it went in vain," said Mercy. She is not the lone person who is suffering because of the Rs 20 lakh policy that has left the dependents in the lurch.

Celine Lawrence, wife Lawrence who died in the cyclone Ockhi tragedy from Adimalathura has to repay Rs 7 lakh as loan. "I'm receiving Rs 12,000 per month as the interest from which I'll have to look after four children. People often come to my home asking for money and I'm unable to pay them," says Celine. Vimala Denson, wife on Denson from Poonthura has three children.
She along with her children are staying in a rented house for Rs 7,000. She has crossed 40 years and is not eligible for the job that was offered to the dependents. "The 14,000 interest that I receive is not sufficient to pay rent and to look after the studies of my children," Says Vimala.

The fishermen federations in the city have approached the department regarding the issue. According to John Mathew who is a social worker from Poonthura, the government is reluctant to give the money to the needy. "However, the dependents can claim money for marriage or any other emergency purpose. But they will receive the money only after six or more months," said John Mathew. Left in the Lurch - Though the government transferred Rs 20 lakh to the accounts of the fishermen's families, they are still struggling to pay back the loans - The fishermen federations in the city have approached the Fisheries Department regarding the issue

**Kerala: Natural hatcheries to boost inland fisheries**


To address the lack of hatcheries for spawning of fingerlings (2-8 cm in length), the fisheries department has decided to give fingerlings directly to fish farmers in the district. The farmers can cultivate the fingerlings in small ponds till they reach an average size to put in large waterbodies. Instead of investing in hatcheries, the fisheries department is now focusing on interested farmers who can turn themselves into hatchery specialists. “We have initially identified select fish farmers who will cultivate them. These fingerlings can be sold directly by the farmer or can be given back to the department. But from the next financial year, the fingerlings will be given to whoever wants them,” said Ignatious Mandro, joint fisheries director, Aquaculture. The fisheries department was forced to look into the issue as farmers have started cultivating exotic species such as African Pacu as it is easy to get their fingerlings for not more than one rupee a piece; exotic species have the risk of eating local species and eating into their feeds.

Officials said good quality fingerlings were available of only species such as Gift Tilapia while carp is no longer economically viable. “The feed that they get is also not of much value,” an official said. Meanwhile in ponds and canals, low-value fishes are being nurtured and it is being operated as a side business. Even officials agree that under the department’s subsidy schemes, fishlings of 1-2 cm size are being given and they cannot survive the natural waters. “Around 90% of them die. Ideally, they should be given fingerlings of 8cm length which can be put in ponds. They have to give more impetus to the distributions of fish seed (fingerlings) and fish feed,” an official said. Scientists at the Centre for Inland Fisheries Research Institute (CIFRI) said farmers are not aware of the catastrophe created by cultivating banned fish species.

“The seeds are easily available, cost is much low and the growth rate is faster. But it would be good for the fishermen to cultivate local species. Unlike marine sector where there is more production because it is more organized, inland fishers are scattered and there are more
anthropological issues such as pollution, constructions, habitat loss and decline in the open water area, affecting the inland fisheries,” said CIFRI scientist Rani Palaniswamy. The inland fisheries have been dominated by shrimp farming which has been promoted by Agency for Development of Aquaculture, Kerala (ADAK), Marine Products Export Development Authority (MPEDA) and Fresh Water Fish Farmers Development Agencies (FFDAs). More than 78% of the total area under shrimp culture is distributed in Ernakulam district and almost 70% of the total aquaculture production of the state is also contributed by Ernakulam district.

It is followed by Alappuzha (9.40%); Kannur (5.44%) and Thrissur (4.68%) districts in area coverage. Alien species reach natural waters by escaping from aquaculture systems. Indian major carps and common carp have also reached the natural waters also through regular open water ranching done by the state department of fisheries and agencies under it.

**Kerala: Fisheries to make registration must for boat building yards**


The Fisheries Department has identified 44 yards building fishing vessels in the district for mandatory registration following an amendment to the Kerala Marine Fishing Regulation (KMFR) Act passed in October 2018. It is expected to bring in much needed accountability in the functioning of fishing boat building yards, which are largely unregulated. Owners of boat yards have been given three months to comply with the registration, for which they will have to meet some safety standards. “Owners applying for registration should deposit fees ranging between ?1,000 and ?50,000 depending on the size of the boats being built and furnish ownership documents, no-objection certificates from the local body concerned and approvals of the fire and safety department and the labour department. Yards should also have a minimum of five cents,” S. Mahesh, Deputy Director, Fisheries Department, told The Hindu. Submission of plan Under the latest amendment, the yards will have to secure prior approval from the Fisheries Department before starting the construction of a fishing vessel. This will entail submission of a plan drawn up by a recognised naval architect. The proposed boat should have facilities for the berthing of workers, kitchen and toilet facilities. Fishing Department authorities will then inspect the boat based on which registration and licence will be issued. Unregistered boats constructed prior to the amendment will be given a specific period to take registration. The Act, however, does not cover fishing vessels with an engine power exceeding 250 horsepower and an overall length of 20 metres. Such vessels are not permitted to fish in territorial waters but are merely given a registration and permit to use port facilities.

Under scanner Many such yards functioning without mandatory approval from local bodies concerned had come under the scanner in the past for dubious dealings. “Though intelligence and
police sleuths make random checks of these yards, it is far from a foolproof mechanism. Often these yards were found to have no clear idea about the clients or for what purpose the boat was being built,” said police sources.

**Kerala: Chinese net fishermen of Kochi in troubled waters**


For the past 20 years, Saneesh ML, 39, of Munambam has been earning a livelihood by fishing with a Chinese net near the Munambam estuary. However, since September last year, soon after the devastating floods hit Kerala, life has not been easy for him. Reason: The catch has dwindled to just to a kg. Most importantly, there are no shrimps which used to be a major source of income for fishermen using Chinese nets. Saneesh is not the only one facing tough times. Fishermen who have put up Chinese nets on both sides of the Periyar leading up to the estuary, have been affected, too. “Earlier, we used to catch three-four kg of shrimp daily. Post-flood, there are no shrimps to net. The population of other fish varieties has also dwindled. This, in turn, has decreased our revenue from `2,000 per day to just Rs 200-Rs 300 per day,” Saneesh said.

“It is getting tough to meet the daily expenses involved in using the Chinese nets. We have stopped employing other persons as helpers as we cannot afford to pay them a decent wage,” he said. Another fisherman said though they had raised the issue with the Fisheries Department authorities in the area, the latter was not able to provide a logical reason for the decline in catch. "We have set up the Chinese net spending Rs 2-Rs3 lakh which was availed as loan. If the scenario persists, we will be in serious debt,” the fisherman said. Reasons aplenty Principal scientist at the Central Marine Fisheries Research Institute K Sunil Mohammed said there could be various reasons behind the decline of shrimps on the particular stretch. “Shrimps enter the estuary or freshwater as part of their life cycle.

They lay eggs in sea but return to brackish water. After larval development, the newly-settled benthic juveniles migrate back to streams and rivers,” he said, adding, the change in the water flow pattern or even the undercurrent after the floods along the estuary may be one of the reasons for the decline. “We need a detailed study to ascertain the actual reason for the dwindling shrimp catch and to know whether this is a peculiar phenomenon in this particular stretch. Fishermen on boats out in the sea have reported good catch of shrimps these days,” Mohammed said.

**Kerala: All eyes on Alappuzhaâ€™s mineral-rich coast**

Alappuzha district is one of the major hubs of mineral sand in the state and major companies have been eyeing the coast for mining. The 40-km-long coast from Thottappally to Arattupuzha has rich deposits of mineral sand. IRE is already mining sand from many areas of the coast in the name of port development and other developmental activities. The smuggling of the mineral sand is also active in the coast of Purakkad, Thrikkunnapuzha and Arattupuzha panchayats. IRE is removing sand from the Thottappally coast in the name of deepening the fishing harbour. Thousands of loads of sand were removed from the fishing harbour and it was transported to the company. However, the local people allege the private parties entrusted to shift the sand to IRE are smuggling it to other states. According to V Dinakaran, former MLA, the transporting contractor has smuggled large quantities of sand from Thottappally.

“This week, we had blocked two lorries and found they were transporting sand without proper documents. Now the government has decided to allot another licence to IRE to remove sand from Thottappally leading channel (pozhi) in the name of deepening it to mitigate flood in Kuttanad. It is also aimed at removing mineral sand from the area. We will not allow the move, because the unscientific mining is causing ecological imbalances in the area and affecting hundreds of fishermen families,” Dinakaran said. The sea erosion is high in the coast due to the ecological imbalances. Many acres were taken by the sea and hundreds of people have become homeless in the past few years. The successive state governments are supporting the sand mining from the fragile coast.

In 2012, the state government had constituted a corporation, Kerala State Mineral Development Corporation (KEMDEL) to explore the mining possibilities in the state. KEMDEL mooted a project in July 2012 to mine mineral sand from Alappuzha coast for presenting it in the Emerging Kerala Summit held in September 2012. KEMDEL decided to set up a Heavy Mineral Concentration Plant at Alappad, Arattupuzha and Kayamkulam coast in Alappuzha and Kollam districts. KEMDEL had invited applications from the industrialists to start a plant near Kayamkulam estuary. But the opposition from the public forced it to drop the plan.

Kerala: Surveillance may put migrant fishing workers in jeopardy, says expert


Experts working among migrant workers fear repercussions for migrant workers engaged in fishing vessels in the State in the wake of the illegal emigration of a group of suspected Tamil migrants to Australia aboard a boat from Malyankara on Saturday. A study on marine fishing relating to labour migration to Kerala conducted by the Kochi-based Centre for Migration and Inclusive Development (CMID) in association with the Thummarukudy Foundation in 2017 found the Kerala coast home to traditional fishers from five Indian States – West Bengal, Odisha, Andhra Pradesh, Karnataka and Tamil Nadu. “Almost all harbours in the State except Vizhinjam
are dominated by migrant traditional fishing workers who were forced out of their States owing to various forms of exploitation and absence of fish landing centres.

They are the mainstay of our fishing industry since even the descendants of Malayali fishing workers are no longer entering the industry as they find other jobs thanks to better education. “Heightened surveillance and screening may put their jobs in jeopardy,” said Benoy Peter, executive director, CMID. Fishers from Colachel Munambam harbour dominated by traditional fishers from the coastal town of Colachel in Tamil Nadu also employs migrants from Murshidabad in Uttar Pradesh for menial jobs. With the acute shortage of fishermen, even migrants from States with no traditional fishing background such as Assam are employed on fishing vessels. Charles George, president of the Matsya Thozhilali Aikya Vedi, however, ruled out such repercussions against migrant fishing workers in the wake of illegal emigration since the Colachel fishermen engaged in trawl boats from Munambam and those from Thoothoor fishing hamlet who dominate distance water fishing boats from Thoppumpady harbour are pretty much non-replaceable by Malayalis.

Kerala: 4500 fishworkers saved 65000 lives during the floods in Kerala, India


Valiant fisherfolk, who saved precious lives during the worst floods that devastated the state in a century, has been adjudged Manorama News Newsmaker 2018. The announcement was made by Justice Kurian Joseph during a programme telecast on Manorama News. The fisherfolk who braved giant odds were adjudged winners after an opinion poll, held in association with Kalyan Silks. “The fishermen showed how the mind of human beings should be. They set an example for reformation beyond caste, creed and religion,” Justice Kurian Joseph said. Poet Kureepuzha Sreekumar and Institute of Management in Government assistant professor Dr Aneeshya Jayadev analyzed the Newsmaker poll. According to Kureepuzha Sreekumar, the selection of the fishermen was the ideal choice made by Keralites.

“Now the state has to give back to the fishermen by solving the issues faced by Alappad village,” he said. Aneeshya termed the noble act of the fishermen as a message of unity. “However, we chose to forget this message during the Sabarimala issue,” she added. The fishermen had carried out rescue operations even at places where the armed forces could not reach. Around 4,500 fishing workers had saved over 65,000 lives during the floods. Others in the final round of Newsmaker 2018 were former ISRO scientist Nambi Narayanan, Health Minister K K Shylaja and state president P S Sreedharan Pillai. This is for the first time that the award has been won by a group of people after it was launched 12 years ago.

Yeomen service Operating in their mechanised country boats in turbulent waters in several flood-hit regions including Chengannur, Kuttanad, Chalakudy, Mala, Kodungallur, Aluva and
North Paravur, they rescued thousands from houses and buildings where even helicopters couldn't reach. Their country boats could cut even through dangerous gush of rampaging water through which the rubber boats failed to navigate. Most of these fishermen engaged in the rescue operations hailed from Thiruvananthapuram, Kollam, Malappuram, Kannur, Thrissur and Ernakulam.

Their courage and the experience in the rough seas aided the Herculean task. The fishing community chipped in for the transportation and food expenses of these selfless souls during the rescue operations. The Fisheries Department followed suit only later. In a noble gesture, these fishermen even refused to accept Rs 3,000 offered to each member of the community by Kerala chief minister Pinarayi Vijayan for the exemplary rescue work done. Onmanorama lauds the priceless efforts by these faceless fisherfolk.

Kerala: Villages vanish in Kerala's Kollam coast as they succumb to sand mining


The coastline between Chavara and Alappad in Kollam district of Kerala, has a decades-long story of people’s battle for survival against mining companies. On a journey through this coastal belt, one can spot abandoned houses, temples, schools and many more buildings where people once lived. Red coloured ponds and dried up mangrove forests are another painful sight on this coastline. This stretch in Kerala is where the extensive mineral beach sand mining has been happening since the 1960s. The abandoned buildings are the remains of people’s failed agitations and indefinite strikes. One by one the villages in the area are vanishing from the map of Kerala. A village named Panmana has turned in to a heap of sand and an abandoned temple stands around which thousands of fishermen once lived. In Alappad panchayat, activists estimate that more than 6,000 fishermen families have vacated over the years due to beach erosion, drinking water scarcity and lack of fish availability.

Sooner or later the panchayat will also be turned in to a sand bund, remaining residents say. Kovilthottam, another village on the coastline, also has only 50 families left. “In 2010 almost all indigenous communities were evicted from Kovilthottam region in Chavara, promising that they will be allowed to rehabilitate back in their own land after completing the mining within three years. Even eight years after those evictions, no rehabilitation has occurred, more than 500 families are homeless,” said Robin an activist in the locality. The remaining families in this 23 kilometres stretch of coastal region (Kollam Neendakara to Kayamkulam) are under the threat of eviction; for the last few years, they have been expecting a massive coastal erosion that can engulf their villages.

Most of the people have been forced to leave their houses, even without any compensation from the authorities or the mining companies. And for the past 72 days, starting November 2018, the
remaining people in Alappad and nearby areas have been on an indefinite strike against mining companies planning to extend their projects. Mineral sand mining in Kollam The presence of the minerals ilmenite, rutile, zircon, monazite, leucoxene (brown ilmenite), sillimanite and garnet in coastal sand dunes of Kollam was discovered in 1920s.

Two public sector companies, Indian Rare Earth (IRE) which comes under central government and Kerala Minerals and Metals Limited (KMML), a company under the state government have been mining since 1968. Though by 1995 many foreign companies had tried mining in the coastal area, continuous protest from the public and activists forced them to drop the projects. IRE and KMML still continue to do extensive mining in the area irrespective of people’s protest. Since the companies have got clearances from respective departments of state government as well favourable orders from the High Court of Kerala, the opposition voices are silenced. There is no data on people who were evicted without any compensation for their loss and no enquiry about polluted drinking water sources of this coastal belt. Though activists quote the numbers of families vacated from the region, there is no official data on it.

Loss of drinking water, fish stock depletion and erosion In Chittoor region near Chavara there are open ponds which have been used by companies for dumping chemical waste. It has been years since the residents there stopped using these drinking water sources. After repeated agitations the companies started providing drinking water to the residents in Chavara region, but not regularly. “Once in a while the companies distribute drinking water, otherwise I have to stand on a queue for long time to get water from the public tap. The tap is far from my house and have to walk all the distance with pots of water,” said 78-year old Mary, who lives in Chavara. She recalls how drinking water and other resources were abundant in the area once. “We used to get fresh well water. Moreover, the fish availability was abundant here. Now what we have is water scarcity and poverty. Though it is painful, I want to leave this place where I was born and brought up. But where will I go.

If the companies give a good compensation I will move somewhere,” she added. Massive coastal erosion is another effect of the mining. The worst nightmare for the remaining residents in the area is of the sea engulfing their habitat. “According to litho map of the area, in 1955 the Alappad village’s area was 89.5 kilometres square. Now it is just 8 kilometres square. So we are sure that our village will be sooner or later vanish, but we continue our agitation for neighboring areas like Onattukara, Upper Kuutanad, Arattupuzha etc, which are in Alappuzha district. They have submitted their proposal to extend their mining which will lead to the destruction of coastal region of two districts Kollam and Alappuzha,” Sreekumar KC, environmental activist and resident of Alappad told Mongabay-India. Benjamin, a resident of Chavara, pointed at the huge mining digs around his house and said, “How long we can stay here.

We will have to leave like others, but where should we go without satisfactory compensation? All the indigenous communities have been wiped out here.” In some areas of Alappad one can
spot two parallel roads in the sea shore, one is partially broken. “The latest road is the fourth or fifth one constructed, as each time coastal erosion happens they construct another road,” Sreekumar said. He also pointed at a study done by National Institute for Interdisciplinary Science and Technology (NIIST) where it is shown that how shoreline has occupied the land from 1968 to 2017.

“The map shown in the study clearly shows the extension of coastal erosion,” he added. Sreekumar said that from Panmana towards north, the coastal region was the habitat of sea turtles. That was area where they laid eggs. Now they have disappeared. “Apart from that this was an area where we get high quality prawns in Kerala. With this massive mining and coastal erosion, all these are just memories for us,” he recalled. Unnikrishnan, a panchayat ward member of Alappad recalled that many of the houses were not in the sea shore few years back and now all of them are close to sea. “The houses you see here were one or two kilometres away from the sea. Now they are hardly 400 to 500 metres away. Fish availability is another issue. Prawns, shell fish and various other small fish were available here in abundance, but now fishermen are forced to leave here due to poverty,” he said. Janet’s family is one among the 50 families remaining in Kovilthottam near Chavara.

“We can’t bear the pain of leaving our home and whatever we earned. But how can we live here without job, without water and under constant threat of coastal erosion. Anytime our house will be under the sea,” she said. Robin, the resident from Chavara, said that the mining companies had earlier promised jobs and rehabilitation to the locals who quit their traditional occupation (fishing). But they still haven’t received anything promised by the companies. Prominent environment activist and writer C.R. Neelakandan reminds that Alappad was the worst affected coastal area when the 2004 tsunami hit Kerala. “The shoreline difference is almost seven kilometres over the years in that area. The sea had occupied land at a width of seven kilometres. The state government has notified that people in the area need not pay the land tax. That means there is no land existing there, it is under water now,” he said. He also pointed that there is a backwater there, which was identified as national waterway.

“But soon sea will evade these backwaters too and we will lose that waterway,” he said by adding that irrespective of all this loss, India has not benefitted much from this mining. “Monazite and ilmenite are the main extracts from this mining. The full processing of these minerals doesn’t happen in India. We export rutile mineral. So the main profit is for foreign companies, so technically our country does not benefit much,” he said. He said that none of the issues in this particular region was studied by agencies. “There were three communities living in this area, all of them were wiped out. In Panmana almost 700 hectares of land were lost,” he pointed. He also talked about the necessity of a strong protest against these companies extending their mining projects to Arattupuzha in Alappuzha district. “What happened in Chavara, Alappad and Panmana will be repeated in Alappuzha too, at least that should be prevented now,” he added. Alappad activist K.C. Sreekumar meanwhile said a proper study is needed in the area.
“Government and other institutions should conduct a proper study in this area, rather than giving blatant clearances for mining. They should survey the coastal erosion, enquire what happened to the people who left here, what happened to the fishing community and why the water sources here got polluted. Everything should be studied properly, so that we could save remaining villages at least,” he said. Writer-activist C.R. Neelakandan also emphasised the need for a study. “There can be radioactive emissions through these unscientific mining and many health hazards can be an after effect. No environmental studies have been done yet over the pollution and hazards of this mining,” he said.

Kerala: Cabinet grants nod for fisheries policy


The draft fisheries policy guaranteeing fishermen the right to fix the price for their catch and to sell it received the approval of the Cabinet on Thursday. The policy is expected to put an end to the alleged fleecing of fisherfolk by middlemen. It will also ban the catch, auctioning, sale and distribution of juvenile fishes. The policy has come as a prelude to the Kerala Fish Auctioning, Marketing and Quality Control Bill, which is likely to be presented during the budget session of the Assembly commencing on January 25. The bill is for regulating the sale and auctioning of fish in addition to ensuring its hygiene and quality. “The policy will help the fishermen from the vice-like grip of middlemen. It will also put an end to the unscientific fish catching practices and ghost fishing,” said J Mercykutty Amma, Fisheries Minister. “As the government is planning to implement the green fisheries project, the Suchitwa Sagaram Sundara Theeram project will be extended to more coastal areas.”

The policy proposes to establish an Inter-State Fisheries Council with the help of other states also plans to introduce responsible tourism in the fisheries sector with the help of fishermen. Major suggestions Limiting the right to catch fish at reservoirs in reserved forests to tribal people; allowing foreign fish species to be bred under strict conditions; exploring biotechnology, nanotechnology and molecular technology in addressing fish diseases; appointing Fish Diseases Surveillance Teams at the state and district levels; to sensitise farmers on aquaculture centres set up at Ayiramthengu in Kollam and Neyyar in Thiruvananthapuram; making the state a centre of ornamental fish sale; launching ready-to-eat and ready-to-cook brands of value-added fish products; raising Fisheries and Ocean Studies University to international standards; limiting the number of boat licences a person could hold; introducing registration system for boat building yards; introducing holographic registration; upgrading health centres in coastal areas to family health centres; establishing fishermen cooperative society in each fishing village; develop inland fisheries; appointing a committee to study the pollution of inland water system.
Kerala: Remedy soon to check coastal soil erosion


With the state slowly losing its shoreline to sea-level rise, a pioneering study to develop solutions for its sustainable management through eco-friendly means is expected to come out this month. The study which is a joint effort of Chennai-based National Institute of Ocean Technology (NIOT) and Kerala State Coastal Area Development Corporation (KSCADC) had taken the 27 to 30 km stretch of Muthalapozhi-Kovalam headland coastal stretch in Thiruvananthapuram. The stretch is said to be one of the worst affected areas by sea erosion in the state. “This is a pioneering study. The preliminary finding is expected to come out this month. The report will be handed over to Kerala Infrastructure Investment Fund Board,” said KSCADC chief engineer Krishnan.

At the same time, it is learnt that the major highlight of the study will be to come out with a permanent solution to check the coastal erosion at Poonthura-Valiyathura stretch. It is expected the study will look into the possibility of constructing an offshore breakwater at the area so that the fishing community could carry out their day-to-day activities without any difficulty. It is said that if the project turns out to be successful, it will be extended across the state. “The findings of the study will be used to protect the Shanghumugham beach a major tourist spot of Thiruvananthapuram which is facing severe coastal erosion,” said an officer with the Fisheries Department. According to the officer, the reason why NIOT was selected for carrying out the coastal area protection programme was that it had carried out similar projects at Bommayapalayam and Mahabalipuram in Tamil Nadu.

Meanwhile, Harbour Engineering Department points out that the aim of the NIOT-KSCADC study will be to provide a stable beach to the Valiyathura-Poonthura coastal belt, which at present had to rely on Vizhinjam for carrying out the fishing activities. “The fishermen at Valiyathura-Poonthura had to rely on Vizhinjam for fishing activities. At times it also results in tensions including law and order problems. Thus the focus will be to provide a stable beach in the area where the fisherfolk could easily take their country crafts to the sea. Also, the concept of offshore breakwater will help check the coastal erosion,” said an officer of Harbour Engineering Department. Earlier, Fisheries Minister J Mercykutty Amma had stated that about 325 km of the coastline has been found to be vulnerable to erosion and there is a need to think beyond the conventional rock revetment and rock groynes for protection of coasts.

According to her, the state with the help of NIOT, Kochi-based Centre for Marine Living Resources and Ecology (CMLRE) and Central Marine Fishery Research Institute (CMFRI) will switch to scientific approaches, including the creation of offshore breakwaters for protecting coastline. A study conducted by the National Centre for Sustainable Coastal Management on
shoreline changes between 1975 and 2011, had come out with the finding that a shift in coastline towards coastal habitation due to sea erosion have been noticed in the states of Andhra Pradesh, Karnataka, Kerala and Tamil Nadu.

Kerala: Draft fisheries policy seeks to enhance production


The draft fisheries policy approved by the Cabinet on Wednesday seeks to enhance fish production through scientific methods, double the income of fishworkers and introduce a participatory system of fisheries management. The draft document stresses the need to ensure the right of fishermen to fix the price of the catch and sell it in the market. It also calls for better conservation and management of marine resources. Fisheries Minister J. Mercykutty Amma said the government was planning to strengthen cooperative institutions to curb the exploitation of fishermen by middlemen. The policy includes provisions to enhance the insurance benefits for fishworkers. The Minister said the government proposed to limit the number of fishing vessel licences for an individual and curb destructive methods of fishing. Boat building yards would be required to have registration. The policy seeks to encourage deep sea fishing and create more artificial reefs as fish breeding centres.

The Minister said the thrust of the policy was on making the fisheries sector environment-friendly. Participatory model Fisheries management would be made participatory with a three-tier system of management councils at the village, district and state level. The Government would also seek the support of other coastal states for the constitution of an inter state fisheries council. The policy document outlines several measures for safety at sea. These include the constitution of a sea rescue squad, marine ambulance service and a system for monitoring the movement of fishing vessels. All fishing vessels would be required to carry navigation lights, signals, safety equipment and communication gadgets and only trained crew would be allowed to operate the boats.

Fisheries tourism The document highlights the need to promote responsible fisheries tourism and create protected areas for fisheries. It also calls for steps to promote inland fisheries, check pollution of water bodies and create more hatcheries. Aquatic animal health labs would be set up in all districts and fish disease surveillance teams constituted. The policy lays stress on promoting ornamental fish production. The document proposes steps for improvement of basic infrastructure like toilets, drinking water supply, health centres in coastal villages. The Minister said the Kerala University of Fisheries and Ocean Studies would be upgraded to international standards and the curriculum reworked to impart training in skills.
Kerala: Fisheries Department devises plans to protect coastline


With the sea-level rise and subsequent coastal erosion turning out to become a national phenomenon, the state Fisheries Department has decided to devise plans to protect its shoreline. The state government which is planning to think beyond the conventional rock revetment and rock groynes for protecting its coasts might switch to scientific approaches, including the creation of offshore breakwaters. It is also learnt it will seek the assistance of Chennai-based National Institute of Ocean Technology (NIOT), Kochi-based Centre for Marine Living Resources and Ecology (CMLRE) and Central Marine Fishery Research Institute (CMFRI) for coming out with a result-oriented strategy. “As far as the state is concerned coastal erosion is a serious matter. It has been identified that 325 km of our coastline is vulnerable to erosion,” said Fisheries Minister J Mercykutty Amma.

“Though various steps were being taken to prevent the same it is time to think beyond rock revetment and rock groynes,” she said. According to the minister, though there were several state and Central agencies that were conducting research into the reasons behind sea rise and subsequent coastal erosion, the Fisheries Department is planning to consolidate their findings and to initiate steps in this regard. At the same time, in a study conducted by the National Centre for Sustainable Coastal Management on shoreline changes between 1975 and 2011, it has been highlighted that a shift in coastline towards coastal habitation due to sea erosion has been noticed in the states of Andhra Pradesh, Karnataka, Kerala and Tamil Nadu. Further, India’s Second National Communication submitted to the United Nations Framework Convention on Climate Change projects the sea level might rise by 3.5 to 34.6 inches which may further result in saline coastal groundwater, endangering wetlands and inundating valuable land and coastal communities.

As per the report, the most vulnerable stretches along the western Indian coast are Khambat and Kutch in Gujarat, Mumbai and parts of the Konkan coast and south Kerala. Meanwhile, National Fishworkers Forum general secretary T Peter said though coastal erosion remains a fact, the Union Cabinet might have turned a blind eye to the same as it approved the CRZ Notification 2018. According to him, the provisions that have been included in the notification might pave the way to further sell off our coastal land and water to corporate and business houses by removing restrictions on constructions and activities detrimental to coastal natural resources. Earlier, Minister of State for Water Resources, River Development and Ganga Rejuvenation Arjun Ram Meghwal while answering Shashi Tharoor in the Lok Sabha said the Centre is well aware various stretches along the coastline of Kerala are facing coastal erosion. The minister also said the Union Government supplements the efforts of the state by way of technical guidance and financial assistance.
The Indian oil sardine stock along the Kerala coast is likely to suffer a setback during the coming years, according to the Central Marine Fisheries Research Institute (CMFRI). "Although a record catch of nearly four lakh tons of oil sardine was registered in the state in 2012, a gradual decrease was recorded in the landings during the following years owing to the development of El Nino", said E.M. Abdussamad, scientist at CMFRI. A sharp decline to about 46,000 tons was experienced in 2016 following a strong El Nino year in 2015. With the reduced intensity of El Nino, the sardine catch registered an increase in 2017. The scientists at the CMFRI are of the view that as El Nino is gaining momentum, sardine stock in Kerala waters may be severely affected leading to a substantial drop in catch.

Though there was a marginal increase in the production of sardine in 2017 after a record-low harvest in 2016, once again the El Nino, which began to gain pace before the sardine stock revived to its normal level from an earlier depletion, may spell disaster for Kerala's fisheries sector with a dwindling catch, scientists said. After studying the data of fluctuations in the production of oil sardine in last 60 years, the scientists at the Pelagic Fisheries Division of the CMFRI concluded that El Nino is the major factor that caused depletion of the oil sardine stock. "The Climate Prediction Centre of the National Oceanic and Atmospheric Administration (NOAA), which is an international agency focusing on the conditions of the oceans, warned in December last year (2018) that El Nino is expected to strengthen during the coming seasons. The World Meteorological Organization (WMO) and Indian Meteorological Department (IMD) also stated that 2018 was an evolving El Nino year and that 2019 may be warmer due to El Nino and global warming", said Abdussamad. He added that with the El Nino getting strengthened, the catch of sardine from the Kerala coast might decrease. Last year (2018) also saw a stagnation in the catch of sardine from the state compared to the previous year. "Indian oil sardine is a sensitive pelagic fish whose biological cycle can easily be upset even due to slight differences in the ocean ecosystem. The impact of El Nino is more evident along the Kerala coast than other areas of the country. Hence, the fluctuation in oil sardine catch is always high along the south-west coast", he added.

India: Commercialisation of the Coast, says National Fishworkers Forum and Kerala Matsya Thozhilali Aikya Vedi

In yet another attempt aimed at benefiting the corporates, the government has approved an overhaul of the Coastal Zone Regulation (CRZ) rules. The protection and development of the coast was till now governed by the Coastal Regulation Zone Notification (2011) that defines what areas fall under the CRZ and what activities are permitted there. The new rules will allow “public utilities” like sewage treatment plants, link roads, coastal roads, and ecotourism projects in CRZ 1 or the most protected and the regulated zones. The government is trying its best to brand the move as one that will lead to significant employment generation and rejuvenate the coastal areas while reducing their vulnerabilities. Fishermen, activists and environment experts on the ground suggest otherwise. The move is set to promote commercialisation in the most protected zones which can have disastrous consequences for the communities living on the coastline and also the environment.

Speaking with NewsClick, Charles George of the Kerala Matsya Thozhilali Aikya Vedi said, “The decision of the Union Cabinet is highly unfortunate. In the name of addressing the issues of conventional fishing workers, the government has prescribed a treatment that is more dangerous than the disease itself. This decision is anti fishing workers and anti-environmental, and it doesn't take into consideration the interests of the fishing workers.” The CRZ is currently classified into four categories — CRZ I is the most protected and regulated, CRZ II is carved out in urban areas, CRZ III in rural areas, and CRZ IV is defined as the area 12 nautical miles from the low tide line on the seaward side. The proposed rules will also permit applying existing town and country planning rules for building construction in CRZ II areas, which are frozen under the current regulation.

The draft is also aiming to authorise the National Centre for Sustainable Coastal Management (NCSCM) to demarcate the tide lines all along the coastline unlike earlier, when seven different agencies were authorised to do so. The draft rules distinguish between the CRZ III A and CRZ III B, where the former has a higher density of population. The No Development Zone (NDZ) in CRZ III A areas is now 50m from the High Tide Line, narrower from 200m under current regulations, but remains 200m for CRZ III B areas. The CRZ 2011 had guaranteed environmental protection and livelihood security to the coastal community. With the new draft rules, the local communities are anxious that the agenda of the government to come off as pro tourism may override the interest of the native communities.

Rejecting the proposed CRZ Notification, T Peter, General Secretary of the National Fishworkers’ Forum said, “The sole purpose of the notification is to pave the way to sell off the coastal lands and water to corporate business houses. The forum has called for nationwide protests demanding a total withdrawal of the notification.” Currently, the draft policy is in talks, with the stakeholders being given 60 days to submit their comments and objections.
After the laborious preparation of the Coastal Zone Management Plan (CZMP), which will influence development activities in coastal districts, coastal States, including Kerala, may now have to redraw the document following the notification of a new Coastal Regulation Zone approved by the Centre. The Central government last week approved the Coastal Regulation Zone (CRZ) notification, 2018 when the CZMP prepared by Kerala was awaiting approval. The preparation of the CZMP, which once approved, will dictate the development patterns along the coast, was a long-drawn affair and it took several nudging from the National Green Tribunal and the Supreme Court for the States to prepare the document. The Kerala document took almost three years to be prepared after a series of deliberations involving stakeholders, including coastal ecosystem management specialists, builders, fishermen, and coastal communities.

The National Centre for Earth Science Studies, Thiruvananthapuram, was assigned the task of preparing the document. The public hearing organised on the draft document had witnessed unruly scenes and protests in some districts. The CRZ 2018 notification, said Veena Madhavan, member secretary of the Kerala Coastal Zone Management Authority, was approved soon after the State submitted the CZMP for its 10 coastal districts. After the CRZ notification, 2018, being published as a gazette notification, Kerala may have to revise the document, she said. She said the procedures to be followed for the revision would be known only when the gazette notification was published.

There would also be a guideline for the States to follow. At the same time, experts involved in the preparation of the earlier CZMP said Kerala may have to introduce changes in the CRZ 3 A category, which deals with panchayats having population density of 2,161 per sq km. According to available information, the No Development Zone (NDZ) has been reduced to 50 metres from the High Tide Line against the earlier 200 metres in CRZ 3 A, permitting more construction towards the seaward side. The NDZ has also been reduced for backwater islands in CRZ 3, which also have to be reflected in the CZMP, said K.K. Ramachandran, former member secretary of the authority. There may not be any changes in the CRZ categories 1, 2 and 4, he added.

Kerala: CRZ notification: Fishermen plan protest; Kerala not to oppose


The Coastal Regulation Zone (CRZ) Notification approved by the Union Cabinet has evoked mixed response in the state. Though the coastal populace welcome the reduction of No
Development Zone (NDZ) and the de-freezing the Floor Area Ratio (FAR), they vehemently oppose the decision to allow development of basic infrastructure for tourism development as they fear it will displace the fishermen from the coastal areas. Various fishermen organisations have called for a nation-wide protest against the notification. Meanwhile, Fisheries Minister J Mercykutty Amma told Express that the state government will not seek amendments or oppose the new notification. Approving the notification, the state government noted it will promote economic growth while respecting the conservation principles of coastal regions. It will result in significant employment generation and rejuvenate the coastal areas while reducing their vulnerabilities, the government said in a release.

Welcoming the decision to relax the restrictions on construction of houses in the coastal areas, Mercykutty Amma urged the Centre to initiate steps to safeguard the interests of the fishermen community. “The relaxation of CRZ regulations will be beneficial to the fishermen as they will be able to build houses. But it should not be misused to facilitate the corporates and real estate firms to impinge on the rights of the coastal community. We should promote responsible tourism which will be helpful for the development of the coastal community. It should not lead to a situation where the coastal people are displaced from their traditional lands,” she said. Rejecting the proposed CRZ Notification, the National Fish Workers Forum called for nation-wide protests demanding a total withdrawal of the notification.

The sole purpose of the notification is to pave the way to sell off the coastal land and water to corporate business houses, said general secretary T Peter. The CRZ 2011 had guaranteed environmental protection and livelihood security to the coastal community. While the failure to implement the CRZ 2011 rested squarely with the Ministry of Environment, Forest and Climate Change (MoEF) and the respective state governments, the relevance of CRZ-2011 was still high. The intentions of this government is to hand over the coasts to the corporates and the tourism lobby, he said. The Kerala Matsya Thozhilali Aikya Vedi (TUCI) has decided to launch a nation-wide protest campaign demanding the withdrawal of the CRZ notification.

“The notification is aimed at providing legal sanctity to the encroachments on coastal land. This will lead to the destruction of the coastal ecosystem and eventually lead to surrendering the coastal land to the construction-tourism-real estate lobbies,” said state president Charles George. He said the CPM-led state government favoured the relaxation of CRZ norms, which was causing concern among the coastal people. “Though many cases are pending before the Kerala High Court and the Supreme Court regarding the encroachments on backwater islands, the state government has not effectively presented its arguments facilitating the encroachments to continue. The state government should put pressure on the Union Government to restrict the relaxations on CRZ to the coastal community,” he said.
Kerala: Inland Aquaculture in Kerala; Challenges and Opportunities


Aquaculture being a fast growing food production system will continue to strengthen its role in contributing to food security and poverty alleviation in India and many developing countries. There are several emerging diseases for farmed fish in India, particularly for freshwater fish and prawns. The practice of seed import without adequate precautions could bring many new diseases to the aquaculture sector in Kerala. The indiscriminate capture of ornamental fish from the wild without adequate replenishment is a serious threat to the biodiversity of the state.

Fish and fisheries products are the primary protein sources for some 950 million people worldwide, and are an important part of the diet of many more. Fish is the most heavily traded food commodity in the world.

Aquaculture being a fast-growing food production system, will continue to strengthen its role in contributing to food security and poverty alleviation in India and many developing countries, in view of the stagnating yields from capture fisheries and increasing demand for fish and fishery products. Despite its high productivity, there is very little recognition of freshwater-dependent fishery production due mainly to a general lack of data and scientific literature compared with industrial marine fisheries. The majority of freshwater fisheries and aquaculture is small-scale and has received only scant attention during the past few decades. The world production of fish reached an all-time high of about 172 million MT in 2018, largely contributed by the increasing aquaculture. The world inland and coastal aquaculture has been steadily increasing over the past few years. India with an area of 3.3 million sq. km and a population of over a billion people, occupies second position in the world in aquaculture production, contributing to over 10 million MT of fish.

Inland aquaculture has been the major fish producing system in India. Most of the aquaculture activities in India could be regarded as rural aquaculture. Freshwater aquaculture in village tanks and ponds follow the improved traditional or semi-intensive composite culture/polyculture system and they serve the household needs for fish and generate some additional income for the family. Freshwater resources of Kerala The state of Kerala is gifted with rich resources of freshwater bodies suitable for aquaculture. The state has a total freshwater area of 1,58,358 ha, consisting of reservoirs (42,890 ha), private ponds (21,986 ha), irrigation tanks (2,835 ha), freshwater lakes (1,620 ha), panchayat ponds (1,487 ha), village ponds and other water holds (1,317 ha), and check dams, bunds, barriers or anicuts (1,138 ha). The state has 41 west-flowing and 3 east-flowing rivers, constituting an area of 85,000 ha.

There are 54 reservoirs in the state (2 major above 5,000 ha, 13 medium of 1,000 to 5,000 ha and 39 small of less than 1,000 ha). The total reservoir area is the highest in Idukki district (18,651 ha) followed by Palakkad (7,132 ha), Thrissur (3,706 ha), Kozhikod (3,172 ha) Kollam (2,590 ha).
ha), Pathanamthitta (2,505 ha) and Thiruvananthapuram (2,340 ha). The maximum number of small reservoirs is in the Idukki district (14) followed by Palakkad (10) Thrissur (6) and Pathanamthitta (3). The freshwater lake area is maximum in Idukki district (624 ha) followed by Kollam (440 ha), Thrissur (295 ha) and Thiruvananthapuram (250 ha). Freshwater aquaculture development in Kerala Modern fish culture in India became prominent with the success and perfection of induced spawning techniques for the Indian major and exotic carps.

Catla catla and Labeo fimbriatus were successfully bred at Malampuzha, and this centre became the focus of inland fisheries development in Kerala. Trials conducted at different parts of the country laid the scientific foundation of composite fish culture techniques. Commercial hatchery production of giant freshwater prawn, Macrobrachium rosenbergii was also achieved with the experiments conducted at the Fisheries College, Kochi in 1987 resulting in a cost-effective technology. Lack of diversification in aquaculture At present, freshwater aquaculture system in Kerala remains restricted to carp culture in a few private ponds, prawn cum paddy culture in limited areas in Kuttanad and Kole lands, stocking of carps in a few irrigation reservoirs, and river ranching in a few rivers on a limited scale. No serious effort has been taken to develop coldwater fish culture, game fisheries, culture of indigenous fish species of Kerala, freshwater pearls, etc.

The farming of Karimeen(Etroplus suratenis) has recently emerged as a popular practice in ponds, and often in cages set in open water bodies. Advanced farming practices such as cage culture; pen culture and running water culture are emerging in many places, and have great potential for utilizing vast areas of freshwater bodies in the State. Adverse climate The Kuttanad area (55,000 ha) and the Kole lands (13,632 ha) suitable for paddy cum fish culture in Kerala lie below the mean sea level, which make them prone to frequent floods. In many places, the flood water level is raised up to 4 feet above the existing embankments during heavy monsoon showers leading to crop loss. The recent floods have caused enormous damage to the freshwater ecosystems in the State, and this damage has not yet been assessed.

Seed import and threat of diseases A major share of the seed required for freshwater aquaculture is imported from AP, Tamil Nadu and West Bengal by long distance transport. The regulation of seed import is also weak and there is no effective control on the species brought and none of the quarantine conditions are followed in such live transport and stocking in the water bodies of Kerala. This practice poses serious biodiversity and zootechnical issues. The appearance of several prohibited species of fish that naturally occur in the rivers of Southeast Asia or South American countries is a drastic example of the damage caused to Kerala’s aquatic ecosystem because of the largely unregulated import of fish to the State for farming and for the ornamental fish industry.

There are several emerging diseases for farmed fish in India, particularly for freshwater fish and prawns. The practice of seed import without adequate precautions could bring many new
diseases to the aquaculture sector in Kerala. Lack of suitable feed for freshwater aquaculture Groundnut Oil Cake and rice bran remain the most popular feed for the freshwater fish cultured in India. Further, ornamental fish industry still prefers imported feeds due to lack of indigenously-made feeds of good quality. Of late, farmers have begun using formulated feeds in limited quantities. Capture based ornamental fishery Ornamental fishery is largely restricted to the sale of riverine collection of indigenous varieties alone for international destinations, directly or via the ports in Chennai, Mumbai or Kolkata. It is evident that only a fraction (less than 10%) of the wild caught fish reaches the final destination in the international market, while the rest is lost while transfer from the source of collection, and conditioning before export. The indiscriminate capture of ornamental fish from the wild without adequate replenishment is a serious threat to the biodiversity of the state.

The fact that many of these species are listed as ‘vulnerable’ or ‘endangered’ in the IUCN Red List of Threatened Species further compounds the problem. Lack of value-added aquaculture products Most of the freshwater fishes are marketed whole without any processing. No effort has been taken to make value-added products like fish fillets, surimi etc. The floating bones in the flesh of the carps might be the main hindrance to value addition. Administrative constraints At the national and the state level, aquaculture policies are being established to stimulate development. Many governments have intervened at the macro level by designating aquaculture as a priority area in their economic agendas, defining goals and targets and establishing guiding strategies to achieve them by facilitating reasonable access to credit, providing fiscal incentives and removing institutional constraints.

However, in many cases, aquaculture administration still falls under more than one agency, which often hinders progress. This is true for our state also where aquaculture activities are taken up by agencies, the activities of which are often overlapping, and policies are contradictory in many instances. Prospects for inland aquaculture development in Kerala Despite the many constraints that face the development, freshwater aquaculture in Kerala present a positive outlook. The proven success of extensive paddy cum fish culture in Vietnam and China could be emulated to suit these areas. Measures to improve fish production in the State by expanding farming areas and enhancing productivity of the aquaculture systems are essential. Although non-endemic in the rivers, the Indian major carps, Chinese carps and common carp have become well established in the waters of Kerala and their propagation need to be encouraged.

Endemic species like the pearl spot, (Etroplus suratensis, though exotic, it is at home in Kerala), Manjakoori (Horobagrus brachysoma), the native catfish (Clarias dussumierii), and Gonoproktopterus curmuca enjoy great preference among Keralites. These species have been shown to grow well, and success achieved in their seed production by the Kerala Agricultural University. Cage culture in the freshwater reservoirs of Kerala would contribute significantly in augmenting the fish and prawn production from the state, which has a direct bearing on export earnings. The cultivable space could be more effectively enhanced by utilizing the available
water area, and facilitating easier harvesting compared to the conventional farming in earthen ponds. Cage culture does not affect the indigenous flora and fauna of the reservoirs or their water flow characteristics, and is therefore ecologically safe.

Apart from offering direct employment to rural population, it would also create a new line of rural entrepreneurs, who could be trained to achieve maximum output from the limited resources available, without harming the environment. Cage culture is most suitable for freshwater lakes and reservoirs but may be practiced in any environment suitable for fish culture. It is promising to note that there has been a recent expansion in the cage culture of Karimeen in the fresh and brackish water bodies in some districts of Kerala. Cage culture of Karimeen, common carp, and other suitable fishes should be promoted in the reservoirs and freshwater lakes in the State. Farming of freshwater prawns Unlike the non-endemic carps, the freshwater prawn (M. rosenbergii) is a native of the rivers of Central Kerala and is one of the most suitable species for culture in fresh and low saline waters, either as a monoculture candidate or in polyculture along with carps, milkfish, gray mullet etc.

Considerable potential for freshwater prawn farming exists in many parts of Kerala where waterlogged areas are available that are otherwise unsuitable for agriculture. The State has rich resources of wetlands, which remain fallow during major parts of the year. A majority of such areas could be brought under freshwater prawn farming to enhance production and productivity from these fallow water bodies. Paddy cum fish/prawn culture Rice and prawn integrated culture in alternate crops is an age-old practice in many Southeast Asian countries. Several successful trials have been conducted in China, Vietnam, Indonesia, and the Philippines, which have proven their success. The rice cultivation and prawn culture are mutually beneficial, and enable to enhance the production from unit area without any ecological hazards. Steps should be taken to promote paddy cum fish/prawn culture in the state by suitably modifying the paddy fields wherever possible.

The alternate or concurrent culture of rice and fish/prawn would serve to increase the income of farmers while economising the production. The use of fertilizers and pesticides could be eliminated by this system of crop management. The coastal belt of Kerala has a unique system of paddy cultivation in saline soils known locally as Pokkali cultivation. The term Pokkali refers to a salinity resistant rice variety largely cultivated in Central Kerala especially in the Ernakulam district. Pokkali cultivation is fast losing ground due to the non-profitability of operations arising out of low yielding varieties of paddy and the high cost of labour involved. The saline resistant, tall variety of paddy cultivated in pokkali lands offers a unique opportunity to culture freshwater prawns simultaneous with the paddy crop during June to October.

The cultivation of high value freshwater prawns along with paddy would make the culture system more sustainable, eco-friendly and economical. The farming of prawns along with Pokkali is mutually beneficial. Left over feed and the excreta of the prawn will act as manure for
the paddy, and paddy plants will act as a biofilm for the development of periphyton, which constitute an ideal feed component for the prawn. Ornamental fish culture The state has a rich resource of indigenous ornamental fish in various river systems that have the potential to earn income to the state. Among these fishes, a few like Puntius denisoni are very valuable in the international market. Indiscriminate collection of these fish from the wild is a threat to the biodiversity. A certification system should be introduced for the export of indigenous fishes, to the effect that only captive bred and reared specimens are allowed to be shipped overseas. While regulating the export, the import norms of new varieties of aquarium fish need to be liberal. The nature and requirements of the world ornamental fish trade are quite dynamic.

To be competent, new varieties need to be introduced in the international market. The exporter needs to be updated on the current trends and the varieties traded in the prevailing market. Hence, the licenses for importing ornamental fish need to be made liberal to facilitate breeding them in captivity in our local conditions and re-export. Importing limited number of brood stock should be permitted liberally after strict quarantine. Presently, Kerala exports only wild caught fish to the international market. Most of the other exotic ornamental fish are being exported from Chennai, Kolkata and Mumbai. This need a change and the priority should be shifted to exotic varieties and captive bred native fishes. The ornamental plants in aquarium involve a sizeable trade in the international market.

These plants should be artificially propagated on a mass scale and explore the market possibilities. Conservation Serious effort to protect the biodiversity is needed in the case of indigenous ornamental fishes and coldwater fishes. In addition there were several recent issues with regard to introduction of exotic species like the African catfish Clarius gariepineus, pacu, gar fish, etc. in Kerala, which has made its way into the country through Bangladesh, or through ornamental fish imports, and are now established in many parts of India. Their recent entry into the open water bodies of Kerala is a major threat to the State’s aquatic systems. Despite the abundance of rich freshwater resources including rivers, reservoirs, lakes etc. and the presence of two active monsoon periods, the impact of freshwater aquaculture in contributing to the food sector is far less compared to other states like Andhra Pradesh, where water is a scarce commodity. Suitable technologies and methods need to be devised to enhance production and productivity from inland aquaculture, while safeguarding the environment.

This would bring about substantial increase in the number of jobs in inland aquaculture. Freshwater fish culture could also serve to enhance depleted wild fish stocks thereby increasing the value of commercial landings for fishermen and enriching the State’s aquatic inland resources. Paddy cum fish/prawn culture and cage or pen culture of prawns in reservoirs and other suitable water bodies appear to have great potential in augmenting the production from freshwater aquaculture. Since paddy is intimately associated with the life in Kerala, being the staple food, its integration with fish and prawn thereby catering to both domestic as well as
export markets could have great influence on the nutrition of the population, apart from increased exports.

Kerala: Vanishing fishing hits Kadalundi birds


The disappearance of the traditional mode of fishing gears seems to have impacted not only the fishery resources in the Kadalundi-Vallikkunnu Community Reserve, but also the dozens of migrant bird species that reach the sanctuary during winter. Studies conducted by a team of researchers from Calicut and Kannur universities have found a direct link between the traditional fishing method using bamboo nets and cages and the presence of birds in the estuarine waters of Kadalundi. Fish wealth M. Nasser, professor of zoology from Calicut University, who led the research, said the disappearance of the bamboo nets had not only affected the bird population, especially migrants in winter, but also the availability and variety of fish wealth in Kadalundi. “What we used to see when people fished with bamboo nets and cages was a kind of mutualism. Water birds like egrets, herons and kingfishers used to swarm the area where they found their best feed,” said Dr. Nasser.

When the birds relished on the small fishes caught in the bamboo nets, fishermen used to collect only large and medium fishes caught in the cages. “The interesting aspect of this fishing method was that all fish were caught alive and without any damage or injury to them,” said K.M. Aarif, team member and DSc fellow at Czech University of Life Sciences, Prague. “Fishermen used to throw all small fish back to the water without inflicting them any injury, thus displaying a great level of mutual regard for nature,” said Dr. Aarif. S. Athira and P.K. Sujesh, the other members of the research team, said that the disappearance of the traditional fishing method and a fall in the fish resources indicated the dwindling quality of the habitat. Attention needed “We immediately need to pay attention to this fall in quality,” they said.

The study, published in the Avian Research Scientific Journal, Springer, Beijing University, also pointed out that if the habitat and its ecology continue to take a beating, it would have a direct impact on the thousands of winged visitors reaching Kadalundi every year from across the continents.

Kerala: Mathematical ability or language comprehension, Kerala schools did nt rank that high, says Sunil Mani of Centre for Development Studies (CDS)

Kerala’s presence as a high-performing State in the NITI Aayog’s Sustainable Development Goal (SDG) index may not have come as a surprise, but the State can reap better benefits if it adopts an introspective approach to the rankings, say experts. In the overall placing, the State tied for the top spot with Himachal Pradesh scoring 69 out of 100. Each State and Union Territory won a composite score based on its aggregate performance across 13 out of 17 SDGs defined by the UN. Topped list Kerala topped the list in good health and well-being, quality education and stood joint first with Sikkim on gender equality. The report notes that a child born in Kerala can expect to live 11 years more than a child born in Uttar Pradesh. In industry, innovation and infrastructure, the State tied for the second position with Manipur, and in zero hunger goal, it stood third after Goa and Manipur.

In several other categories such as no poverty, reduced inequalities, peace, and building strong and accountable institutions, the State emerged a front runner, but at varying positions – as low as 10 and 12 - below other States. The rankings categorise the States into achiever, front runner, performer and aspirant. The rankings should, in fact, help to draw the State’s attention to individual goals and spur public policy decisions, rather than making it complacent, Sunil Mani, professor and director, Centre for Development Studies (CDS), Thiruvananthapuram, said. “In reality, Kerala is a ‘front runner’ only in two goals — good health and well-being and quality education. But are we really at the top? The State is still grappling with communicable diseases, for instance. Earlier studies have shown that the morbidity rate is very high,” Prof. Mani said. In quality of education also, the contemporary Kerala situation left much to be desired, he said.

Learning outcome “In a measure of learning outcome, for instance mathematical ability or language comprehension, I don’t think Kerala schools rank that high. Again, in industry, innovation and infrastructure, if you look at the medium and large enterprises that have come to Kerala, overall the State is nowhere. Mobile phone and Internet penetration may be high in Kerala, but are they true indicators of industry and innovation,” he asked. In the parameters set for eradicating hunger and poverty, Kerala ranked respectively three and five. The State was ranked 12th in reduced inequalities and clean water and sanitation and 13th in decent work and economic growth.

Next level The real challenge before Kerala is progressing to the next level, economist and Planning Board member K.N. Harilal said. “After you climb to a certain level, incremental progress then becomes difficult. We have achieved certain things, true, but we are in a position where we cannot stand still. Next generation challenges are manifold. We have to invest more in higher education and in tackling lifestyle diseases,” Prof. Harilal said.

**Himachal Pradesh, Kerala and Tamil Nadu: Top development index**

Himachal Pradesh, Kerala, and Tamil Nadu have been ranked highest in terms of being on track to achieve the United Nations’ Sustainable Development Goals (SDG), according to a first-of-its-kind index released by NITI Aayog on Friday. The index comprises a composite score for each State and Union Territory based on their aggregate performance across 13 of the 17 SDGs. The score, ranging between 0 and 100, denotes the average performance of the State/UT towards achieving the 13 SDGs and their respective targets. The average Indian score was 57. “The SDG Index Score for Sustainable Development Goals 2030 ranges between 42 and 69 for States and between 57 and 68 for UTs,” the report said. “Among the States, Kerala and Himachal Pradesh are the front runners, with an SDG India Index score of 69.

Among the UTs, Chandigarh is the front runner with a score of 68.” Tamil Nadu has a score 66, and is the top scorer on the goals to do with eradicating poverty and also providing clean and affordable energy. “The aim of the index is to instil competition among States to improve their performance across social indices as the States’ progress will determine India’s progress towards achieving the set goals by 2030,” NITI Aayog CEO Amitabh Kant said. Using the index, States will be monitored on a real-time basis. “Kerala’s top rank is attributed to its superior performance in providing good health, reducing hunger, achieving gender equality and providing quality education,” the report said. “Himachal Pradesh ranks high on providing clean water and sanitation, in reducing inequalities and preserving the mountain ecosystem.”

“Among the UTs, Chandigarh takes the lead because of its exemplary performance in providing clean water and sanitation to its people,” it said. “It has further made good progress towards providing affordable and clean energy, generating decent work and economic growth, and providing quality education.” Overall, the average score for the States was the worst when it came to gender equality (36), in creating sustainable cities and communities (39), in enabling industry, innovation, and infrastructure (44), and in eradicating hunger (48). The SDG India Index - Baseline Report 2018 is available at: http://niti.gov.in/writereaddata/files/SDX_Index_India_21.12.2018.pdf

Kerala: Dead fish, oil films float in city rivers


Dead fish and films of oil now float in the city’s rivers. While the fish kill occurred in the Muttarpuzha (a tributary of the Periyar) near the Manjummel regulator-cum-bridge over the last two days, reddish layers of oil have been found in the Periyar over the last three days near the Pathalam regulator-cum-bridge in Eloor in the city. Periyar’s woes Apart from the oil films, it has been a week since the colour of the Periyar on this stretch changed to brown, claim local activists. “Though we alerted the Pollution Control Board, all they did was take samples from the
According to locals, the release of effluents into the river from the surrounding industries is the cause of the change in colour and the oil films that have appeared. The effects of the pollution can be felt downstream too, say fishermen from Varapuzha and Kadamakkudy. “It affects fish cultivation downstream in Kadamakkudy,” says Anilkumar B.B., a fisherman who also runs a shrimp farm in Kadamakkudy. “At such times, thirutha [mullet] fish taste of DDT and they cannot be eaten,” he adds. The change in the water quality over the last week has prompted fishermen allied with the Bharatiya Mazdoor Sangh (BMS) to demand that government authorities look into the matter immediately.

“The fishermen are slowly inching back to normal life after the floods,” says C.N. Saneesh, a member of the Varapuzha BMS committee. “But now our livelihoods are at stake again. We want the Fisheries Department to look into this problem too.” Fish kill Fish kill in the Muttarpuzha near Manjummel has been happening over the last two days, say residents. On the afternoon of December 19 too, remnants of sunken dead fish could be spotted on the shallow river bed and dead shrimp lay on the banks. A day ago, a faint film of oil was also present on the river, says Rony Varghese, a Class IX student who lives nearby. “Fish kills are a common sight here,” says Sebastian A.J., a resident.

“Many people spear the floating fish and sell them in the market.” The fish kills are primarily due to the stagnation of the river, says engineer B. Sreeelakshmi of the State Pollution Control Board at Eloor. The lack of river flow combined with increased pumping out of water from the river for human use can cause effluent discharges to be concentrated and hence, cause fish kills, she adds. “As organic content in the water increases, oxygen decreases and causes the fish kill,” she says. “We have taken several samples across the river to study this and the oil layers. Our preliminary analysis suggests that the oil came from somewhere upstream. We are also compiling a detailed report on these issues along with an action plan suggesting how to rectify these problems.”

Kerala: Inland fisheries suffered massive losses in floods


A workshop organised by the School of Industrial Fisheries and Industrial Fisheries Students Association, Cochin University of Science and Technology, here on Monday took stock of the fisheries sector in the State, especially against the backdrop of the mid-August floods that caused massive losses to marine and inland fisheries sectors. Leela Edwin, senior scientist at the Central Institute of Fisheries Technology (CIFT), who made a presentation on the impact of the floods, said that a team of CIFT scientists had made a rapid assessment of the fisheries sector. She said a
report had been submitted to the Union government in this regard. Inland fisheries, where fishermen are less organised than in the marine sector, had suffered massive losses.

Fishing equipment and implements were lost, she said. S. Sarma, MLA, who inaugurated the workshop said though financial gains from fisheries sector had considerably improved, the condition of traditional fishermen had not improved. The impact of recent natural calamities has worsened the situation. The State has to frame strategies for empowering traditional fishermen in deep-sea fishing and coastal mariculture activities. R. Sasidharan, Vice Chancellor, Cochin University of Science and Technology, presided at the inauguration. B. Madhusoodana Kurup, first Vice Chancellor, Kufos, delivered the keynote address. K. Gopakumar, former Deputy Director General (Fisheries), ICAR, and A. K. Chaudhury, Director, CIFNET, were among those who spoke.

Kerala: Juvenile fishing rears its ugly head again


The seizure of a boat with around 3,000 kg of juvenile threadfin breams on Friday by Fisheries Department officials has brought to light the continuation of a practice that has been banned under the amended Kerala Marine Fisheries Act even as a section of fishermen continues to complain of a serious depletion in marine fish resources. The boat was seized at Munambam and the saleable fish catch was auctioned off for about ?30,000; the juvenile catch was taken into custody and it was not sold. The boat owner was fined ?2.5 lakh, said an official. He said the instances of juvenile fishing had come down drastically with the department stepping up vigil. However, there are some who still engage in the practice.

Some of the boats have been reported to be landing juvenile catch in unnotified centres as there is always lookout for juvenile catch in notified fish landing centres. Charles George of Matsya Thozhilali Aikya Vedhi said that there was an open agreement among stakeholders about totally abstaining from unsustainable practices. He added that juvenile fishing was not the only problem. Traditional fishermen and boat owners had agreed to refrain from night fishing. However, there appeared to be a split among stakeholders with regard to issues such as night fishing and juvenile fishing, he said. He said the government must adopt stern measures to rein in destructive practices. He added that timely reviews of existing rules and even periodic ban on fishing certain species were needed now.

Kerala: Plastic fishing to revive Kakkad river

The concept of plastic fishing could not have come at a more opportune time for the Kakkad river. The river has been reduced to a dump for the past several years and has been left to the mercy of encroachers. The plastic-fishing mission was launched in the river, hardly 3 km from the Kannur town, on December 8 to create awareness among the local residents and to involve them in saving this tributary of the Valapattanam river. As the first phase of the mission, volunteers of the Malabar Awareness and Rescue Centre for Wildlife (MARC) participated in the plastic fishing on the day. “Our proposal for plastic fishing in the Kakkad river was approved by the Department of Environment and Climate Change as part of its Paristhithikam programme,” said R. Roshnath, wildlife researcher associated with MARC.

Migratory birds The river, part of the Kattampally wetlands, was a favourite haunt of migratory birds, he said. It was also a nesting and foraging site of herons. Waste dumping and encroachment were posing a major threat to the river, he said. MARC hired three boats for the plastic-fishing campaign. The campaign is being supported by the Kannur city Corporation and the Haritha Keralam Mission. In the next phase, a group comprising local residents will be formed to make the entire stretch of the river plastic-free. Survey Meanwhile, officials said that the Revenue Department had started a survey to identify encroachment on the Kakkad river and to protect it from further encroachment. There was also a proposal to set up birdwatching facilities there.

Kerala: Fishing boat fees: response of govt sought


The High Court on Friday sought the response of the State government on a writ petition filed by the Fishing Boat Operators Association, Kollam district, challenging the rule increasing the licence and registration fees for fishing boats and imposing restrictions on fishing by mechanised boats in the territorial waters of the State. The association, in its petition, said the licence and registration fee had been enhanced exorbitantly as per the Kerala Marine Fishing Regulation Rules, 2018. In fact, excess fee had been prescribed for registration and renewal of licence. As a result, many boat owners were not able to obtain licences or renew their registration.

Kerala: Workshop on rebuilding fisheries sector


A national-level consultative workshop on ‘Rebuilding Kerala - new paradigms for development of fisheries sector’ will be held on the Lakeside campus of Cusat on December 17. Jointly organised by the School of Fisheries, Cusat, and Industrial Fisheries Students’ Association, the workshop will be inaugurated by S. Sarma, MLA. R. Sasidharan, Vice Chancellor, Cusat, will
preside over the function. B. Madhusoodana Kurup, former Vice Chancellor, Kerala University of Fisheries and Ocean Studies, will deliver the keynote address.

The workshop will focus on the losses suffered by the fisheries sector in the August floods. The losses are assessed at ₹175 crore. It will also discuss rebuilding the fisheries sector with innovative and sustainable production systems to tap the full potential of marine and inland aquaculture. Action plans and strategies will be discussed for rebuilding and enhancing fish wealth. Besides, the workshop will deliberate on new approaches for increasing per capita consumption of fish.

**Kerala: Fishermen disrupt dredging work**


Fishermen from Vypeen Island under the aegis of Theeradesa Matsya Thozhilali Union protested against dredging operations off the island’s coast on Tuesday demanding that the dredged material should not be dumped in such a way that it affected fish availability and livelihood of fishermen. Charles George of Kerala Matsya Thozhilali Aikya Vedhi, who inaugurated the protest action, said that if the authorities did not call fishermen for talks, they would intensify the protest. Fishermen from the island have been struggling in the face of depleted fish resources. The same fishermen were in the forefront of the rescue operations in the State during the mid-August floods.

However, the question now was who would save the saviours, he said. Protest meeting Fishermen initially gathered on the coast in a protest meeting before venturing out into the sea in a dozen small fishing boats. They prevented dredging operations for about an hour before calling off their protest, Coastal Police sources said. The dredging operations are being carried out to increase the depth of the waters for the LNG terminal on the island. Mr. George claimed that according to an understanding, the dredged materials should be dumped about 17 km off the coast. However, the material were being dumped on the coast, which was being washed back into the sea.

**Kerala: Germany to provide Rs 720 crore loan to flood-hit Kerala**


Germany will provide financial aid of Rs 720 crore to rebuild climate-resilient infrastructure in flood-ravaged Kerala. German Ambassador to India, Martin Ney said the loan would be provided at a nominal rate by the German Development Bank, KfW. The rate would be decided after expert discussions, said Ney, while adding that the aim was not just to rebuild Kerala but to
make the new infrastructure climate-resilient. “In Germany, we have the expertise to build and maintain climate-resilient infrastructure. So, we will support Kerala financially to do the same,” the ambassador said.

According to Ney, besides a reduced interest loan of Rs 720 crore to promote climate-resilient reconstruction of transport infrastructure, KfW will also provide a Rs 24 crore grant for international expertise in the field of climate-resilient infrastructure planning. “In 2019, we may also provide a Rs 80 crore support. However, the decision will be taken later,” the ambassador said adding that annual German aid to India is to the tune of 1 billion euros. The aid to be given for flood relief was agreed after talks with the Union government held just after the August floods in Kerala. Ney also stated that within the framework of Indo-German cooperation, the city of Kochi had been selected to receive particular support in order to become a “Smart City”. “Through KfW, Germany is financing a Rs 940 crore project to provide Kochi with an integrated water transport system.

The Water Metro project involves 15 identified routes connecting 41 boat piers and 10 island communities in the 46 km route network,” he said. On Thursday, a High Level Committee of the Centre headed by Union Minister for Home, Rajnath Singh, approved an additional assistance of Rs 3,048 crore to Kerala. The Kerala government had sought Rs 4,700 crore as compensation from the Centre for the damage caused by the floods, which were termed as “the worst in a century”. At least 488 people died in the floods which hit 14 districts of the state. In September, a month after the floods, Kerala had submitted a memorandum to the Centre seeking Rs 4,800 crore for relief work. The memorandum included all the details about the loss of human life, property, infrastructure and damage to crops.

Responding to this, a committee headed by the Union Home Secretary had cleared Rs 3,100 crore. The Rs 600 crore that was announced as an advance earlier was included in this amount. Following the flood, there was an offer of Rs 700 crore from the United Arab Emirates (UAE). However, it didn’t materialise. Besides the UAE, the emirate of Sharjah had also offered separate financial aid of Rs 4 crore. Qatar had offered Rs 35 crore and the Maldives had also offered some help. But the Indian government had decided to refuse any help to deal with the post-flood reconstruction and rehabilitation process. The Centre’s decision was questioned by Kerala Chief Minister Pinarayi Vijayan. Recently, the United Nations (UN) Resident Coordinator in India, Yuri Afanasiev, presented the Post Disaster Needs Assessment (PDNA) Report to Vijayan, that assessed the damage and loss incurred due to the floods.

According to the report, the state would need about Rs 31,000 crore for recovery and reconstruction. The highest amount would be needed for the reconstruction of roads and transportation (Rs 10,046 crore), followed by housing (Rs 5,443 crore), agriculture, fisheries and livestock (Rs 4,498 crore), employment and livelihood (Rs 3,896 crore), other infrastructure (Rs 2,446 crore), irrigation (Rs 1,483 crore) and water and sanitation (Rs 1,331 crore). The report
highlighted international examples and models for building a better Kerala in 16 sectors. It suggested that Kerala could become the first green state in the country by building on the four pillars of integrated water resources management; eco-sensitive and risk informed approaches to land use and planning; inclusive and people centered approaches; and by adopting knowledge, innovation and technology.

The PDNA is the global methodology developed by the UN, the World Bank and the European Union to assess damage and loss in the wake of disaster and to recommend recovery needs and strategies. In all, 76 experts from 10 UN agencies and the European Union across 13 sectors collaborated to develop the report in 20 days. The UN agencies included the UNDP, UNICEF, UNESCO, UN Women, UNFPA, UNEP, WHO, WFP, ILO and FAO and adopted reports of 3 sectors from the World Bank and the Asian Development Bank. Besides, two experts on integrated water resources management from the Netherlands also provided support. The report was prepared after visiting 120 villages in 10 districts and interacting with experts, affected people, elected representatives, officials and representatives of civil society organisations.

Kerala: Coast contains ecologically and socio-economically most vulnerable stretches


Home to ‘Venice of the East’, the coastal district of Alappuzha in the south Indian state of Kerala, and forested hills in tourist-magnets Idukki and Wayanad, are “very highly vulnerable” to climate change, says a recently released vulnerability index of the flood-battered state. Bringing both environmental and socio-economic factors into the picture, researchers led by the University of Kerala, assessed the local dimensions of vulnerability in the tropical state of Kerala, using a specifically designed composite vulnerability index. Kerala has a very long coastline of 570 km, out of which close to 60 percent is prone to severe sea erosion, points out the Kerala State Action Plan on Climate Change. “The coastal wetlands, lagoons and mangroves, which are unique fragile coastal ecosystems in Kerala, are under the combined threat of projected sea level rise and saltwater intrusion,” S. Sarun, the lead author of the study, told Mongabay-India.

“Hence, those districts that have (their) maximum geographical area under these ecosystems have the highest vulnerability,” said Sarun, of the department of geography, University College, University of Kerala. Also at play is the interaction of various socio-economic elements. “Generally vulnerability is higher for those deprived sections of a society who could have been victims of some phenomena or events including the impact of climate change. We have tried to give prominence to people who are dependent on climate-sensitive sectors such as fisheries, forestry and agriculture,” said Sarun. Farmers, fishermen and tribes are most vulnerable Farmers, fishermen and tribes are most vulnerable groups in the state because their dependence on fishery,
forest and farming opens them up to the ravages of climate change while at the same time they are not adapted to cope with the uncertainties.

“These all are considered for determining socio-economic vulnerability. This study may help to plan appropriate measures to address events such as flood, drought, landslide, coastal erosion, storm surge which all are climate-induced one in the state,” Sarun said. The tourist-friendly state was thrust into the limelight this year when torrential rains (second spell of southwest monsoon) hammered the state from August 8 to 19 this year, displacing millions and killing over 500 people in rain-related events. Government officials estimate losses due to the floods and landslides at more than the state’s annual plan outlay (Rs. 26,500 crore or Rs 265 billion for 2017-2018 fiscal). A coordinated post disaster needs assessment study by United Nations organisations stated that the state would need Rs 31,000 crores (Rs 310 billion) for rebuilding.

Countries in South Asia are among the most vulnerable globally to the impacts of climate change according to the Global Climate Risk Index 2019 released at the ongoing annual climate summit in Poland (COP24).

India has been ranked the 14th most vulnerable nation in the index which said massive rainfall triggered floods across Nepal, Bangladesh and India, affecting more than 40 million people. Anshu Sharma co-founder and director of SEEDS India, a non-profit organisation working in disaster risk reduction and recovery in Asia, said vulnerability indices are “very useful” as “they contextualise a risk or disaster impact.” “The same rainfall/flood in Florida would have a different impact. Vulnerability indexing tells you about the impact or potential impact of a given hazard for a specific geography or community. How reliable is this is something that depends on how robust the method followed was,” Sharma said. The good, the bad and the ugly So how does Kerala fare? The researchers explained that factors such as a high population of people crammed into a narrow coastal strip inset with wetlands and lagoons–that are exposed to anticipated climate change risks such as sea level rise–have propelled Alappuzha to the top (very highly vulnerable) in the index.

Features such as backwater banks and filtration ponds/paddy fields are other sections of the coastal zone which are highly susceptible to sea level rise (SAPCC). Of the 14 Kerala districts, Alappuzha is the most densely populated one in the state, with a sizeable percentage of people depending on sectors like paddy cultivation and fishery which are sensitive to climate change, the study notes. Idukki, Wayanad, and Palakkad that also hold sway in the top are endangered due to the high population of primary and socially deprived sectors inhabiting a landscape hallmarked by extensive patches of tropical montane forests amid rolling grasslands (locally called Shola forests) as also carpets of dense forests.

A large distribution of Shola forest and dense forest cover leads to higher exposure to climate change risk, the researchers assert. Palakkad has a high social vulnerability because of the percentage of the population relying on agriculture-related activities and the comparatively low
performance on the human development index. It also has a high concentration of socially deprived groups (it has the highest number of Scheduled Caste population in the state). Similarly, state capital Thiruvananthapuram is pegged as ‘highly vulnerable’ due to the comparatively large extent of sand beach. Thrissur and Kozhikode are in the middle (regions of medium vulnerability), their places attributed to population density, extent of beach and dense forests. At the bottom of the rung with less vulnerability are Pathanamthitta, Malappuram, and Kasargod due to the absence of Shola forests and mangrove forest and also due to less extent of coastal wetlands and lagoons.

The index rankings, therefore, reflect the identification of districts that more threatened under the impacts of climate change. Sarun Savith is hopeful that the index will be incorporated in the updated version of the state action plan. “The state action plan also has graded the districts according to composite vulnerability and they also list the same vulnerable hotspots but the present study is more scientific and has a strong component on the meteorological component. So that is why we hope the index will be incorporated,” Savith said. Index shows the way for adaptation Pinpointing exposure and sensitivities through the index can also inform adaptive measures in a regional specific context for coastal areas, forested areas, and high densely populated areas and socially deprived hilly regions.

The study suggests that for the protection of forests, it is essential to limit anthropogenic disturbances, monitor changes and allow for the regeneration of keystone species, as well as maintenance and creation of connecting corridors over the landscape. For the protection of mangroves, authors recommend coastal planning that facilitates the inland migration of mangroves due to sea level rise. To shield beaches and lagoons, beach nourishment, construction of sea walls and sea dykes, storm surge barriers, flood-proofing measures, flood hazard mapping, flood warning, and forecasting systems can be adopted. MC Deo from IIT Bombay, who was not associated with the study, said there is a gamut of hard and soft options to protect vulnerable coastal areas. “While the former includes building structures, the latter involves eco-friendly interventions with minimum damage to the coast.

The hard measures pertain to building sea walls, groynes and similar structures while the soft one are in the form of geo- or sand tubes, artificial beach nourishments, growing vegetations around sand dunes, creating a buffer zone of mangroves,” Deo said. Deo advocated “scrupulous” adherence to coastal zone regulations framed by the Indian government as they target eco-friendly measures. “Only in case of unavoidable coastal works, like defence works, a combination of soft and hard measures need to be adopted,” he said. This apart, Savith and co-researchers said prohibition of reclamation of wetlands, discharge of wastewater into wetlands, treatment of wastes at source itself and soil erosion control measures in the catchment area of tributaries to wetlands, measures to reduce siltation of wetlands are important.
Researchers have mapped Kerala districts according to vulnerability to climate change by bringing both environmental and socio-economic factors into the picture. Vast swathes of coastal wetlands and lagoons and larger clusters of mangrove forests make the state environmentally vulnerable. Low human development index, a large population of socially deprived groups, which are dependent on the primary sector, and high population density render the state vulnerable from a socio-economic point of view.

Kerala: Multi-species aquaculture facility a milestone


The newly opened multi-species aquaculture complex launched by the Marine Products Export Development Authority (MPEDA) will cater for aquaculture farmers in Kerala as well as the neighbouring Karnataka and Tamil Nadu. The highlight of the facility is a hatchery for black tiger shrimp and six nurseries for mud crab and four varieties of fin fishes—sea bass, cobia, silver pompano, and genetically improved farmed tilapia. The hatchery has an annual production capacity of 20 million post-larval black tiger shrimp, and the nurseries can produce 16.5 lakh fingerlings of fin fish and 0.5 lakh crablets which will help farmers diversify and scale up aquaculture production, said a press release here. The hatchery has a quarantine facility and an effluent treatment system in accordance with biosecurity norms.

The nurseries meant for diversified fish/shellfish species are ponds lined with high-density polythene and provided with necessary biosecurity protocols. Proximity to airport The proximity of the facility to the international airport is an added advantage ensuring faster transportation of seeds. The Vallarpadam facility can become a model for the establishment of similar facilities in other parts of the country, especially in the Konkan region and parts of Maharashtra. Union Minister for Commerce Suresh Prabhu, who inaugurated the aquaculture facility, also opened MPEDA’s signature stall that will function from the authority’s headquarters in Kochi. The stall, named Seafood India, is a 1,700-sq ft facility at Panampilly Nagar, selling and displaying value-added marine products of exporters, besides exhibiting products developed by prominent fisheries research institutions such as CMFRI, CIFT, and NIFPHATT.

Kerala: In a first, Asian green mussels produced in micro-nursery system at Vizhinjam CMFRI


In a first, Vizhinjam Central Marine Fisheries Research Institute (CMFRI) has developed the juveniles of Perna viridis or Asian green mussels through micro-nursery system. This is part of the efforts to make the mussels available to aquaculture farmers. The Asian green mussels are
commonly found on the coasts of Kerala. However, juveniles of the mussels are not available on an industrial basis. In this situation, the CMFRI developed the mussels in the institute. In order to artificially produce the mussels, the natural habitat of the mussels was recreated in a special hatchery. Then the micro-nursery system was arranged and adult mussels were deposited. In the artificial system, each phase of growth since the egg laying to larvae stage of the mussels were observed.

Though Asian green mussels are being produced in various marine research institutes in India, it is for the first time they are being produced in micro-nursery system. The mission was accomplished by a team including scientist Gomathi headed by CMFRI chief Dr. M. K. Anil. About 20 lakh juveniles of mussels can be produced at a time in the micro system developed at the CMFRI. Asian green mussels are one of the most delicious and less harmful variety among mussels. The authorities said that they will develop the juveniles on an industrial scale and distribute it to the farmers. The new hatchery will be inaugurated on Tuesday by union minister of state for agriculture Krishna Raj.

**Kerala: Undeterred, stitching back net of life**


Much of their lives have been around fishing nets. The stories of the biggest losses of their lives are also related to these nets. Now, the slow rebuilding of their lives too happen around these nets. On the top floor of the Kerala State Cooperative Federation for Fisheries Development’s (Matsyafed) fishing net-making factory behind the Beemapally mosque, 37 women who have lost their husbands to Cyclone Ockhi are learning a new craft to stay afloat. Pavitha, 36, from Poonthura who had never gone for work outside her house, have been undergoing training in net making, with others like her. Her husband Moses, who had come back to Kerala after 15 years in Dubai, had gone to the sea on November 29 with another fisherman. Skeletal remnants of his friend’s body were recovered from near Beypore, a month later. But Moses’s body never turned up. Relief for many The job has come as a relief for Pavitha, who has to look after three daughters.

“The government has deposited a compensation of Rs. 20 lakh, from which we can draw a monthly interest of Rs. 14,000. Here, I get paid Rs. 10,000 a month during the training period. The government is also funding for the children’s education. This is the first time I am going out for work. So, I am still getting used to it,” says Pavitha. Selvi from Adimalathura used to help with the loading and unloading work at a nearby fishing harbour. She did not get the body of her 38-year-old husband who went with 16 others to the sea on the day Ockhi hit. She is also slowly finding her feet at the factory. “My biggest concern now is to catch the only direct bus from home to here. If I miss that, I will have to shell out a lot of money for auto. Four of my children...
are in school. I do get affected by back pain often from this work, but I have to continue working for the children,” she says. Their work involves mending holes in the nets after it passes through the stitching machine. “Matsyafed already has two centres in Ernakulam and Kannur. This centre was launched two years back. There is huge demand for fishing nets. We got two people from the Ernakulam centre to train these women. Some of them are learning fast, while a few are naturally struggling,” says V.B. Geetha, manager of the facility.

**Kerala: Conduct study of Ockhi impact on seawater, fishermen: House panel**


The Assembly committee on environment has recommended a study into the impact of Cyclone Ockhi on coastal ecosystem, the livelihood of fishermen and seawater. It had also stressed the need for using local parlance used by fisherfolks before the agencies go ahead with the messages on cyclone and rain alerts. The committee had come out with the demands in its report on Cyclone Ockhi and the environmental impact it had on the coastal areas. The panel noted as the alerts issued to fisherfolks were mainly in English is not giving desired results. “The Ockhi disaster has underscored the need for setting up a mechanism that could compile the alerts provided by Indian Meteorological Department (IMD), Disaster Management Authority, Fisheries Department and Kerala University of Fisheries and Ocean Studies,” observes the committee. and is riddled with technical jargons it has not been yielding the desired results.

The other major recommendation is regarding the conduct of an environmental impact study into the discharge of plastic wastes and other effluents into the seawater. The study should also cover unscientific construction activities along the coast belt. The committee which takes a strong note of construction of groynes and seawall along the coast calls for the need to carry out an environmental impact study on the site before its construction. According to the committee, as unscientific construction of groynes and seawall leads to sea surge and pose hardships for fishermen to venture into the sea, such kind of study will help address such issues. The due compliance of CRZ norms will also have to be adhered to during such constructions, reminds the committee.

However, the committee in its report mentioned that the IMD cannot shrug off its responsibility of failing to provide a timely alert. It further adds that the stance of SDMA that it could act only upon official intimation needs to be revisited. 379 houses vacant T’Puram: Fisheries Minister J Mercykutty Amma said in the Assembly that 379 flats/houses allotted for tsunami victims were lying vacant. There are 8,762 flats/houses constructed in the state. According to the minister, 8,190 families were residing at such flats/houses, of which 22 were staying illegally. Such families will be removed and the flats will be allotted to eligible persons. An instruction has been
given to the Revenue Department in this regard, the minister said. As per the data tabled at the Assembly, the illegal occupants were mostly at Kozhikode (20), followed by Alappuzha (2).

Kerala: Skill Development Programme on Value Addition of Fish, Fishery Products held in Kerala


ICAR–Central Institute of Fisheries Technology, Kochi, in collaboration with The Kerala State Co-operative Federation for Fisheries Development Ltd. (MATSYAFED) has conducted a three-day long skill development programme on “Value addition of fish and fishery products” from 14-16 November, 2018 at Cherai village of Ernakulam district, Kerala. The programme conducted with the assistance of National Fisheries Development Board (NFDB), Hyderabad was attended by 24 participants from coastal areas like Cherai, Munambam, Edavanakkad, Malipuram etc. Shri A.B. Shaji of Cherai Fishermen Co-operative Society inaugurated the programme on 14 November 2018. Shri George, Manager, Matsyafed, Ernakulam District offered felicitations on the occasion.

Sessions on hygienic handling of fish, nutritional benefits of fish consumption, drying, handling, preprocessing, drying using solar dryers, quality evaluation and packaging, waste utilization, fish for alleviating malnutrition, entrepreneurship development, anti-microbial resistance and personal hygiene were conducted. Preparation of value added products like fish papad, fish soup and hygienic drying using solar dryers were demonstrated. Shri K.C. Rajeev, Board Member, MATSYAFED pointed out the importance of translating the learning to action and offered all the support from MATSYAFED in the future endeavors. He also appreciated the effort of ICAR-CIFT in reaching out to the fisher folks with innovative technologies. All the participants expressed their satisfaction at the end of the training programme. Participants demanded more training in the same line.

Some of the participants expressed their willingness to initiate small scale enterprises based on the learning from the programme and by further updations. The certificates of participation were distributed by the Chief Guest and other resource persons. Dr. Suseela Mathew, Head, Biochemistry and Nutrition Division, ICAR-CIFT and Coordinator of the programme appreciated all the participants and MATSYFED Officers for their wholehearted support during the programme. She urged the participants to make use of the learning in their day to day life and to initiate small scale venture. She assured the support of ICAR-CIFT in providing technical know-how related to value addition of fish and fishery products.
Kerala: Juvenile fish catching continues despite strict laws

Despite a year after implementation of stringent laws against capture of fish under minimum legal size (MLS), catch of juvenile fish continues. As juvenile fish catching became rampant and started affecting the total catch, the government — on a recommendation by Central Marine Fisheries Research Institute — had brought out a list of MLS for various species which can be caught. Recent data from district fisheries department reveals that 11 cases of illegal fish catch were reported till date this year. By slapping fine and through auction, the department had collected a total of Rs 14 lakh. The fine amount alone cost about Rs 13 lakh. According to the data, majority of the MLS violation cases happened in April and July. “Presence of some amount of fish under MLS is quite normal among large quantity of catch.

It is not practically possible to avoid catching juvenile fish. The department confiscates a catch only if fish juveniles are present above 30% in the whole lot,” said assistant director of fisheries at Vypeen Joice Abraham. Another major violation, which has been under scanner this year, was fishermen engaging in fishing without necessary documents. In about eight such cases, the department had confiscated Rs 20 lakh till date this year. Meanwhile, members of All Kerala Fishing Boat Operators’ Association (AKFBOA) expressed their concern over poor catch due to recurrent prohibition on fishing and of stringent laws. “It has been a bad year for fishermen in the state due to poor catch.

With strict laws imposed by the fisheries department only in our state, fisherfolk here are not being able to catch up with the fishing outcome of other states,” said vice-president of the association Paul Rajan. “As laws prohibit us from using certain techniques such as pelagic nets, we cannot catch marine species that are close to us. Whereas fisherfolk from other states are catching our species,” said general secretary of the association Joseph Xavier. He added that boat owners under the association would soon go an indefinite strike against the stringent laws that is applicable only to our state.

“We have intimated the issues to officials of both the Centre and state governments, but we have not received any reply so far,” he said. Joseph also added that they would file a case in the high court regarding implementation of special laws for fishermen in Kerala. Boat owners also expressed concern over the issue of migrant workers, mostly from Tamil Nadu, returning to their native states due to strict laws enforced here.

Kerala: Post-Ockhi, govt spends Rs 120 crore

Kerala has shelled out over Rs 120 crore for immediate relief and future projects within a year after cyclone Ockhi left behind unprecedented trail of destruction. Officials estimate it as the biggest-ever allocation and expenditure post a natural disaster in fisheries sector in the state. As per the revenue department data, an amount of Rs 18.9 crore was spent for relief activities in Thiruvananthapuram, the worst-affected district, making it the highest amount of relief fund to be spent in the past few decades in the district and the highest across Kerala. Kollam, Ernakulam and Alappuzha districts had to spend Rs 3.7 crore, Rs 2.96 crore and Rs 5.05 crore respectively.

Thursday marks the first anniversary of Ockhi disaster. Five months after the tragedy, the state government had distributed Rs 20 lakh each to families of 92 missing fishermen and Rs 22 lakh each to families of 51 Ockhi victims.

The fisheries department had estimated loss to 187 boats and 446 nets and an administrative sanction of Rs 9 crore was accorded as compensation towards loss of fishing equipment. “We didn’t stop with compensating families. Projects were drawn up with a long-term vision for the education of fishermen’s children. Besides, projects to establish faster mode of communication like satellite phones and NavIC are also underway,” said fisheries department additional director P Sahadevan. At the onset itself, 1,14,032 families were given an immediate aid of Rs 2,000. The families who got displaced in Ockhi are being paid a monthly rent of Rs 3,000 and for the first year an amount of Rs 26 lakh was allocated. The department has now undertaken the task to compensate fishermen families who lost their homes, either completely or partially. This amount is higher than that has been allotted to families affected by flood. Fishermen whose houses have been completely damaged are being given Rs 10 lakh while the maximum amount allotted for houses reported with 75% damage in flood is Rs 4 lakh and the minimum amount for flood victims under house damage is Rs 10,000.

The government has allotted an amount of Rs 7.41 crore for compensation under damage to houses after cyclone Ockhi. As many as 458 houses have been identified as partially damaged in Ockhi. Government has also reached out to 318 children of Ockhi victims, allotting Rs 13.92 crore for their education every year till 2037. “We could do away with many mandatory requirements for distribution of aid when Ockhi happened. This helped us distribute the amount at a fast pace,” an official with the fisheries department said. Three marine ambulances are being made at Cochin shipyard at a cost of Rs 18 crore. State government is mulling a Rs 2,000-crore external agency funded rehabilitation package for fishermen community in the state after the Centre has cold shouldered the rehabilitation package to the tune of Rs 7,340.45 crore submitted by the state government after Ockhi.

Kerala: One year after Cyclone Ockhi, Kerala’s fishing families are still struggling to rebuild their lives

No one expected Lawrence Bernard to return home from the sea when Cyclone Ockhi hit coastal Kerala last November. The 48-year-old fisherman was missing for over three days after it struck. During that time, he was clinging to his capsized boat in the cold waters of the Arabian Sea, braving monster waves that had paralysed his lower body and shattered his ear drums. He was eventually rescued by a foreign merchant ship. Bernard’s joy knew no bounds when he finally returned home to Poonthura village in Kerala’s Thiruvananthapuram district, where he spent three days being treated at the Government Medical College. But a year after his miraculous escape, he wonders if it would have been better if he had died at sea. “I am a living dead,” said Bernard from his bed on Friday. “I cannot work. I cannot move on my own. Back pain and vertigo attacks have ruined my life.

Did God save me from Ockhi to undergo all these hardships? My family would have got government support if I had died at sea.” Cyclone Ockhi, which battered Lakshadweep, Tamil Nadu and Kerala on November 29, 2017, before heading towards Gujarat, had killed 143 fishermen in Kerala. Only 52 bodies could be recovered, while the remaining 91 missing fishermen were declared dead. Since then, the Kerala government has spent Rs 202 crore to support affected families, rebuild coastal villages and help the fishing industry return to normalcy. This sum includes the Rs 20 lakh the government provided to the immediate relatives of each deceased fisherman as compensation, and monetary assistance for those who were injured and whose boats were damaged. Bernard, for instance, received Rs 10,000 as financial assistance after he was discharged from hospital. Poonthura and Vizhinjam fishing villages in Thiruvananthapuram district bore the brunt of the cyclone. Together they accounted for half the deaths recorded in the state – 35 fishermen from Poonthura and 37 from Vizhinjam. Bernard is one of the 153 survivors from the two villages. Many protests were held in these villages immediately after Ockhi – first to demand that the government intensify rescue operations and later to push for higher financial support for the dead and injured.

A year later, there is resentment against the government on a number of issues. These include conditions attached to the compensation amount, a perception that the injured have been left to fend for themselves, and claims that the government has not given the widows of fishermen the jobs they were promised. In this past year, these villages have also seen far-reaching socio-economic changes because of Ockhi. Several fishermen have quit fishing out of fear or are taking an extended break from the sea. This has had a domino effect on the fishing industry that the economies of the two villages are so dependent upon. Right to compensation One of the biggest grousers the families of the dead fishermen have are related to the conditions the government has attached to the compensation amount. The sum of Rs 20 lakh was equally divided among the parents, wife, children, and unwed sisters of the dead fishermen. According to the terms of disbursement, the sum was converted into a bank fixed deposit for five years.

The beneficiaries receive the interest earned on that deposit in monthly instalments. In families where the deceased fishermen had children, the principal amount can only be withdrawn for their
marriage. It is not clear when the parents and widows of fishermen who died without children can withdraw the lump sum. The families say that the government should allow them to withdraw their entire share to settle their debts as that helps them more financially. Vizhinjam resident Blasita Pathrose, 56, who lost her son Sebastiaradima alias Sebastian, 36, received one fourth of the compensation amount, or Rs 5 lakh. Sebastian’s wife and two children were the other beneficiaries. “I get monthly interest of Rs 3,500, but I pay Rs 4,000 as rent for the place where I live with my daughter,” she said. “I never faced financial difficulties when my son was alive. I would have bought a house if the government allowed me to withdraw my share.”

Muthappan Alarappan and his wife Elsy, also from Vizhinjam, lost their youngest son John Muthappan, 29, to Ockhi. His body was not recovered.

“John lived with us in this rented house,” said 55-year-old Alarappan looking at his son’s photograph hanging on a wall of their home. “He used to take care of all our needs.” The couple pays Rs 2,000 a month to rent their tiny asbestos-roofed home. “We get Rs 14,000 as interest from the fixed deposit, which is a big support,” said Elsy. “But we should be allowed to withdraw it. It will help us buy our own house.” Leaders of the Catholic Church, which wields a lot of clout in Thiruvananthapuram’s Christian-dominated coastal villages, have also demanded that the state allow relatives of the victims to withdraw the entire compensation amount. “The government should hand over at least half of the money to the relatives,” said Issac Johny, secretary of the parish council at the Our Lady of Good Voyage Church in Vizhinjam. “It will help them pay their debts and relocate from rented homes.” The parish council comprises priests and lay people and runs the daily affairs of the church. Father Bebinson, the vicar of St Thomas Church in Poonthura, agreed.

“Parents of the victims do not have any other sources of income,” he said. “They pay rent from the interest they receive. They could relocate to their own home if the government allows them to withdraw the amount.” Fear factor There are also demands for the government to compensate fishermen for the loss of work due to bad weather. Bebinson said fishermen lost more than 80 days of work in 2018 due to adverse weather warnings. “The government should compensate them with free ration for loss of working days,” he said. But some fishermen have also been avoiding the sea because they are fearful, and this has had a cascading effect on the fishing economy here. For instance, on November 17, when the India Meteorological Department issued a warning asking Kerala’s fishermen to not venture out to sea for four days because of Cyclone Gaja, very few fishing boats left the Vizhinjam and Poonthura harbours after that period ended. The majority of fishermen wanted to wait three more days until the effects of Gaja, which had wreaked havoc in Tamil Nadu, had completely subsided.

“Fear has gripped Poonthura after Ockhi,” said Bebinson. “Fishermen do not want to risk their lives anymore.” Some fishermen were not ashamed to admit this. They said they are now obsessed with weather warnings and decide not to go fishing even if there was a mild warning. Joseph Francis, 37, was one of them. He began fishing at the age of 15 and is known as the
bravest fisherman in Poonthura. But after a close shave during Ockhi, Francis does not want to risk his life anymore. “Ockhi drained all my courage,” he said. “Earlier, I never missed a day. Now I work one or two days in a week. I am wary of even small waves now.” Some have abandoned fishing completely. Selban Paniyadima, 55, and Delbow Susamariya, 49, both from Poonthura village, spent three days in the sea holding onto a capsized boat after Ockhi struck. “I am afraid of the sea now,” said Paniyadima. “Waves increase my heartbeats. So I decided to stop working.” Susamariya said his decision to quit fishing was the “hardest decision of my life” but he did not have an option as he did not have the strength to face the sea again. The majority of such fishermen now ply auto-rickshaws for a living. Vizhinjam resident Marya John, 35, who had a narrow escape during Ockhi, has not stepped into a boat in a year. “I am scared,” he said.

“My family also asked me not to risk my life so I opted for a less dangerous job.” John bought an auto-rickshaw in December, learnt to drive with the help of a friend, got his license, and began working as an auto-rickshaw driver in February. “I will continue with this job till I conquer my fear for the sea,” he said. Forty-one-year old Maxwell Alphonse of Poonthura bought an auto-rickshaw after he realised that he did not have the heart to continue fishing any more. Though he was at home during Ockhi, he joined a search team to find missing fishermen after the storm abated. “I fished out a couple of dead bodies,” he said. “That was a depressing experience.” But Alphonse said that he would resume fishing again. “Plying an auto-rickshaw is just a stop-gap arrangement,” he said. According to Bebinson, the number of auto-rickshaws in Poonthura has increased from 90 to 170 in just one year. Blow to the market All this has affected the market related to the fishing business.

Local businesspersons say the sale of fishing-related paraphernalia – kerosene, engine oil, fishing nets – have not picked up since Ockhi. Binu Gouris, who owns a shipping material store in Vizhinjam, said his daily sales of engine oil have declined to one-third of the quantity sold in the corresponding period last year. He attributes this to the fall in the number of boats heading to sea. “I used to sell 75 five-litre cans of engine oil every day,” he said, showing this correspondent his ledger. “It has come down to just 15 cans now.” Thadayoos Maryadas owns a boat manufacturing yard in Vizhinjam in which more than 500 boats have been built over the last 20 years. Business is bad, he said, with hardly any demand for new boats. At the end of November, Maryadas was building his sixth boat of the year. Last year, he built 20 boats. “The numbers speak for themselves,” he said. Business in one commodity is booming in Poonthura and Vizhinjam: wireless sets. Owners of fishing vessels, which usually travel about 30 nautical miles into the sea, are ordering new sets to be fitted in their vessels (the bigger boats already have them).

The owners register the radio frequency with the Coast Guard and coastal police, who can alert them about bad weather conditions even while they are at sea. Each set costs between Rs 15,000 and Rs 20,000. Belhar Antony recently bought one such set. He said he would not have had to if the state government had kept its promise of distributing to fishermen Navic, the autonomous
regional satellite navigation system developed by the Indian Space Research Organisation. But M Tajudeen, deputy director at the fisheries department, said the government will soon provide fishermen with navigation sets, satellite phones and life jackets. “The government has sanctioned Rs 25.36 crore to provide 15,000 fishing vessels with Navic,” said Tajudeen. “The system will warn fishermen about weather forecasts and potential fishing zones in the 1,500 km range from the coast.”

Give jobs’ Besides complaints related to the compensation amount, relatives of fishermen killed by Ockhi want the government to provide them with jobs. Tajudeen claimed that the government has provided jobs to widows of deceased fishermen. “We have selected women below 40 years who passed matriculation,” he said. “We will provide jobs for more women soon.”

However, some residents of the fishing villages are sceptical about this promise. “We don’t know how the beneficiaries were selected,” said Elsy, mother of John Muthappan. “I have applied for a job but haven’t got any reply so far.” She said age should not be a constraint for jobs. “We lost the sole breadwinner of my family,” said Elsy. “Now I have no option but to work. The government should consider this and not age to select people for jobs.” Others said that the wives of critically injured fishermen should be considered for jobs too. Poonthura resident Geetha, 36, said she was financially dependent on her relatives after her husband Michael, 47, was paralysed during Ockhi. At present, Geetha and his nephew take care of him. “I don’t know how I will live,” said Geetha. “I hope the government will support me.” Despite their other complaints, the villagers appreciated the government’s initiative to provide free education and vocational training to the children of fishermen who died or went missing. “This is a blessing for us,” said Blasita Pathrose.

“My grandchildren have received the financial assistance.” Flood relief Even as they struggled to rebuild their lives since Ockhi, fishermen from Poonthura and Vizhinjam stepped in to help when Kerala was reeling under floods in August. They were among the fishermen who voluntarily took their boats to the marooned inland areas and rescued thousands of people stranded for days. “We didn’t think twice when we came to know the gravity of the situation,” said Joseph Francis in Poonthura. He and his friends worked for three days straight to rescue people in Chengannur, one of the worst-affected areas. “Our boat rescued more than 500 people,” he said. Kerala Chief Minister Pinarayi Vijayan recognised the contribution of fishermen like Francis at a function to honour them in Thiruvananthapuram in August. He said that they did not think of their own safety, their families or any other monetary gains from the government when they joined in the rescue operations. Joseph said the people of Kerala did not pay much attention to their plight after Cyclone Ockhi. “But we could not leave our brothers and sisters at the time of a natural calamity,” he said.
Kerala: Fisheries sector to observe protest today


The fishermen community in the State will observe 'World Fisheries Day' falling on November 21 as a day of protest against the anti-fishermen policies of the state and central governments. The Kerala Swatantra Matsyathozhilali Federation (KSMTF) will take out a march in Kollam raising various demands. The federation, by observing protest day, raises their voice against the Central shipping ministry's decision to create a shipping corridor along the coastal sea citing that it might affect the fishermen's livelihood across coastal states. The designated corridor is 15 nautical miles from the coast having a width of 20 nautical miles where most of the fishing occurs, it is alleged. The area across which the corridor has been proposed is the main fishing ground where thousands of fishing boats are into fishing.

The move will affect the availability of fish for domestic use and also foreign money earned through exports, as the west coast is a major breeding ground for fish in the country, according to fishermen. The fishermen also demand permission for traditional fishermen to fish in any area of the sea within the national boundary. The corridor also restricts traditional fishermen from entering the designated shipping corridor. The traditional fishing boats that use kerosene as fuel have tough times with the hike in kerosene price. The fishermen raise their demand of consistent subsidy distribution through Matsyafed and to ensure supply of kerosene by the Central Government. The fishermen under the district committee of KSMTF will conduct a march from Vadi harbour to port Kollam by 10 am on Wednesday followed by a sit-in protest at the entrance of the port as part of the protest.

Kerala: Traffic Separation Scheme for the south-west coast


The Directorate General of Shipping has proposed the establishment of a Traffic Separation Scheme (TSS) off the south-west coast of India to prevent collision incidents between merchant vessels and fishing vessels off the coast of Kerala. This proposal has been drawn taking into consideration past collision incidents off the Indian coast, traffic patterns of merchant vessels for past years, and optimum sea routes, in consonance with the current traffic flow, including simplification of traffic in converging areas off the coast of Kerala. The proposal has also considered aspects pertaining to the safety of navigation, maritime security and the separation of opposing streams of traffic to reduce incidents of collision in Indian waters. Stakeholder consultations are in progress for establishing the Traffic Separation Scheme – TSS in the south-west coast.
The proposed TSS lanes are currently under consideration, and will be located at a distance of about 90 nautical miles west of Mangalore in Karnataka, with the lanes leading in a south-easterly direction to the southernmost tip of India and ending about 40 nautical miles off south of Kanyakumari in Tamil Nadu. The average distance from the coast is about 50 nautical miles. The proposal will be put on the DGS website before finalization, and will also be sent to stakeholders. The promulgation of TSS on the south-west coast of India is expected to shift the density of merchant traffic away from the coast and merchant ship traffic will become more concentrated in the established TSS. This is expected to result in more sea room for fishing vessels to operate safely and will, therefore, be beneficial to the fishing industry.

**Kerala: Fathoms deep: Rekha of Chavakkad, India’s first fisherwoman**


Before dawn breaks, K.C. Rekha, a 45-year-old mother of four, sits alone untangling a mass of nylon fishing nets on the Chettuva beach, a fishing village at Chavakkad in Thrissur district of Kerala. Her seawater-creased, tanned fingers finish the task before her husband, P. Karthikeyan, arrives for their voyage to the deep sea on their small, old boat. The couple sails 20-30 nautical miles, without a compass, a GPS device or any other modern navigation equipment and life jackets. “We rely on traditional knowledge,” says Rekha, who believes Kadalamma, the sea goddess, will protect them. Her faith stems from the struggle that began more than 10 years ago when she decided to be the deckhand of Karthikeyan after his two workers quit. The couple just couldn’t afford labour. Today, she is the only woman to get a deep-sea fishing licence from the State Fisheries Department.

The Central Marine Fisheries Research Institute, the country’s premier marine research agency, felicitated Rekha recently. “There are many women engaged in fishing in backwaters and rivers, but there was no record of a woman’s presence along our coastline. We finally located her and recognised her feat,” CMFRI Director A. Gopalakrishnan says. She is the only woman in the whole of India to have such a licence, the institute says. Women traditionally do not take up this work. Rekha is undaunted even when the Arabian Sea is rough and dark clouds hover over her head. She sets sail as the rest of the world sleeps, to haul in catch for the local market. She has been giving tough competition to fishermen by sailing through the most unpredictable routes for the past few years. Rekha loves her work, despite the odds and uncertainty that nature has in store for her almost every day.

**Kerala: House panel visits fishing harbours**

The House Committee on Welfare of Fish Workers and Workers of Allied Sectors has stressed that steps will be taken to redress the constraints being faced by fishermen at harbours in the district. House panel chairman C. Krishnan, MLA; member K. Dasan, MLA; and officials visited the fishing harbours at Azhikkal, Ayikkara, and Thalayi following the panel’s sitting here on Thursday. The visit followed complaints about the limitations of the harbours raised at the sitting by the representatives of fishermen’s organisations. At the sitting held at the Collectorate conference hall here, Harbour Engineering Division officials informed the panel that solar lights would be installed at the breakwater at Azhikkal and that toilets at the Azhikkal fishing harbour would be opened to fish workers in a month. The committee members also saw the decrepit wharf at Azhikkal. The officials informed the panel that a proposal for renovating the wharf has been submitted to the government. Fishermen at Azhikkal brought to the notice of the panel the space constraints of the harbour.

The HED officials also informed the committee that the barge for dredging the Mappila Bay fishing harbour at Ayikkara would reach in a week. They also informed the panel that a new study would be conducted on constructing the proposed new breakwater at Mappila Bay. The committee directed the officials to consult with veteran fishermen in the area before finalising the design of the breakwater. Reduce plastic use At the sitting, Mr. Krishnan said that the Coastal Regulation Zone rules concerning distance to the land area from the coast should be strictly complied with for new constructions. New constructions should be permitted with due considerations to the environmental issues in the backdrop of tsunami and the disaster caused by Cyclone Ockhi, he said.

He also called for reducing the use of plastic as plastic waste reaching the sea was adversely affecting fishing activities and fishery reproduction. Coastal road Mr. Krishnan also said that the 600-km-long coastal road being constructed in the State would be beneficial for transportation of fisheries products and the tourism sector. Adequate compensation would be given for acquiring land for the road, he said, adding that the project would be completed in three years. Additional District Magistrate E. Muhammad Yusaf, Fish Workers’ Welfare Board chairman C.P. Kunhiraman, Matsyafed governing board member P.A. Reghunathan, and Fisheries Deputy Director M. Sreekantan were among those present at the sitting.

Kerala: Fishermen to get satellite phones, NavIC sets


Fishermen in the state will be equipped with satellite phones and NavIC satellite navigation sets soon. The state cabinet on Tuesday approved Rs 25.36 crore project for this purpose. With this, a total of 1000 fishermen will be equipped with satellite phones. The government has allotted Rs 9.43 crore to purchase satellite phones. Once the fishermen gets equipped with satellite phone,
the officials will be able to communicate with the fishermen who venture into the deep sea. It will ease the rescue operation if the fishermen gets stranded on sea during bad weather conditions. The state government is implementing the project in association with BSNL. A satellite phone costs Rs 94,261. At the same time, each fisherman has to pay an amount of Rs 1500 as consumer share. Meanwhile, NavIC equipment will be fitted to 15,000 fishing boats.

With a coverage of 1,500 km from the coast, NavIC will warn fishermen about weather conditions and provide information about international boundaries and potential fishing zones. NavIC sets are designed by ISRO and manufactured by KELTRON. An expenditure of Rs 15.93 crore is estimated to manufacture 15,000 sets. It is observed that NavIC is useful to ease the rescue operation and check accidents during fishing. Satellite phones and NavIC sets will be distributed to 15,000 selected fishermen who venture into sea far from 12 nautical miles from the coast. Fishermen from 12 coastal districts will get the benefit. According to the government, Rs 25.36 crore for the project will be allotted from Ockhi cyclone relief fund in Chief Minister’s Distress Relief Fund.

At the same time, Rs 1.78 crore will be allotted to give compensation to 89 fishermen who lost fishing equipment when Ockhi cyclone ravaged the coastal areas. A compensation of Rs 22.52 lakh will be given to 113 non registered fishing units. The fishing boats eligible for the allowance should register under fisheries department. The cabinet also approved a project worth Rs 610 lakh to purchase life jackets to fishermen. Each fisherman has to contribute Rs 250 for this. Mehamood, a native of Kozhikode, who lost his fishing equipment in Ockhi disaster, will get Rs 1.48 lakh as compensation. The cabinet made the announcement as his name was not included in the list of compensation published earlier.

Kerala: Families of missing fishermen wallow in despair


It has been three months since Oceanic, a trawler boat, collided with a tanker vessel and sunk into the depths of the Arabian Sea with 14 fishermen, off Kochi coast. Two crew members were rescued and the bodies of five others were recovered by rescue workers. However, families of the seven missing fishermen are in deep despair. They have lost hopes of performing the last rites on the bodies of their loved ones. The loss of the sole breadwinners has pushed these families into penury. The hopes of getting a compensation from the government are dimming as the fishermen are natives of Tamil Nadu and they worked in Kerala. The leaders of fishermen blame the navy for the plight of the families.

To receive compensation from the government the bodies of the fishermen need to be recovered from the sea. However, the Navy abandoned the search operations a week after the mishap, saying that they have no expertise in recovering bodies from deep sea. According to the navy, the
sunken boat was located by their under-sea scanning equipment. However, the boat and bodies could not be lifted as the sea was 75-m deep. "The navy has not been reliable in rescue operations both during the Ockhi disaster and the mid-sea collision on August 7. There has been a serious lapse on the part of the navy rescue team. As the focus shifted towards the floods that unleashed destruction across the state, the navy abandoned the search for the missing fishermen," said Matsya Thozhilali Aikya Vedi state president Charles George.

The relatives of the fishermen, whose bodies are recovered, will get Rs 10 lakh from the state government and another Rs 10 lakh from the insurance scheme. But the families of the missing fishermen are running from pillar to post for compensation. "We discussed the matter with minister Mercykutty Amma on Sunday and she as assured to take up the matter with the Chief Minister. The Chief Minister will write to Tamil Nadu government urging to help the families," he said. "We have given multiple representations to the government seeking intervention to help the families of missing fishermen.

As the bodies have not been recovered there are difficulties in providing compensation. Among the missing people, six are from Tamil Nadu and one is from West Bengal," said P V Sivan, owner of the ill-fated boat Oceanic. Fishermen leaders point out that it is difficult to fight the case for compensation against M V Desh Sakthi, the ship owned by Shipping Corporation of India, as the boat has not been lifted. The police had arrested Captain of the ship B S Ahluwalia, Second Officer Nand Kishore Garu, and seaman Rajkumar in connection with the mid-sea collision. They have been released on bail.

**Kerala: Cabinet nod for project to ensure safety of fishers**


The State government has approved a project to equip fishermen with NAVIC satellite navigation sets and satellite phones to ensure their safety at sea. The State Cabinet which met here on Tuesday ratified the Rs.25.36-crore project to provide 15,000 fishing vessels with NAVIC equipment. With a coverage of 1,500 km from the coast, the satellite navigation system will warn fishers about weather events and provide information about international boundaries and potential fishing zones. Designed by the Indian Space Research Organisation (ISRO) and manufactured by Keltron, the NAVIC sets are estimated to cost Rs.15.93 crore. Another 1,000 deep sea fishermen will be equipped with satellite phones at an estimated cost of Rs.9.43 crore for communication at sea. BSNL is providing the phones at a cost of Rs.94,261 each. The beneficiary share has been fixed at Rs.1,500.

The entire cost of the project will be mobilised from the Chief Minister’s Distress Relief Fund for the victims of Cyclone Ockhi. Life jackets The Cabinet approved a Rs. 6.1-crore project to equip 40,000 fishermen with life jackets. It also ratified a package of Rs.1.78 crore as
compensation for fishermen who lost their fishing equipment in Cyclone Ockhi. The meeting decided to set up the Kerala Coconut Development Council to improve the acreage and production of the crop in the State. The council headed by the Agriculture Minister will seek to extend the area under coconut cultivation from 7.81 lakh to 9.25 lakh hectares, replace diseased and old trees with saplings of high-yielding varieties and boost the productivity to 8,500 per hectare. It will also promote the manufacture of value-added products from coconut.

Kerala: Call for promotion of indigenous species of fish


Minister for Agriculture V. S. Sunil Kumar has called for promotion of indigenous species of fish in all fishery development programmes. Speaking after releasing a report on fish count in Kole lands at a function held at Kerala Agricultural University (KAU), Mannuthy, on Monday, the Minister said it is welcoming to see that some of the endangered fish species have been spotted in Kole lands. “I have persistently opposed ‘Orunellum oru meenum’ programme on two reasons. First of all, fish farming should not replace paddy cultivation and secondly profit oriented promotions of commercial species of fish should not endanger the existence of indigenous species. I wish the fishery scientists would come up with methods to improve the multiplication rates of indigenous species of fish. Kole land ecosystem is a complex combination of many elements like water plants, fish and birds ,” he said.

Future plan KAU Vice-Chancellor R. Chandra Babu stressed the importance of such surveys in developing future plan for preservation and conservation of ecosystems and indigenous species. “Kole lands represent a diverse ecosystem, which facilitate multiple and interlinked land use. At a time when unintended injuries to bio diversity due to interference in nature are being detected, studies of this nature will help us to evolve appropriate strategies for corrective steps and conservation measures ,” he said. Three species of freshwater fish, belonging to the threatened category in the IUCN Red List of Threatened Species have been found in the Thrissur Kole, according to the fish count report released. Horabagrus brachysoma( Manjakoori), Carinotetraodon travancoricus (Attunda), and Hyporamphus xanthopterus (Attuchuvappan) are the species reported from the kole lands. Thrissur Kole is also found to be the home to one of Kerala’s smallest freshwater fish species, the green carplet, Horadandia brittani ( Attukananjon), which is endemic to peninsular India.

In total 48 species of fishes were collected from the Thrissur Kole, highlighting the high species diversity of freshwater fish in this ecosystem. The survey also found that the water quality parameters were within normal levels as per standard quality guidelines. Except near the Enammavu regulator, all locations showed freshwater characteristics. Water hardness was very high at the Enamavu regulator, compared to the other stations. Joint survey The survey was
conducted jointly by the Forestry College of KAU, Kerala University of Fisheries and Ocean Studies (KUFOS) and Kole Birders Collective. KUFOS Registrar Victor George, Director of Research T.V. Sankar, Scientist M. K Sajeevan. KAU Registrar P. S. Geetha kuttly, Director of Research P. Indira Devi and Forestry faculty Dean Vidyasagaran spoke.

Kerala: Coastline faces serious threat: a multimedia report

https://indiaclimatedialogue.net/2018/11/12/keralas-coastline-faces-serious-threat/

Forty-one-year-old Kochukutty Amma is forced to live inside a school building with her family at Valiyathura village near Thiruvananthapuram. She was shifted here from Shankumugham beach five years back in 2013, when raging sea waves claimed the land where her hut was situated. Kochukutty’s family is not the only one shifted to this building, which belongs to the fishery department of the Kerala government. There are 10 more families in this building braving tough and unhealthy conditions. “We came here after we were rendered homeless. There is only one toilet here. You can understand how it is. There is no space to sleep. All of us sleep on the floor,” says Kochukutty Amma. “We need a house to live.” The government has promised to provide homes to these families, but the construction of the houses isn’t complete yet. This is the stark reality of Kerala today.

A state situated on the southwest coast of India that consistently appears in the annual list of the must-see tourist destinations of Lonely Planet in Asia. This province blessed with beaches, backwaters and verdant forests also wears the tag of being God’s Own Country. But now Kerala is losing its glory. Almost half of the state’s coastline is endangered today and a large-scale displacement is inevitable. Mercy Kutty Amma, Kerala’s Minister for Fisheries and Harbour Engineering, admits that her government faces a “big challenge” of relocating more than 30,000 families who live close to the coastline. “Every year, so many houses are lost by coastal erosion. We have to relocate the people living there elsewhere,” she told indiaclimatedialogue.net. Kerala has a population of about 33 million, out of which 80% live in the state’s nine coastal districts. The 600-km shoreline is densely populated and the pressure of habitation on the beaches has increased manifold in past three decades.

Besides increasing tourism, business and industrial activity have played a major role. Despite the Coastal Regulation Zone (CRZ) guidelines issued by the government and Coastal Zone Management Authorities (CZMA) appointed in various states and union territories, the coastline of India is in a poor state. Flouting of rules is rampant. Coastal regulation guidelines are diluted by the government itself to facilitate ill-planned development projects. Changing coastline The total length of India’s coastline is more than 7,500 km. Around 250 to 300 million people live along this, and a majority is dependent on the coast and sea for their livelihoods. A report released this year by National Centre for Coastal Research (NCCR), a department of the Ministry of Earth Sciences, says almost one third of India’s coastline is eroded in the past 26 years. The
Nevertheless, erosion remains a concern for several state governments and the people living along and near the shoreline. West Bengal, Kerala, Puducherry and Tamil Nadu are among the top states where erosion is more than 40%. States like Odisha and Andhra Pradesh have seen more than 40% accretion, which means formation of land due to deposit of sediments. West Bengal has lost more than 99 sq. km of land due to the net effect of erosion and accretion. While releasing the report in August, M.V. Ramana Murthy, Director, NCCR, termed the coastal erosion an “alarming threat” for the population living along and near the coast. He stressed the need for immediate steps so that loss of more land and infrastructure to the sea could be avoided.

“The damage will be irreversible. Coastal population will bear the maximum brunt, especially villages and recent habitations, including buildings, hotels and resorts which are at risk,” said Murthy. Today, one-third (33%) of the coast is under threat. The NCCR study shows a varying degree of erosion at different places along the seashore. While on the east coast 63% of the West Bengal coast is eroding, on the west coast, besides Kerala, the shoreline seems stable. The west coast, particularly in Kerala and Goa, is densely populated, unlike in the east where most people live away from coastline. However, Goa’s shore is largely stable. Kerala is in a bad shape, as 45% of its coast is eroding. Scientists acknowledge climate change impacts and the phenomenon of sea level rise (SLR), but they don’t believe it has got a direct role to play in coast erosion, at least for now.

The sea level rose in last century by 40 cm and this report by the scientists of National Institute of Oceanography, Goa, says that the annual rise in sea level is less than 2 mm per year. Therefore, while the extreme weather events like cyclonic storm Ockhi, which hit Kerala last year, can be attributed to global warming, erosion can be best explained by other factors. Mismanagement “Erosion and accretion are complementary to each other. If the sand and sediments are drifted from one side, it must accumulate somewhere,” says Murthy. In theory this argument is sound, but the construction of structures along the beach has disturbed the equilibrium of erosion and accretion. Sea walls, groynes or breakwaters tamper with the littoral flow of the current close to the shore. As a result, the coast on the northern side of any such structure is eroded due to sea wave effect. Just a few kilometres away from Kerala capital Thiruvananthapuram, Bheemapally village is a classic example of what the coastline is turning into. Hardly any beach is left along the shoreline.

The entire coast is full of massive boulders and rocks, which have been put here to protect the houses of the locals. “This all is result of so-called developmental activities,” explains A.J. Vijayan, an environmental activist and researcher who is working to save livelihood resources for local communities. “Earlier, Kerala was blessed with long and wide sandy beaches, but what
remains now here is just an artificial coast with all these structures.” Experts and scientists say it’s a combination of factors that affects the shoreline.

The NCCR report counts more than a dozen reasons for the shoreline change, categorising them as natural and anthropogenic causes. Natural reasons identified in the report range from action of waves to sea storms to sea level rise. Construction of structures at the coast like harbours, beach mining and building of dams on rivers are the main anthropogenic causes cited. Man-made structures like sea walls, groynes and offshore breakwater exist in about 400 km of the coastline in Kerala. These structures are built for fishing and business harbours, other commercial activities or to protect the land from seawater encroachment. “As we started building the big fishing and business harbours, it has affected the behaviour of sea waves. In the northern part of such structures, you can see the waves hitting the coast with higher intensity as you can see here at Bheemapally,” says Vijayan. Kerala has today more than a dozen big, medium and small ports. The most recent one, which is also one of the biggest ports in India, is coming up at Vizhinjam near Thiravananthapuram.

The agreement for this project worth more than INR 75 billion (US 1.03 billion) was signed between the Kerala government and the Adani group in 2015. Though the project isn’t complete yet, local fishermen and environmentalists say that the erosive effect is already being felt on the coast. T, Peter, General Secretary of the National Fish Workers Forum, shows the Shankumugham beach where the erosion is quite visible. Not only were people living near the beach shifted away, the Kerala government had to advise tourists also to stay away from this beach. “The erosion and damage due to sea waves has increased since they have started building the (Vizhinjam) port. You know it affects the northern side of the coast. During rough weather, sea waves hit very hard here and after the monsoon, when the wind blows in opposite direction, the accretion is not possible because the sediment is blocked by these sea walls and groynes constructed all along the coast,” says Peter.

N.M. Shareef of the Geological Survey of India also warns about this. In an article published in the Current Science magazine, he writes, “Any structure built right on the beach prevents beach accretion and not the beach erosion. Man’s alteration of the shorelines especially by construction on the beaches will create unnatural water currents. They have an adverse effect on beaches undergoing retreat, but the effect is more pronounced on beaches undergoing long time rapid shoreline retreat. As the beach continues to erode, the sea wall may also block natural replenishment of sand from dunes or cliffs behind the wall.” Double Whammy Besides being ineffective in coast protection, these man-made structures have also taken a toll on the hills. There are hundreds of quarries in the mountains of Western Ghats today and continuous digging and mining for stones to build sea walls etc. have weakened the fragile hills. This has resulted in an increasing number of landslides.
Kerala saw maximum number of landslides this year since the onset of monsoon and the situation turned grave during the recent floods. One of the reasons for the coast erosion is the large number of dams built on almost every river of Kerala. Kerala has today 41 west flowing rivers and these rivers could have been great source of silt, sand and soil transportation towards the coast. This may have helped the accretion. But there are more than 50 dams on these rivers and these dams have blocked the flow of soil to the seashore. The Fifth assessment report of Intergovernmental Panel on Climate Change (IPCC) estimates that 75% of sediment flow is blocked by large dams. “Once we started constructing big dams everywhere, it has blocked the sediment transport and the rich soil coming in along with the nourishment to the sea. It has two effects. One, it has affected the health and the growth of beaches and two, it has also affected the nourishment supply to the sea which helps to produce more marine and fish resources,” says Vijayan.

Saving the coast Earlier this year, India’s Ministry of Environment, Forest and Climate Change (MoEFCC) issued a new coastal regulation draft, which should be implemented soon. However, many experts believe that new guidelines have further diluted the existing rules that may aggravate the already endangered coastal areas. “The CRZ notification (guidelines) could have been an important tool to regulate and manage the coast and it would have helped to conserve the ecology and coastal livelihood, but it has largely been either amended to open up the vulnerable part of the coast or the authorities who are overseeing it are spending their time approving the projects,” says Kanchi Kohli, a researcher at New Delhi-based think tank Centre for Policy Research. The Kerala government is now exploring the use of geo-synthetic tube technology to make offshore breakwater at Poonthura.

Under the technique large geo-synthetic tubes are placed deep under the seawater to break the energy of waves. The National Institute of Ocean Technology (NIOT) has already experimented with this technique at Kadalur (Chennai) on the east coast. “If successful in Poonthura, this method will be used in Shunkumugham beach area also,” says minister J. Mercy Kutty Amma. However, the effectiveness of this method is still debatable. Is it desirable to fight nature or should one find a way to live harmoniously with it? Many experts and scientist believe that people should move back from the coast to give the sea waves enough space. According to an estimate, INR 10-15 million are spent to construct the sea walls in one kilometre, and mostly it deprives the fishing community from having a natural coast for their livelihood.

If people move back from the coast and allow the sea to have its space, there will be better coexistence. Nandkumar D., former professor of geography at University College Thiruvananthapuram and senior advisor, climate change and environment at non-profit Inter-cooperation Social Development, says, “If they (NIOT) are doing this (use of geo-synthetic tubes) as an experiment it is alright but the best thing (to protect the coast) what we can do is to let the sea play at the coast. We lost the beach due to all this encroachment. If people move a little away from the coast it will make a healthy beach and the local community will be happy as
the stony structures which hamper their livelihood won’t stand between them and the sea.” The government of Kerala says it has plans to remove people who live within 50 metres from the coast and the process has begun. “We have made arrangements to shift 192 families in flat-like accommodations,” says minister J. Mercy Kutty Amma.

**Kerala: Shrimp exports from Kerala may be affected by US ban threat**


The Indian shrimp is facing a ban threat in the US, as the Department of State has found that the fishing practices followed by the country do not comply with the US regulations to protect sea turtles. The ban, if imposed, may adversely affect the Rs 7,000-crore export of shrimp from Kerala. On May 1, 2017, the Department of State had certified 39 nations and one economy, and granted determinations for seven fisheries, as having adequate measures in place to protect sea turtles during the course of commercial shrimp fishing, which permits those countries to export wild-caught shrimp to the country. However, India does not feature in the list of certified countries. As India pleaded that the country is following safe fishing practices, a team of experts from the US had visited Odisha, where olive ridley sea turtles nest in large numbers. The team is expected to visit Kerala by January, 2019, said sources.

The US has implemented stringent anti-dumping policy to ensure protection of endangered marine species. As per the norms, the exporter has to furnish details regarding the location from where the fish was caught and the fishing gear used. If the catch is from outside the territorial waters using illegal, unreported, and unregulated (IUU) fishing practices, the consignment will be rejected. The US law demands use of Turtle Excluder Devices (TED) in fishing gear to ensure that no turtle is harmed due to the fishing practice. “There is a threat of a ban in the US on the import of wild shrimp from India. We are trying to convince them that we don’t follow destructive fishing practices,” said CMFRI principal scientist Sunil Mohamed. “We have informed the American authorities that we follow safe fishing practices and ensure protection of marine ecosystem. Turtles are found mostly in the Bay of Bengal and there is no nesting found on the Western Coast.

Besides, a majority of the shrimp exported from Kerala is from the shrimp farms. We expect they will give some relaxation,” said Fisheries Deputy Director S Mahesh. All-Kerala Fishing Boat Operators Association general secretary Joseph Xavier Kalapurakal said Kerala boats have not installed TED as the population of sea turtles is low in the Arabian sea. “We don’t follow destructive fishing practices. Even if a turtle is found in the catch, we release it into the sea. We are confident of convincing the American authorities,” he said. With the Fisheries Ministers from southern states set to meet in Kochi on Saturday, fishermen leaders have demanded the issue should be discussed. “The American authorities are bringing in regulations to support their
fishing sector. The India Government should take up the matter with the American authorities and find an amicable solution to the problem. If the ban is imposed it will push the fishermen to penury,” said Matsya Thozhilali Aikya Vedi president Charles George. “A major chunk of the export to the US constitutes farmed shrimp and we don’t think the ban will have a huge impact. We export wild shrimp worth 253 million dollars to the US,” said an officer.

Kerala: Uniform fishing rules in the pipeline


The newly released Kerala Marine Fishing Regulation Rules 2018 is serving as a temporary baseline document for other coastal states to amend their respective Marine Fishing Regulation Act (MFRA) and rules in the management of the fishing sector. At the South Indian fisheries ministers’ conference that concluded here on Sunday, officials from six states and three Union territories made the initial move to put a unified front for evolving common rules for the peninsular states in this sector, which could then be taken further to other coastal states. Kerala is the only state in the country to have amended the KMFR Act 1980 (on September 18, 2017) and one year later, formulated the rules (on September 1). At a meeting held in Delhi last month, the central government officials and coastal states expressed their appreciation and most of them are now drafting their respective Act and rules based on Kerala’s gazette notifications.

Unanimously, they sought to pressurize the need for a separate fisheries ministry at the Centre. As of now, the fisheries sector comes under ministries of agriculture, commerce, shipping and external affairs. “We have been discussing this issue and we will raise it in the Parliament also,” said state fisheries minister J Mercykutty Amma. Malladi Krishna Rao, minister for fisheries, Puducherry, said since there was no dedicated ministry for fisheries, the sector was not being considered with sensitivity and proper importance. “If there’s an issue with farmers, the entire Central machinery steps in to help them. The fisheries sector is also of equal importance against the backdrop of growing food security issues.” Fisheries ministers from Kerala, Maharashtra and Pondicherry attended the meet besides officials from all the southern states and Union territories of Lakshadweep and Andamans.

They raised the issues of fishermen from other states coming and fishing in their areas. Fisheries development commissioner Paul Pandian said the Centre would consider states’ demand for extending the fishing areas from 12 nautical miles — which is the territorial waters — to 36 nautical miles as most fishing boats have high-speed engines. “We are coming up with new guidelines for the National Policy for Marine Fisheries (NPMF).” He said it would include an advisory of engine horsepower in accordance with the length of the fishing vessel. The conference of fisheries ministers from south Indian states has unanimously decided to implement
in all the southern states the minimum legal size (MLS) recommended by the Central Marine Fisheries Research Institute (CMFRI) to curb juvenile fishing, said Mercykutty Amma.

“Kerala has already implemented the MLS for 58 fish species to ban juvenile fishing. Now, other states have also come forward to implement the measure in their territorial waters to make the regulation more effective,” she added. The meeting also urged the Union government to reduce the fuel price and to waive road tax for fuel for fishing vessels. Fisheries officials of the south Indian states arrived at a consensus for demanding the Centre to give the authority to the states to provide fishing rights beyond the territorial waters of 12 nautical miles. The conference also decided to put pressure on the Union government to increase the unit cost of deep sea fishing vessels from the existing Rs 80 lakh to Rs 1.5 crore.

Kerala: Call to blend tradition, science, business in fisheries


The management of fisheries resources should follow an integrated approach, blending traditional knowledge and science with business principles, Chief Minister Pinarayi Vijayan said. Speaking after inaugurating a conference of Fisheries Ministers from South Indian States at Central Marine Fisheries Research Institute (CMFRI) here on Saturday, he sought effective engagement of primary stakeholders and those engaged in ancillary activities to ensure that fishing was ecologically and economically sustainable. Fisheries governance should be improved to resolve conflicts between traditional and mechanised sectors. Simultaneously, governments should provide legislative support to ensure that rights of traditional fishermen were secured and their livelihoods not adversely impacted by developmental activities. Union and State governments should agree upon management policies for sustainable utilisation and management of living resources in the country’s Exclusive Economic Zone (EEZ), Mr. Vijayan said.

Apart from catering to food and nutritional requirements of the population, the fisheries sector played an important role in trade and commerce and also provided employment and livelihood to coastal communities. After the declaration of the EEZ in 1976, the sea area available to India was estimated at 2.02 million sq km. With sovereign rights on the EEZ, India was also responsible for conserving, developing, and optimally harnessing marine resources in this area, he said. The country had 9.90 lakh active fishermen, of which 33% were employed in the mechanised sector, 62% in the motorised sector, and 5% in the artesanal sector. Sustainable principles With regard to inshore waters, the emphasis had to be laid on maintaining the harvest at about the current levels of Maximum Sustainable Yield, with ‘sustainability’ and ‘equity’ as the key principles.

Biodiversity conservation, area-specific management plans, protection of endangered and threatened species, measures for sustainable utilisation of resources, and creation of fish refugia
through consultative processes were important. Knowledge management could be done through real-time resource maps, weather forecasts etc. by making use of Information and Space Technology for the benefit of traditional fisherfolk. Marine fish resources were exhaustible and uncontrolled harvesting often led to depletion of resources, the CM said. Kerala’s initiatives

Referring to Kerala’s initiatives in the sector, Mr. Vijayan said a plan was afoot to give emphasis to participatory management of fisheries resources, for which fisheries management councils at State, district, and village levels would be set up. They would be having representation of fisherfolk too. The government also plans to introduce new schemes to enhance skills and capabilities of traditional fisherfolk, to undertake deep-sea fishing, for which liberal assistance from the Central government was required.

It also had plans for modernisation of its indigenous deep-sea-fishing fleet through fishermen cooperatives and self-help groups, on-board training, and linkages to markets and export. Stakeholders at the meeting said that Kerala was of the view that instead of a PPP model, traditional deep-sea fishermen should be trained and equipped to undertake deep-sea fishing through fisheries cooperatives. There should also be a ban on destructive fishing practices, since they had a devastating effect on fish stocks and on the marine environment. These included use of poison, dynamite, aggregating devices, lights, and pair trawling, apart from catching of juvenile fish, which was quite alarming. Fisheries Ministers of Andhra Pradesh, Karnataka, Maharashtra, Goa, and Puducherry, and Fisheries Secretaries of Lakshadweep, Andaman and Nicobar Islands and a host of senior officials and scientists are participating in the conference. They are expected to arrive at a consensus on implementation of conservation programmes.

Kerala: Fisheries Ministers from South India to implement MLS to curb juvenile Fishing


Fisheries ministers of south indian states have unanimously decided to implement the Minimum Legal Size (MLS) measure recommended by the CMFRI to curb juvenile fishing, Kerala fisheries minister J Mercykutty Amma said here Sunday. Kerala has already implemented the MLS for 58 fish species to check juvenile fishing. MLS is seen as a fisheries management tool with the ability to protect juvenile fish, maintain spawning stocks and control the sizes of fish netted. "Now other states have also come forward to implement the measure in their territorial waters to make the regulation more effective," she said here while briefing the details of the conference to the media. The conference also resolved to urge the Centre to reduce the fuel price and waive road tax for the fuel for fishing. Mercykutty Amma also said the meet arrived at a consensus for demanding the central government to permit the supremacy to the states to provide fishing right beyond the territorial waters of 12 nautical miles.
A decision was taken to exert pressure on the Centre to increase the unit cost of deep sea fishing vessels from the existing Rs 80 lakhs to Rs 1.5 crore. "The conference also decided to seek technical and financial support from the Centre for equipping fishermen for deep sea fishing through cooperative societies," the minister said. The two-day conference also decided to ask the Centre to introduce financial safety plans to compensate employment loss to the fishermen during the period of trawling ban. The meeting recommended the states to follow Kerala model "Clean Sea" initiative to remove plastics from the sea and implement satellite supported vessel monitoring system (VMS) on fishing vessels venturing beyond the 12 nautical miles in the sea. Earlier, representatives of fishermen and fishing boat owners put forward their suggestions and highlighted the issues faced by them during a stakeholder meeting. To this, the fisheries minister replied that the state government was committed to taking steps to develop the fisheries sector only through ensuring the active participation of stakeholders.

Kerala: Nod for Customs marine unit


Taking into consideration the prospective growth in marine traffic through the southern coastline of Kerala, the Customs Department will soon station a Marine Preventive Unit for maritime surveillance in the region. According to officials, a proposal to form the unit has already been moved to the Union Ministry through the Chief Commissioner of Customs, Central Excise, and Central Tax. The proposal follows a request to this effect made by the Government of Kerala through the District Collector, Kollam. The Customs Department currently operates two marine preventive units in Kerala — one each at Beypore and Kochi. Equipped with patrol boats, these units work in tandem with the Indian Navy, Coast Guard, and Coastal police stations. Confirming the move, Customs Commissioner Sumit Kumar said the unit would most probably be stationed at the Kollam port.

“The unit will be trained to intercept, board, search, and seize suspicious vessels and will be entrusted to check smuggling through sea routes and inland waterways,” he said. Officials said stationing a marine preventive unit in the southern region was a crucial move, considering the earlier reports of rampant liquor smuggling from Goa and Thiruvananthapuram by seafaring fishing boats. In their opinion, these routes could also be potentially used to smuggle drugs, fake currency notes, or even explosives. For Lakshadweep The Customs is most likely to constitute a similar unit for the Lakshadweep islands, the administration of which has approached the department seeking to declare its seaport at Kavaratti, Minicoy, and Agatti as ‘Customs area’.

A proposal pertaining to this would soon be sent to the Union Ministry for its consideration. Meanwhile, official sources flagged concerns over the shortage of manpower experienced by the department. “Once these proposals are approved, we would require more manpower because the
Customs in Kerala, with a staff shortage of close to 40%, is already stretched to the limit. The government will have to recruit through the Staff Selection Commission,” they said.

**Kerala: Fishing for a bountiful harvest**

https://www.thehindu.com/society/meet-the-fish-farming-enthusiasts-in-thiruvananthapuram/article25444330.ece

Jaison C Augustine erases stress by spending time near a pond at his home at Mankuzhy, near Sreekaryam. Ever since he took to fish farming, it has been more than just a pastime for Jaison, an employee with IBS Software at Technopark. “I find it invigorating to take care of the fish and do errands on my farm. What is interesting is that when I am there, the fish seems to sense my presence,” says Jaison. He started the farm with his neighbour, Ajith Kumar, 10 months ago. Jaison isn’t the only techie who is hooked to fish farming. Two other employees of IBS, Melvin John S and Vivek Livingstone, have been running a farm at Vazhayila, along with Vivek’s brother-in-law, Vipin George, for one year now. Both these farms had their first harvest and the second batch of fish is getting ready. Homestead fish farming, they say, was the best option because the initial investment was less compared to other business proposals they had in mind.

“We wanted to break free from the stress-filled nature of our jobs and do something that gave us a chance to spend time outdoors. I have been in the IT field for 12 years now. Nowadays, after winding up my work by 7 pm or so, I travel all the way from Technopark to Vazhayila to work on the farm. We may have to clean the filter or attend to technical snags, if any. I don’t mind staying back till midnight to finish the work and then go to my home at Pattom. I don’t find it tiring,” says Vivek. Bankable variety Both the farms breed Genetically Improved Farmed Tilapia (GIFT), a strain of tilapia. Tilapia is the widely farmed variety of fish across the world and farming of GIFT is fast picking up in the state, with the seeds or fingerlings being supplied by the Rajiv Gandhi Centre for Aquaculture in Vijayawada. The popularity of this variety is on account of its adaptability to adverse weather conditions and high protein content, Melvin explains. However, these techies point out that running the venture is no cakewalk. “It takes at least six months for the fish to be ready and there is no easy way out to get a good harvest. There is a lot hype about fish farming and the general perception is that you just have to have a pond to start the farm.

There are several challenges. You have to constantly keep a track on the quality of water. Waste accumulation should be avoided. The quality of seeds is also important since duplicate seeds are available in the market,” elaborate Melvin and Vivek. Both the farms use Recirculating Aquaculture Systems (RAS) to keep their ponds clean. The technique filters the water from the pond and it gets reused every time. “However, we have to clean the filters regularly. We also have to keep an eye on the health of the fish. Heavy rain, for instance, is not good for the fish,”
Vipin adds. Moreover, they say that it would be futile to expect a bumper harvest initially. Melvin says that they got approximately 750 kg in the first phase.

“Honestly, we had expected more. Nevertheless, the entire harvest was sold off within hours among friends,” he says. In fact, they have started farming in one more pond, thus increasing the total farming area to four cents. The next harvest is likely to be in March. Jaison, meanwhile, in spite of falling short of expected production, has added half a cent to the existing one-and-a-half cents in the second phase of farming. It should be ready to harvest by January. “We have rectified the mistakes that we committed in the first phase,” he says. He has started aquaponics [combination of aquaculture and hydroponics] as well. “I have planted long beans, bitter gourd, tomato, amaranthus and other plants. The harvest is for household use,” Jaison adds.

**Kerala: Fishermen, fishing vessels to be taken on board into newly-formed Sea Rescue Squads**


The state government has given the green signal to recruit fishermen and fishing vessel owners for its Sea Rescue Squads (SRS) which will help fishing vessels in distress at sea. “We will soon distribute applications among the fisher community. Fishermen interested in becoming part of the SRS can respond to us. Their vessels can also be registered. We will provide the training for the fishermen to conduct rescue operations,” an official said. The fishermen will be also trained in coordinating communication with different agencies. The state government has sanctioned Rs 7.15 crore from the Chief Minister’s Disaster Relief Fund to form the SRS. The decision to set it up was prompted by the havoc caused by the Ockhi Cyclone when several fishermen went missing. In the first phase, the SRS will be set up at 60 marine villages. As per the proposal, an SRS unit will have five fishing vessels and three crew members each; in total 15 fishermen in each group.

The SRS will be based at fishing harbours where mechanised fishing vessels operate. Fish landing centres will have smaller vessels. SRS members will be provided with communication equipment, distress alert transmitters, life jackets, life buoys, torch, uniform and other essential sea safety equipment. The Fisheries Department has decided to induct 9.6-metre-long motorised/improvised traditional boats and 19.5-metre-long mechanised boats that have the regulatory registration as part of the SRS. Priority will be given to fishermen and vessels which were engaged in rescue operations during Ockhi and the recent floods. The member of SRS - aged between 20 and 45 - need to be a permanent resident of marine villages, and be mentally and physically fit to undertake rescue operations. “Once the application is received from the fishermen community, we will start training by January. In later stages, the SRS will be expanded to all 222 marine villages in the state,” an officer said.
Applications invited from fisherfolk Kochi: The district administration on Wednesday invited applications from fisherfolk for the formation of ‘Sea Rescue Squads’, in an effort towards strengthening coastal security and rescue efforts in the aftermath of cyclone Ockhi. The squad will see the inclusion of experienced fishermen from the district and the people selected will be provided with the requisite training at the National Institute of Water Sports in Goa. The squads will be the first responders in natural calamities, like Ockhi, in the state. The members will be rewarded with a fixed sum as remuneration for the services they render during emergency situations. Bids inviting applications from vessel owners with all necessary security measures are open now.

Traditional vessels with two employees and mechanised ones with driver, helper and owner/representative can apply. Vessel owner not acclimatised to the sea or fishing activities can nominate an experienced hand while applying. The applications can be obtained from and submitted at the Ernakulam Fisheries Deputy Director Office, Vypeen Fisheries Station and various ‘Matysabhavans’. The last date for submitting the application is November 15.

Kerala: Is MSP a viable proposition in marine fisheries?


The system of minimum support price (MSP) for agricultural commodities in India has stood the test of time and continues to be one of the successful price support mechanisms practised in the country. Essentially, the MSP acts as a benchmark price below which the state promises to compensate the farmers either through direct procurement or through deficiency payments. Farmers’ produce procured under the scheme are subsequently routed through the public distribution system (PDS) reaching the PDS beneficiaries at subsidised rates. Over and above providing an assured farm income for the tillers of the land, it has played a crucial role in stabilising market prices of essential agricultural commodities and maintaining a strong incentive for the farmers to adopt technologically superior farming practices (Chand 2003).

Though criticised on account of creating serious imbalances in the crop-mix, fuelling inflationary pressures and eliciting inter-regional disparities due to implementation problems (Nayyar 1994; Bharadwaj 1997; Chand 2003; Roy 2018), the food policy centred on the MSP regime remains a strong safety net for the farming community. Inspired by this, there has been a long-standing demand from the fishing community in India to have a system of minimum landing price for the fish caught by the fisherfolk. The Government of Kerala’s announcement in April 2018 to introduce MSP for fishers’ catch (New Indian Express 2018) as a response to the fishers’ demand, is among the first of its kind in the country, and one of the few across the maritime countries.

Taking cue from this, we undertake a critical appraisal of the proposal and analyse the various pros and cons of going ahead with the plan. The Case for MSP in Kerala In this section, we
present a few arguments that would be helpful in judging the suitability of MSP against the present context of marine fishery marketing in Kerala: Demand–supply imbalance: There have been a number of recent studies that highlight the imminent resource crisis in Indian fisheries, mainly attributed to overfishing, juvenile fishing and other destructive fishing practices (Devaraj and Vivekanandan 1999; Ramachandran 2004; Mohamed et al 2010). Kerala does not remain insulated from this secular process of resource depletion which is exemplified by the recent sardine stock decline that considerably affected the incomes of small-scale fishers who predominantly depend on pelagic resources (CMFRI 2017).

More or less in tandem, the market demand for fish is increasing at a consistent rate thereby pushing up the market prices. The demand–supply gap is widening continuously despite growth in aquaculture production year after year. Kerala’s annual requirement of fish is estimated at 7.5 lakh metric tonnes (MT), and the total fish landings are estimated at 7.2 lakh MT. About 1.49 lakh MT of high value fish are exported to foreign countries. Thus, there is a deficit of about 2 lakh MT of fish, especially with respect to sardine and mackerel, which are currently imported from other states (GoK 2017). Given this scenario, coupled with the fact that Kerala is a money order-driven consumer economy, it is highly unlikely that fish prices would follow a stable or decreasing trend vis-à-vis its substitutes in the near future. However, there are instances when bumper catches in certain types of fish result in market glut thereby dampening prices in the short run.

However, such incidents would be increasingly rare, short-spanned and limited to certain pockets, given the emerging scenarios of resource constraints and climate change–driven adverse weather settings. How successful would a policy instrument like MSP, which requires elaborate planning and commensurate field-level reinforcements, be against such outlooks where market demand outweighs the supply in foreseeable future? False signals to catalyse resource depletion? India’s marine fishery regulatory regime on its governance impact is on quite shaky grounds. Apart from the seasonal fishing ban, a few input-specific controls and spatial controls, many of which exist only for namesake, fishing in India lacks serious regulations (Parappurathu and Ramachandran 2017). We do not have effective output-specific controls such as individual catch quota, collective catch quota or vessel catch limits as in the western waters to exercise strict control on the level of harvests.

The recently introduced minimum legal size (MLS) regulation in Kerala has only been partially effective to check juvenile fishing so far. Given these, sufficient restraints need to be exercised before a market price support mechanism like MSP is introduced. Therefore, prior to introducing MSP, we need to find reliable answers for whether there would be high chances of transmitting false price signals that may further exacerbate resource position? Systemic rigidities in the value chain: One of the primary arguments for MSP in the fisheries sector is that the share of fisherfolk in consumer’s rupee is low.4 This has been said to be the result of excessive exploitation of fisherfolk by auctioneer middlemen who pocket a considerable part of the marketing margins. It
is quite true that majority of the fisherfolk operating across the length and breadth of coastal Kerala maintain output-tying credit deals with auctioneer-middlemen for meeting their credit requirements.

The cost of such loans is often huge, as the interest payments in the form of auction commission works out to be several multiples of the rates charged by the formal financial institutions. Over and above these, the lender-auctioneers indulge in several fraudulent malpractices that essentially lead to underpricing of the fish transacted. Unholy alliances between auctioneers and the wholesalers/traders are quite common such that the former fixes prices deliberately lower than market equilibrium price in order to secure undercover kickbacks. Mandatory auction allowance over and above the agreed upon quantity of fish transacted is another malpractice that narrows the fisherfolk’s share. A recent study5 carried out at ICAR-CMFRI has also shown that the dependence of fisherfolk on informal credit is quite high in spite of the presence of cooperative agencies such as the Kerala State Cooperative Federation for Fisheries Development Limited (Matsyafed) which play an active role in enhancing credit delivery in the coastal belt.

However, this is a systemic issue that cannot be addressed through a price support mechanism like MSP. What is actually needed to improve the fisherfolk’s share in consumer’s rupee is a mix of initiatives that enhance marketing efficiency of the fish value chains and a comprehensive set of measures that improve financial inclusion in the coastal belt. Practical problems in implementation: There could be umpteen numbers of practical issues that need to be tackled once MSP is rolled out. To be effective, the government should be able to procure all the quantity of fish that is offered by the fishers at MSP, that too uniformly across the coast. For achieving such a feat, the capacity of cold storage required would be enormous. Once an investment is made in this direction, it is to be ensured that such facilities do not remain idle. This indirectly means that procurement should take place on a regular basis. This also requires sufficient back-up in the form of regular offtakes which may involve huge subsidies. If a hitch happens in the system at some point of time, what would be done with such a highly perishable commodity like fish?

Even in agriculture, the central government is able to procure only two cereals on a regular basis, rice and wheat, in spite of the fact that MSP is announced for 25 commodities. The prices received by farmers are below MSP in large number of markets, where it is not supported by effective procurement (Chand 2012). Further, an effective MSP regime would require a “costs and prices commission” or some similar body that recommends judicious prices on a regular basis considering an array of factors such as demand and supply situation, costs involved, subsidies incurred and so on. Is it possible to consider all these factors beforehand in marine fisheries that is multispecies, community-owned and highly dependent on imminent weather conditions? If not, how politically sensitive would the process of such announcement be, and hence, how judicious? Possible Alternatives None of the arguments made above -negate the fisherfolk’s legitimate claim for fair prices that enables them to earn a decent livelihood.
However, considering the above factors, MSP would be a bad choice to achieve the said objectives. A better measure would be to announce a price stabilisation fund through which the state can undertake ad hoc initiatives to intervene in the market and realise price corrections from time to time. The market intervention scheme (MIS) administered by the central government in partnership with states, and presently in operation for perishable horticultural commodities, is another suitable alternative to MSP. Kerala can chart out a similar scheme to handle price crashes in fishes in affected landing centres. Under this, the government, with the support from Matsyafed can undertake procurement activities on an ad hoc basis during instances when prices fall below certain pre-fixed percentage levels compared to ruling rates over the previous normal season. This also augurs well for mariculture-based production augmentation which is currently gaining traction.

The advantage is that such mechanisms do not necessitate any permanent establishments. The cure would directly address the problem, that too at the right place, at the right time. Modalities may also be worked out to attach deficiency payment systems with the above proposed schemes with intermediation of the banking institutions so that leakages in entitlement distribution could be minimised. Another pragmatic option is to provide the right of fixing landing price to fisher cooperatives in the respective landing centres on a daily basis depending on the demand–supply conditions, as is being practised in Japan and Norway. Necessary legislative support would be a prerequisite if this would be the case.

Coupled with these, comprehensive packages are needed to enhance the efficiency of fish value chains through measures such as improving landing centre infrastructure, strengthening cold chains, reefer systems, retail chains and value addition through product diversification. Another important priority is to address the perennial problem of credit shortage in the marine fishery sector. The institutional lending systems should be strengthened, procedures simplified and flexibility augmented in credit contract conditionality to improve financial inclusion in the fishery economy. Hand-in-hand, the Matsyafed can systematically upscale its credit delivery activities, procurement mechanisms and retailing systems so that the fishing community themselves can become active partners in bringing about change.

**Kerala: Boat repair yard at Puthiyappa hailed**


The Harbour Engineering Department’s plan to set up a boat maintenance yard at Puthiyappa harbour has been hailed by hundreds of mechanised fishing boat owners in the district who have been seeking the service of a private yard in Kochi. The Rs. 19-crore proposal recently submitted by the harbour engineering wing has also won the approval of the Fisheries Department for the speedy implementation during this fiscal itself. Officials say Fisheries Minister J. Mercykutty
Amma too has assured her support at all levels to speed up the proceedings. Though a boat repairing yard had been functional at Beypore to attend emergency repairs, the lack of proper maintenance and timely upgrade put an end to the show several years ago.

The spot was later taken over by the Coast Guard for the development of their facilities. Later on, only a few private agencies were there at the spot handling the job for the local boat owners. “At present, majority of the small boat owners in the district are in a situation to depend on the limited service of three private boat maintenance yards at Beypore. For all major repairs, we usually seek the assistance of a Kochi-based unit,” says C. Musthafa, a Beypore-based boat owner and member of the Kerala State Fishing Boat Operators Association. He points out that a boat maintenance yard at the government sector has been a long pending request for getting affordable service support.

In Kozhikode district, there are about 5,300 fishing boats and a population of 20,000 active fishermen who are expected to get the benefits of the new yard, which is expected to have all modern facilities to cater to the whole Malabar region. Fisheries officials say a separate boat building yard planned at Ponnani harbour too would come to the aid of the fishers here. “Earlier, there was a proposal to set up a small boat maintenance yard at Puthiyappa in the private sector, but it failed to win government approval. What we sought was the setting up of a fully-equipped maintenance yard, which can even repair larger fishing vessels,” says M. Vasu, another fishing boat owner. He also points out that a maintenance yard at the government sector can largely cut the cost of repair works compared to that of the private agencies.

**Kerala: Fishers for withdrawal of licence fee hike**


Fishermen have demanded that the “steep hike” in licence fee for small and big boats should be withdrawn as they are already under severe financial stress owing to resource depletion and effects of climate change. Kerala Matsya Thozhilali Aikya Vedhi said here in a statement that the government had demanded a 10% rise in licence fee for small fishing boats. At the same time, the deposit and licence fee for big boats had been raised steeply. The fishermen said while the government had raised the licence fee, it was not imposing any monetary burden on exporters. The fishermen’s union has warned that the decision was taken without consultation with stakeholders.

**Kerala: Fishermen up in arms against Pozhiyoor harbour project**

As the Harbour Engineering Department has initiated the feasibility study for a fishing harbour in Pozhiyoor at Kulathoor grama panchayath, fisher community has come out with reservations against the same. The fishermen said that the Department has to initiate an impact assessment of the harbour before progressing with the study. “The fisher community at large is against the idea of setting up new fishing harbours in the state,” said Anto Elias, state working president, Kerala Swathantra Matsya Thozhilali Federation. “Before mooting new harbour proposals, the Fisheries Department should take stock of the operational status of existing harbours in the state. Our point is that the Pozhiyoor fishing harbour project could only help to drain the state’s exchequer,” adds Anto. According to him, though a considerable sum of money was spent on for the setting up of Muthalapozhi harbour, it is yet to become fully operational.

Also, the harbour is a ‘black spot’, according to the fishermen community, as fishing vessels have capsized during strong tides, throwing the fishermen into the sea, said him. However, the Fisheries Department said the said harbour will not only prove helpful for fishers from Kollamkode in Kanyakumari district, Tamil Nadu but also from Pozhiyoor, Poovar, Karimkulam, Kochuthura, Puthiyathura, Pallam and Pulluvila. They also add that the new harbour can help to ease the congestion at the Vizhinjam fishing harbour during the peak season. However, Harbour Engineering Department’s chief engineer P K Anilkumar said the fishing community’s concerns were unwarranted one as the feasibility study also covers the impact the harbour had on the fishers living near it.

“We plan to complete the investigatio and model study before March. The findings will be handed over to the Central Water and Power Research Station. The numerical data collection also studies the effects of wave transmission is also progressing,” said Anilkumar. It is learnt that the Harbour Engineering Department is also working on the investigation works for setting up fishing harbours at Valiyathura, Poonthura and Varkala-Chilakkoor.

Kerala: 192 Kerala fishermen families get apartments


As part of a housing project launched by the Kerala government, 192 homeless fishermen families were rehabilitated in modern apartments here on Wednesday. The beneficiaries of the housing scheme included families which had lost their huts due to sea erosion in the last several years and those who had been living in dilapidated houses within 50 metres from the sea. Chief Minister Pinarayi Vijayan inaugurated the project by handing over keys to one of the beneficiaries at Muttathara. The apartments, built at a cost of Rs 17.5 crore, have been constructed in 24 blocs over 3.45 acres of land. Each house, with an area of 540 square ft, has two bedrooms, living room and kitchen. The complex has a community hall, garden, market,
common store and an anganwadi. The residents are homeless families from various coastal
villages in Thiruvananthapuram.

Some of them have been staying in rehabilitation camps for the last several months. Four of the
families had lost their men in the Ochki cyclone last year, said Fisheries Department sources.
Fisheries Minister and CPI(M) leader J Mercykutty Amma said, “The government wanted to
give safe houses for homeless fishermen families. Most of the fishermen are staying in small
houses or huts which don’t have basic facilities. The housing project would go a long way in
ensuring social security for fishermen in Kerala.

Kerala: After the Flood: Rise against hunger India and local community members provide relief

https://reliefweb.int/report/india/after-flood-rise-against-hunger-india-and-local-community-
members-provide-relief

Kerala is the southern part of India. In the mid of August 2018, major areas in Kerala witnessed
heavy rainfall continuously for more than a week. All the lakes, rivers and other water bodies
were filled and it became severe as the water started overflowing into the land areas. I hail from
a place called Kuttanad. The people here depend on agriculture, poultry and fishing. Kuttanad is
a low lying area below sea level. Due to its topography, it is flood prone, with the recent flood
being very severe. The water level rose above 15 feet. Entire herds of livestock were submerged.
Fishing boats and fishing nets were destroyed. Houses were totally and partially destroyed.
Bodies of water were contaminated due to carcasses of livestock. Mud and sludge, as well as
waterborne reptiles like snakes, entered into the houses.

My house was totally submerged. I saw miseries and relentless calls from my neighbors to save
them from this unforeseen calamity. I could not sit at home watching all these miseries, and I
offered voluntarily to work for disaster recovery. The first priority was to get people to safer
places. Myself and a team of fishermen worked relentlessly day and night to move the people
from affected areas. This included the elderly, sick, children and women. Our teamwork paid off
and we were able to move the people to safer places. Later, people were moved to relief camps.
Access to food and medical facilities were our major challenges. Our request to provide this was
heard by Mr. Dola Mohapatra, Executive Director of Rise Against Hunger India. He instructed
his team, along with their affiliate, Society for Action in Community Health (SACH), to act
immediately.

They provided the following assistance: Distributed food packs for 3,500 families Coordinated
30 medical camps, which were a great relief for the people here, and to a very large extent, this
helped to contain the wider spread of diseases. Our next challenge was contaminated water due
to flooding. Our people suffered as they were unable to acquire drinking water. Again, Rise
Against Hunger India came to our help. They provided a 40,000 liter capacity R.O. (reverse
osmosis) plant. The plant was inaugurated by G. Sudhakaran, Minister of State for the Public Works Department.

This has been a very important milestone. Due to the tremendous response received from the public, Rise Against Hunger India has promised to provide additional R.O. plants to cater to the entire village. There are around 50 fishermen whose boats and fishing nets were damaged in flood. Rise Against Hunger India has also promised to provide us the required boats and fishing nets, which will help the fishermen to earn their daily living. Around 50 houses have been damaged by the floods. We are looking forward to repairing these houses with the help of Rise Against Hunger India. I personally have to thank Rise Against Hunger India for their impeccable efforts to help us during this most distressing period. On behalf of myself and the entire community of Kuttanad, I would like profoundly thank the entire Rise Against Hunger India team and their affiliates.

Kerala: Fish workers to intensify protest


The National Fish Workers’ Forum has threatened to organise a broad-based protest, including a sea parade from Kutch to Kanyakumari, to press their demand for withdrawal of a notification on the shipping channel off the Indian coast. Forum general secretary T. Peter said protest was organised at 43 maritime centres in the country on Tuesday as part of the programme to raise the demand for cancellation of the notification. The fishermen fear that the shipping channel notification would keep traditional and mechanised fishing boat operators out of their traditional fishing grounds and that they would lose their means of livelihood. K.V. Thomas, MP, inaugurated the protest at Fort Kochi. Cochin Port Labour Union secretary B. Hamsa presided at the protest meeting, said a press release here.

Kerala and Tamil Nadu: Fishers protest against proposed new shipping corridor


Opposing the shipping corridor proposed by the director general of shipping (DGS), fishermen and their families staged a protest in the sea with black flags tied to their boats off Kurumpanai in Kanyakumari district. The protest was organised by the South Asian Fishermen Fraternity (SAFF) as the largescale movement of ships would result in drastic increase in the loss of lives and livelihood of fishermen on the West Coast. SAFF general secretary Churchil, who lead the protest, told TOI that the existing shipping corridor is 40 nautical miles off the coastline. “The proposed new shipping corridor in the DGS website states that the corridor from Kanyakumari
(Tamil Nadu) to Kutch (Gujarat) would be reduced to a mere 15 nautical miles from the coastline,” he said and added that these shipping corridors will be several nautical miles wide.

Stating that the stretch between Kutch and Cochin will be a one-way stretch that is five nautical miles (15 to 20 nautical miles from the coast), Churchil added that the stretch from Cochin to Kanyakumari will be two-way (15 to 25 nautical miles) due to the increased ship movement from Cochin to Colombo. “It will benefit the corporate shipping sector by saving fuel and time at the cost of livelihood of lakhs of fishermen,” he said. The activist said that most fishermen resort to fishing in country boats and fibre boats, from early morning to evening or from the evening to the early hours of the day. “They go fishing between 10 nautical miles and 50 nautical miles and this is where hundreds of big ships will shuttle day and night if the new shipping corridor is implemented,” he added.

Churchil said that there were 14 ship-boat accidents in the seas from 2014 till date, claiming the lives of 30 fishermen near Kanyakumari and Cochin and most of the victims were from Kanyakumari district. The most recent was the collision of Oceanic, a fishing boat off the Cochin coast that claimed 12 lives in August. SAFF pointed out that this life loss was when the shipping corridor is beyond 40 nautical miles. “If it is reduced to 15 nautical miles the number of accidents, life loss and loss to property and livelihood would go up manifold,” he said. Fishermen also said that their small boats will miss the eyes of ships and that the small boats are not equipped to flee the place in case of a fast approaching ship, putting the fishermen at greater risk.

On Sunday, SAFF members also wrote to Union shipping minister, Nitin Gadkari, chief minister, Edappadi K Palaniswami and the director general of shipping on Sunday to drop the proposed new shipping corridor. “The announcement has come without consulting fishermen and other stakeholders. If they turn a deaf ear to our representation, we will be forced to stage a series of strong protests till the project is stalled,” Churchil added.

Kerala: South India fisheries mins to meet Nov 10


Conference of fisheries ministers of South Indian states will be held in Kochi on November 10 and 11. The meeting, to be organised by Fisheries department, Central Marine Fisheries Research Institute and Central Institute of Fisheries Technology, aims at exhibiting the successful interventions made by the state in conservation of fisheries resources and seeking their partnership in such initiatives, said Fisheries minister J. Mercykutty Amma. She was addressing the consultative meeting organised at CMFRI on Monday. “The government has made series of active in-tervention in conservati-on of fisheries resources. The Kerala Marine
Fishing Regulation Act (KMFR) in 2017 has been amended. Catch of juvenile fishes has been banned and size and mesh size of fishing nets were regularized,” the minister said.

However, she observed that such regulations will not be effective unless the neighbouring states follow the measures. “Marine fisheries resources can be conserved only if the Union government gives due importance to conservation measures in policy making. All states should follow the measures as well,” she added. There will be technical sessions on various topics related to fisheries resources conservation. Papers will be presented on topics including national fisheries policy, banning destructive fishing practices, banning juvenile fishing, restrictions on construction of fishing vessels, automatic identification system and plastic pollution. An organising committee has been constituted for conducting the conference. Fisheries director S. Venkateshpathi, CIFT director C.N. Ravisankar and top officials of various government agencies and MLAs also attended the meeting.

Kerala: 3,004 fisherfolks to attend exams


A wave of literacy is blowing across the coastal hamlets of Kerala as part of Kerala State Literacy Mission’s ‘Akshara Sagaram’ project being implemented with the help of fisheries department. Some 3,000 fishermen community members will appear for examinations at 70 centres in Kollam, Kozhikode and Ernakulam on November 25, where the second phase of the project has been implemented. A total of 3,004 aspirants have registered for examinations, of whom 2,638 are women. Kozhikode district has the highest number of candidates – 1209, Kollam – 1152 and Ernakulam 643. Those who pass the examination can join the course for Class IV equivalency. The project is implemented in 234 wards under 36 local self-government bodies identified as the least literate. As many as 204 instructors have been appointed by the mission to implement the project. These instructors are from the coastal area who have completed their SSLC.

The major beneficiaries of the project include fishermen who are illiterate, school dropouts, physically and mentally challenged and those who failed in standard IV. The curriculum has also been revised for the first time since the mission was constituted in 1998 to include topics associated with the lives of fishermen, – including on sea, jobs associated with the sea and on mud banks or ‘chakara.’ Examinations will be conducted for a total of 100 marks, including reading, writing and mathematics. The candidates should score a pass mark of 30, proportionally divided among the topics. The first phase of ‘Akshara Sagaram’ was implemented in Thiruvananthapuram, Malappuram and Kasargod districts in which 3,568 candidates passed the literacy examination. According to the census of 2011, there were 18 lakh illiterate people and the
majority of them were from coastal areas. The mission aims at imparting literacy and continuing education programmes under ‘Akshara Sagaram’ project in coastal areas across the state.

**Kerala: Sagara fails to make an impression**


Shaji knows how to navigate his craft through tides and turbulence, when to harvest a bumper catch following lunar calendar and the molt cycle of lobsters. What he does not know are alphabets, one main reason he stays off Sagara, the ambitious android application developed by the National Informatics Centre for the Fisheries Department to keep track of fishermen. Even after six months into its launch and repeated instructions from the department, a large number of vessels and fishermen in the State are yet to start using the app. “Forget English, I can't even manage Malayalam using phone keys. And if I attempt it before venturing out into the sea every night I will be wasting a lot of time,” says Shaji, a school dropout. Main challenge Though nearly 1,000 vessels from Kollam registered their mobile numbers with the department, only 205 have generated OTPs.

“One main challenge is that many of the fishermen use base models, not smartphones. And some others who have android phones are not very keen on using the app even if we help them with downloading the app or generating the OTP,” says C. T. Suresh Kumar, Deputy Director of Fisheries. He adds that as of now the department can access the live details of only 205 crafts and it is necessary for all to stay connected in the post-Ockhi scenario. “We will be soon distributing 40,000 life jackets and the Ockhi review committee has approved the issuing of satellite phones and NAVIC devices. But being part of Sagara is the first step and only those vessels which record their entry and exit using the app will be part of the official system,” he says. To make the app popular among fishermen, the department has appointed instructors, mainly educated youngsters from the community.

“They have been meeting and introducing their folks to the app, but many elderly fishermen refuse to cooperate. Among the 2,000 plus vessels in the district only 205 are currently using it,” he says. Each boat using the app is required to enter the route and list of persons on board so that they will receive alerts in case of extreme events. Complicated app “It's not easy for fishermen to key in details and many boats take in temporary crew members. So the details you feed change every day and the majority of them hardly knows how to send an SMS or chat online. I think they find the app far too complicated and getting a smartphone will not end the issue. So instead of forcing them it will be better if they can switch to a simpler method like using their thumb impression,” says Peter Mathias, president, All Kerala Fishing Boat Operators Association.
Kerala: Villages vanish in this coastal district of Kerala as they succumb to sand mining


The coastline between Chavara and Alappad in Kollam district of Kerala, has a decades-long story of people’s battle for survival against mining companies. On a journey through this coastal belt, one can spot abandoned houses, temples, schools and many more buildings where people once lived. Red coloured ponds and dried up mangrove forests are another painful sight on this coastline. This stretch in Kerala is where the extensive mineral beach sand mining has been happening since the 1960s. The abandoned buildings are the remains of people’s failed agitations and indefinite strikes. One by one the villages in the area are vanishing from the map of Kerala. A village named Panmana has turned in to a heap of sand and an abandoned temple stands around which thousands of fishermen once lived.

In Alappad panchayat, activists estimate that more than 6,000 fishermen families have vacated over the years due to beach erosion, drinking water scarcity and lack of fish availability. Sooner or later the panchayat will also be turned in to a sand bund, remaining residents say. Kovilthottam, another village on the coastline, also has only 50 families left. “In 2010 almost all indigenous communities were evicted from Kovilthottam region in Chavara, promising that they will be allowed to rehabilitate back in their own land after completing the mining within three years. Even eight years after those evictions, no rehabilitation has occurred, more than 500 families are homeless,” said Robin an activist in the locality. The remaining families in this 23 kilometres stretch of coastal region (Kollam Neendakara to Kayamkulam) are under the threat of eviction; for last some years they are expecting a massive coastal erosion that can engulf their villages.

Most of the people have been forced to leave their houses, even without any compensation from the authorities or the mining companies. Now, starting November 2018, the remaining people in Alappad and nearby areas will begin an indefinite strike against mining companies planning to extend their projects. Mineral sand mining in Kollam The presence of the minerals ilmenite, rutile, zircon, monazite, leucoxene (brown ilmenite), sillimanite and garnet in coastal sand dunes of Kollam was discovered in 1920s. Two public sector companies, Indian Rare Earth (IRE) which comes under central government and Kerala Minerals and Metals Limited (KMML), a company under the state government have been mining since 1968. Though by 1995 many foreign companies had tried mining in the coastal area, continuous protest from the public and activists forced them to drop the projects.

IRE and KMML still continue to do extensive mining in the area irrespective of people’s protest. Since the companies have got clearances from respective departments of state government as well favourable orders from the High Court of Kerala, the opposition voices are
silenced. There is no data on people who were evicted without any compensation for their loss and no enquiry about polluted drinking water sources of this coastal belt. Though activists quote the numbers of families vacated from the region, there is no official data on it. Loss of drinking water, fish stock depletion and erosion in Chittoor region near Chavara there are open ponds which have been used by companies for dumping chemical waste. It has been years since the residents there stopped using these drinking water sources. After repeated agitations the companies started providing drinking water to the residents in Chavara region, but not regularly.

“Once in a while the companies distribute drinking water, otherwise I have to stand on a queue for long time to get water from the public tap. The tap is far from my house and have to walk all the distance with pots of water,” said 78-year old Mary, who lives in Chavara. She recalls how drinking water and other resources were abundant in the area once. “We used to get fresh well water. Moreover, the fish availability was abundant here. Now what we have is water scarcity and poverty. Though it is painful, I want to leave this place where I was born and brought up. But where will I go. If the companies give a good compensation I will move somewhere,” she added. Massive coastal erosion is another effect of the mining. The worst nightmare for the remaining residents in the area is of the sea engulfing their habitat.

“According to litho map of the area, in 1955 the Alappad village’s area was 89.5 kilometres square. Now it is just 8 kilometres square. So we are sure that our village will be sooner or later vanish, but we continue our agitation for neighboring areas like Onattukara, Upper Kuutanad, Arattupuzha etc, which are in Alappuzha district. They have submitted their proposal to extend their mining which will lead to the destruction of coastal region of two districts Kollam and Alappuzha,” Sreekumar KC, environmental activist and resident of Alappad told Mongabay-India. Benjamin, a resident of Chavara, pointed at the huge mining digs around his house and said, “How long we can stay here. We will have to leave like others, but where should we go without satisfactory compensation? All the indigenous communities have been wiped out here.” In some areas of Alappad one can spot two parallel roads in the sea shore, one is partially broken.

“The latest road is the fourth or fifth one constructed, as each time coastal erosion happens they construct another road,” Sreekumar said. He also pointed at a study done by National Institute for Interdisciplinary Science and Technology (NIIST) where it is shown that how shoreline has occupied the land from 1968 to 2017. “The map shown in the study clearly shows the extension of coastal erosion,” he added. Sreekumar said that from Panmana towards north, the coastal region was the habitat of sea turtles. That was area where they laid eggs. Now they have disappeared. “Apart from that this was an area where we get high quality prawns in Kerala. With this massive mining and coastal erosion, all these are just memories for us,” he recalled.

Unnikrishnan, a panchayat ward member of Alappad recalled that many of the houses were not in the sea shore few years back and now all of them are close to sea. “The houses you see here
were one or two kilometres away from the sea. Now they are hardly 400 to 500 metres away. Fish availability is another issue. Prawns, shell fish and various other small fish were available here in abundance, but now fishermen are forced to leave here due to poverty,” he said. Janet’s family is one among the 50 families remaining in Kovilthottam near Chavara. “We can’t bear the pain of leaving our home and whatever we earned. But how can we live here without job, without water and under constant threat of coastal erosion. Anytime our house will be under the sea,” she said. Robin, the resident from Chavara, said that the mining companies had earlier promised jobs and rehabilitation to the locals who quit their traditional occupation (fishing). But they still haven’t received anything promised by the companies. Prominent environment activist and writer C.R. Neelakandan reminds that Alappad was the worst affected coastal area when the 2004 tsunami hit Kerala.

“The shoreline difference is almost seven kilometres over the years in that area. The sea had occupied land at a width of seven kilometres. The state government has notified that people in the area need not pay the land tax. That means there is no land existing there, it is under water now,” he said. He also pointed that there is a backwater there, which was identified as national waterway. “But soon sea will evade these backwaters too and we will lose that waterway,” he said by adding that irrespective of all this loss, India has not benefitted much from this mining. “Monazite and ilmenite are the main extracts from this mining. The full processing of these minerals doesn’t happen in India. We export rutile mineral. So the main profit is for foreign companies, so technically our country does not benefit much,” he said. He said that none of the issues in this particular region was studied by agencies. “There were three communities living in this area, all of them were wiped out.

In Panmana almost 700 hectares of land were lost,” he pointed. He also talked about the necessity of a strong protest against these companies extending their mining projects to Arattupuzha in Alappuzha district. “What happened in Chavara, Alappad and Panmana will be repeated in Alappuzha too, at least that should be prevented now,” he added. Alappad activist K.C. Sreekumar meanwhile said a proper study is needed in the area. “Government and other institutions should conduct a proper study in this area, rather than giving blatant clearances for mining. They should survey the coastal erosion, enquire what happened to the people who left here, what happened to the fishing community and why the water sources here got polluted. Everything should be studied properly, so that we could save remaining villages at least,” he said. Writer-activist C.R. Neelakandan also emphasised the need for a study.

“There can be radioactive emissions through these unscientific mining and many health hazards can be an after effect. No environmental studies have been done yet over the pollution and hazards of this mining,” he said. - Villages along coastal Kerala are disappearing as land is devoured by mining activities. - Activists call for a study of the area and the impact of mining on the people and environment, before giving clearances to mining companies. - The coastal sand
Dunes in Kollam district are rich in minerals ilmenite, rutile, zircon, monazite, leucoxene (brown ilmenite), sillimanite and garnet. Many of these minerals are mined for export.

**Kerala: Shipping channel: Fishers to protest**


The National Fish Workers’ Forum (NFF) has said that it will organise a protest in the open seas off all the maritime States in the country on October 30 against a Union government move to notify a shipping channel that will hit the livelihoods of fishermen. NFF general secretary T. Peter, Kerala Swathantra Matsya Thozhilali Federation State president P.P. John, secretary Jackson Pollayil, and vice president V.D. Majeendran told a press conference here on Saturday that it was the duty of the government to protect lakhs of fishermen who were self-employed and were providing valuable food to society.

The Union government move is to designate an area of 20 nautical miles (about 37 km) in width beyond 15 nautical miles off the coast between Kutch in Gujarat and Kanyakumari in Tamil Nadu as the shipping channel. This is the area where traditional and other fishermen engage in fishing. They said they had already sent a memorandum to the Union Shipping Minister Nitin Gadkari.

**Kerala: App to aid fishermen at sea launched in district**


The mobile application, Sagara, launched by the fisheries department to ensure safety of fishermen at sea had its district-level inauguration at Thoppumapady on Monday. The function, which was attended by more than hundreds of members of fishermen community, was inaugurated by Kochi MLA K J Maxi. 'Sagara' is aimed at providing security to fishermen who venture out into the sea. Through this application, crew in fishing boats can provide details about the members on board, the expected direction and distance that the boats will set sail to and also mention the time when they return. This information, which can be accessed by the fisheries department officials, will act as a monitoring system and can be used for rescue works in case of any emergency.

Though the mobile application was initially launched in the state a few months ago, officials in the fisheries department in Kochi said that there were only a few takers for the application. The district-wise inauguration is aimed to make the usage of the mobile application common among the fishermen community. "Of the 1,600 boats in the district, only about 350 fishing boats have so far used the application," said additional director of fisheries department at Vypeen Joice
Abraham. To make the application more popular among the fisherfolk in the district, the fisheries department is planning to conduct awareness classes in association with different harbours.

"The department is determined to make at least 1,000 fishermen register in this application by this week," added Abraham. As an initial step, an awareness class was conducted soon after the launch at Thoppumpady. Registration of fishing boats by fisheries department is being done using a software called 'Realcraft'. To receive login ID and password for using the mobile app, boat owners have to register first in 'Realcraft'. Owners of the registered boats also have to update their mobile numbers for which the fishermen can contact the nearest fisheries office. Sagara, which can be used in various Indian languages, can be downloaded for free from Google Play Store.

Kerala: A treat for dried fish lovers


Dried fish lovers’ have something to cheer about, as the Society for Assistance to Fisherwomen (SAF) under the Fisheries Department will soon introduce salted fish under the brand name of Theeramithri in the market. Fisheries Minister J Mercykutty Amma will launch the product at a function to be held in Kochi on Friday. SAF executive director Shreela N S said around 145 fish processing units under will be producing salted fish. “We will introduce six varieties of salted fish. The fish are procured and processed by members of 145 fish processing units from different parts of Kerala. We have provided driers and other required equipment. Training was also provided to members of each society,” she said. The products will be supplied to 1,000 shops, including supermarkets and hypermarkets, across the state. “The shelf life of each variety of salted fish differs. Some will last for three months, while others for just a month. A majority of salted fish products come from other states.

The companies operating in Kerala procure fish from other states for processing. However, we will only procure fish from harbours in Kerala. We ensure the quality of the product by checking it in the laboratory. The price of our products will be comparatively cheaper,” she said. In the next phase, more products such as fish pickles and fish chamanthi will be introduced. “SAF was formed for the upliftment of women in the fishing community. We provide financial and technical support for them to start business ventures. We provide subsidy as part of the programme,” said an official. SAF was formed after the 2004 tsunami that left many fisherfolk without work. It introduced projects to ensure employment for fisherwomen. SAF backed groups are engaged in the production of fish products, food products, garments, coir products and running supermarkets.
Kerala: India's first fisherwoman facing and quashing taboos


Adventurous and inspiring life sketches of Rekha Karthikeyan, the first fisherwoman of India, dominated the experience sharing meet of women farmers and entrepreneurs in fisheries sector organised by the Central Marine Fisheries Research Institute (CMFRI) on Monday. Thrilling anecdotes about her battle against giant waves and taboos existed in the society in connection with Rekha venturing into the sea for a livelihood helped the audience at the CMFRI understand the real meaning of women empowerment. The meet was organised in the wake of the National Women Farmer’s Day to share experiences of women employees and entrepreneurs in a slew of areas such as fishing, cage fish farming, bivalve farming, ornamental fish farming, fish fertiliser, dried fish, fish trade and integrated farming.

Rekha Karthikeyan, who was recognised by the CMFRI as the first fisherwoman in the country last year, shared her sufferings and difficulties she faced during the early phase of her career in fishing, with the audience. According to Rekha, women can succeed in all the fields just like men if they have willpower and patience. She goes into the sea for around 50 km for fishing in a fibre boat with her husband, and is also confident that anything that a man can do using a fibre boat can be performed by her in the sea. Smija T M, a cage fish farmer in Periyar, said even though she suffered a huge loss due to the recent floods, she was in no way to avoid cage fish farming. Around 20 women shared their respective experiences with the audience. A panel discussion, held as part of the programme, observed that cage fish farming and ornamental fish culture were highly prospective areas suitable for women for livelihood.

V Kripa, Shoji Joseph, Rema Madhu and N Aswathy were the panellists at the discussion. K K Joshi, C Ramachandran and Vipin Kumar spoke on the occasion. A talk on health issues in women was delivered by Vinita Murali. A painting competition for Fisheries VHSC girl students on the topic ‘Women Empowerment in Fisheries Sector’ was also held on the occasion. The programme was jointly organised by the Socio-Economic and Evaluation division and the Women Cell of the CMFRI.

Kerala: Fisheries Department to set up data collection system for fisher families


According to the Fisheries Department, the data to be collected through a specially designed mobile application will then be uploaded to a Fisherfolk Family Registration Software. In a bid to ensure that the benefits of various welfare schemes are reaching the right hands, the Fisheries Department has floated the idea of preparing a Fisherfolk Family Register (FFR). The project
that covers all registered fishermen/fish allied workers, as well as their family details, will be implemented at a project cost of Rs 16 lakh. According to the Fisheries Department, the data to be collected through a specially designed mobile application will then be uploaded to a Fisherfolk Family Registration Software. It is said that the geo-tagging of houses will be carried along with FFR preparation.

“It was in September that a project for preparation of FFR was submitted to the government. Following approval from the working group, the state government has now accorded its administrative sanction,” said S Venkatesapathy, Fisheries Director. According to the director, with the help of FFR not only the data of fishermen will be collected but the details of their family will get documented too. It is learnt that 22 questions will be asked during the data collection drive and the information thus received will further be used to ensure the transparency in the implementation of various schemes and projects meant for the welfare of the fisherfolk.

Meanwhile, Fisheries Minister J Mercykutty Amma told ‘Express’ that the data collection is mainly related to the geospatial mapping of coastal areas in which the data of fisherfolks who are residing in vulnerable locations will be collected. “As soon as the government came into power, around 35,000 fisherfolk families were identified to be living in precarious situations and thus mulled the idea of rehabilitating them. But following cyclone Ockhi and the devastating floods, a more comprehensive data is needed to identify them and rehabilitate them,” said Mercykutty. As per sources, the state government is also weighing the idea of providing credit cards to fisherfolk.

Kerala: Succumbs to the sea, the Indian government ramps up coastal construction

[https://www.equaltimes.org/as-kerala-succumbs-to-the-sea-the#.W72XytczbIU](https://www.equaltimes.org/as-kerala-succumbs-to-the-sea-the#.W72XytczbIU)

Between June and August this year, the southern Indian state of Kerala experienced the heaviest rainfall it had seen in over a century. More than a million people were displaced, over 400 people died, and an estimated US$3.7 billion worth of damage was sustained. But the environmental destruction of the area around India’s Arabian Sea coastline has been taking place for years. In 1989, when Mary Punitha Vasantha moved to Valiyathura, a fishing village in Kerala’s Thiruvananthapuram district, the sea was about 100 metres away from her house on the shore. “There were three lines of houses in front of us,” she tells Equal Times. “Our children used to play football on the shore. But year by year, the high tide waves started to swallow the beach. Now, all the three lines houses have been washed away.” A few months ago, Mary’s home was partially destroyed by the sea.

According to Valiyathura’s local councillor, some 200 houses have been lost to the sea or damaged in the past year. Even part of the offices of the Valiyathura branch of the National Centre of Earth Science Studies – a government unit focused on environmental conservation and the management of natural hazards – was almost levelled by sea erosion that took place between
June and July 2018. The locals, who mainly make their living by fishing, now have to anchor their boats far away from where they have been relocated to, with the increased transport costs affecting their incomes.

Those who lost their houses have been moved into ‘temporary’ shelters in nearby schools. Forty-six-year-old Esabel James watched as her home was swallowed up by the sea on 16 July. Although she says the government has offered her a home far from the shoreline, she has been living with her family of seven in a school shelter camp that houses about 150 people ever since. She has no idea when she will be given the keys to her new home. “Life is horrible here in this shelter camp. At least five big families must survive in one small class room. Most of the time there is no power or water. I don’t know how long this uncertainty will continue,” she says despairingly. There are a number of families who have been living in the school for much longer. “We lost our homes some four years ago,” says Meena Rajan. “We were moved to this school by the government, who promised us a better house. But still we are waiting. Our men go for work from here. We cook here and we sleep here.

Our children are growing here without proper care.”

Manmade or natural shoreline loss? Beaches along Kerala’s 580-kilometre coastline face erosion during the South-West Monsoon months of May to September and the North-East Monsoon between December and January. During this time, high-tide waves drag soil away from the shore. After the monsoon is over, low tide waves bring back the eroded sediment and soil. The cyclical process of erosion and accretion should ensure that the beaches remain intact. However, as the sea becomes more and more violent due to climate change and man-made activities, less and less sediment is returned by the waves, which narrows the width of the beach. According to Dr RS Kankara, a scientist at the National Centre for Coastal Research (NCCR), beach erosion is a chronic problem across India. A report prepared by Kankara and his team using satellite mapping and shared exclusively with Equal Times reveals that almost one-third of India’s 6,632km coastline was lost to erosion between 1990 and 2016.

It also reveals that more than 40 per cent of coastal erosion in India takes place in four states: West Bengal has lost 63 per cent of its coastline, while Pondicherry has lost 57 per cent, Kerala has lost 45 per cent and Tamil Nadu 41 per cent. Quoting MV Ramana Murthy, director of the NCCR, Indian financial daily LiveMint reported that coastal erosion has become a major threat for coastal populations and, without immediate steps taken, “the damage will be irreversible. Coastal populations will bear the maximum brunt, especially villages and recent habitations, including buildings, hotels and resorts which are at risk,” said Murthy. Meanwhile, some local residents and climate experts are laying the blame for coastal erosion in Kerala (especially along the Thiruvananthapuram coast) primarily at the feet of manmade activities.

“The construction of a US$65m international [mutli-purpose] port in Vizhinjam, which is some 15km away from Mary’s damaged house in Valiyathura, is the main reason for shoreline loss
around here,” says Joseph Vijayan, a social worker and local activist who fought a case in India’s apex court against the port project. The construction of the port by Adani Ports, India’s largest private multi-port operator, began in December 2015 despite stiff resistance from locals and environmental campaigners. The Vizhinjam Port should be completed by December 2019 – but by then, Joseph says, it will be too late. Already his says the livelihood of 30,000 local residents and fishermen is at stake due to the irreversible ecological damage being caused by the project.

“The construction of a small harbour in Vizhinjam some decades ago caused the shore where I once played football to disappear underwater. If building a small harbour caused that much damage, how much damage will an international port cause?” asks Joseph. Mini Mohan, a fishing community campaigner, echoes Joseph’s views. “I have been a regular visitor to the coast for the last decade, and I am seeing the changes right in front of my eyes. During the last year, the changes have been drastic. A place I visited just three months ago has been eaten up by the waves. Poor fishermen suffer the first causality [of coastal erosion]: they not only lose their homes but they also lose their livelihoods,” she says. Although Adani Group were contacted several times via email and social media for comment, they did not respond by the time this story was published.

More erosion due to poor regulations The publication of a new draft Coastal Regulation Zone (CRZ) law in April, has also raised serious concerns about the future of India’s coastline. Issued by the Ministry of Environment, Forests and Climate Change, the 2018 CRZ notification will make way for more construction on the coast and the easy implementation of several new government ventures which had previously failed to get environmental clearances. One such venture is the multi-billion dollar Sagarmala mega-project, which will create six new mega ports as well as the modernisation a few dozen more in coastal areas across the country. The project was finally adopted in April and plans to develop at least 14 Coastal Economic Zones (CEZ) and 29 Coastal Economic Units (CEU) are currently afoot. In addition, the development of mines, industrial corridors, rail, road and airport connectivities to and from the ports is expected to yield an export revenue growth of US$110 billion.

The project is expected to generate over four million direct jobs and six million indirect jobs by 2025. But, activists are concerned that not only will local communities not see any real financial benefit from the project, but that they will also bear the brunt of the environmental degradation it will cause. A significant modification suggested in the 2018 CRZ draft decreases the buffer zone area from the high-tide line from 500 metres (as per the 2011 draft) to just 50 metres away from the sea. According to India’s National Fishworkers Forum General Secretary T Peter, this spells disaster. “The new coastal regulations have been drafted only for the easy implementation of the Sagarmala Project that was initially proposed in 2003,” he says, adding that the new CRZ was issued only to help industrialists, especially those in the tourism sector. Mohan is also fearful of what intensified construction activities on the coast will bring. “In schools all over the coastal
areas, there are shelter camps filled with ‘sea refugees’. We are only going to see more of them if we don’t protect the environment.”

**Kerala: Move to lease out sea waters for mariculture sparks row**


Stakeholders in the fisheries sector have expressed concern over a provision in the recently released Draft National Mariculture Policy alleging that it would lead to the entry of corporates into the field, leading to loss of livelihood. The policy aims to ensure sustainable farmed seafood production for food and nutritional security and to provide additional livelihood options to coastal communities. However, traditional fishermen fear that installing cages in the sea and protecting them would need huge investment and the coastal community would not be able to reap benefit from the initiative. This will lead to the entry of big players and increase conflict in the sea. Kerala University of Fisheries and Ocean Studies (KUFOS) former Vice-Chancellor B Madhusoodana Kurup said the policy will not be beneficial to fishermen as they cannot afford the huge investment.

“The objective of the policy is to ensure socio-economic uplift of fishermen. However, they will not be able to reap the benefit as it needs huge investment. Naturally corporates will enter the field, which would lead to conflicts in the sea. Till now there are no restrictions on fishermen in catching fish from the open sea. However, the introduction of demarcated mariculture zones will restrict their movement and lead to conflict. The technology and investment needed for the project is very high and fishermen will not be able to afford it. Kerala coast is highly volatile and turbulent. So setting up mariculture cages in the coastal sea will be a challenge,” he said. A SENIOR officer, who was part of the 14-member committee that prepared the Draft National Mariculture Policy, said all fears of the fishermen will be addressed. “We will be holding six stakeholder meetings across south Indian states to address the concerns of fishermen. Kerala’s annual fish production is 5.85 lakh tonnes and we have a huge demand,” said the officer. “India’s consumption will be 18 million tonnes by 2019 and we have to increase mariculture to improve production,” he said.

“The farms will be set up within 0 to 12 nautical miles from the shore. We have 8,118 sq km of sea and if we use one per cent of sea for mariculture we will need to start farming in 82 sq km. One cage with 6 m diameter will need 100 sq m space and we can install 8.2 lakh cages in this area. One cage can provide 3 million tonnes of fish a year,” he said. He said the CMFRI has already introduced cage farming in Visakhapatnam, Mandapam, Tirunelveli, Chennai and Veraval. It is the fishermen who operate these units and they are happy with it, he said. However, the government should provide insurance coverage to the cage farms against threat and natural
calamities. It is for the state government to identify demarcated zones and lease out the zones, said CMFRI principal scientist K Sunil Mohamed.

“The challenges are in ensuring protection to farms. Kerala will have to bring in amendments to the Kerala Inland Fisheries and Aquaculture Act to facilitate cage farming in sea. To avoid conflict, the authorities will have to identify areas where cages can be installed. India will have to concentrate more on mariculture as catch from the open sea is declining,” he said. Matsya Thozhilali Aikya Vedi president Charles George said the government should engage cooperative societies of fishermen for open sea cage farming. “If private players enter the field it will lead to conflicts and loss of livelihood for fishermen. Already the coastal community is in distress as marine resources are declining and the Coastal Regulation Zone restrictions are displacing them from the coastal areas,” he said.

Kerala: Details of 3,000 fishers collected under â€“Sagaraâ€™ app project


The Fisheries department has gathered the details of around 3,000 fishermen as part of its ongoing survey in the district to update “Sagara”, an exclusive Android application developed by the National Informatics Centre under the Digital Kerala Initiative for the dissemination of timely alerts on weather changes and other emergency communications by various government agencies. The six-member survey team appointed by the Fisheries department on contract for the survey has also gathered the registration details of 1,000 boats, including the mechanised and non-mechanised ones, which will be shortly uploaded onto the special purpose mobile application. Project coordinators say the target is to gather the complete details of 20,000-odd fishermen after visiting all the major harbours in Kozhikode district within three months and make it available on the application for their proper technological linkage.

It also aims at recording the details of no fewer than any 5,300 fishing boats in the district, they say. Now, data collection is going on in six centres, mainly covering the harbours and fish landing centres. The team entrusted with the task is primarily recording the fishermen’s name, language, phone numbers, age, nature of their job and the details about their vessel. At first, it will be fed into a special software named ‘Realcraft’ and later it will be accessed by a State-level technical wing to update the Android application. A centralised communication system for supporting emergency rescue operations too is on the anvil. “The fishers’ cooperation is very vital to complete the survey work on time as most of them are very much busy with their work. We have asked the survey team to first collect the details of all the fishing boats and then focus on the fishermen,” says P.K. Ranjini, Deputy Director of Fisheries (in-charge).

She also points out that the data collection drive will be a flop if the survey team fails to get the details of all the active fishers in the district. With the launch of the latest version of the
application with features to support multiple languages, fishing boat owners in Kerala will be able to get real-time alert about the status of their vessels and crew on the job. For the Fisheries department authorities, the updated application will bring all their target groups under a common roof for quick information sharing during emergency situations.

At present, the basic version of the application is available in the Google Playstore for free download and can be logged in using the registered mobile number. Officials say the linkage of all the existing satellite-based technologies that guide fishers when and where to fish for the best results too will be possible in the advanced stage of developing the app. Integration of the existing services from the Indian National Centre for Ocean Information Services and India Meteorological Department too are possible in consultation with the Indian Space Research Organisation.

Kerala: Fisheries livelihood losses up to Rs. 94 crore, says CIFT estimate


The Central Institute of Fisheries Technology, Kochi, which has made a rapid assessment of the damage to craft and gear and livelihood of capture fisheries in Kerala in the recent floods, estimates that the loss of livelihood was about Rs.94 crore while damage to the craft and gear in marine and inland capture fisheries cost about Rs.11 crore. Loss of fish from the reservoirs, habitat destruction and damage to the ecosystem congenial for growth of fish population are pronounced and it would take some time to revive, said CIFT in a statement here on Wednesday. CIFT made the assessment on a direction from the Indian Council of Agricultural Research. C. N. Ravishankar, director, CIFT constituted eight teams headed by Leela Edwin. The teams visited all flood-affected areas of the State and collected information and held discussion with the stakeholders. Discussions were also held with the State fisheries department, and fishermen in the affected sites.

The study noted that the craft used in the estuarine and inland sector were mostly made of wood (sometimes with an FRP coating) or entirely made of FRP. The length of the vessels varied and often ranged from four to seven metres and cost between Rs.10,000 and Rs.60,000. Use of tubes, dugout canoes and coracles are rampant in the reservoirs. Gillnets are the most commonly used among the different gears and it constitutes more than 60 per cent of the total gears in the State. Other gears used include cast nets, small seines, hook and lines, traps in the inland sector and stake nets and Chinese dipnets are found in the estuarine stretches. Many of the fishing gear and accessories were washed away along with fishing craft. The total loss due to damage to craft and gear is about Rs.6.7 crore in the inland system and ?48 lakh in the marine system. In the inland system, high damage was reported in Idukki, Alappuzha, Ernakulam, Kottayam and Thrissur.
districts. In the marine fisheries, most damage was in Malappuram (Rs.3.93 crore) and Kollam (Rs.0.27 crore).

Kerala: Fisherfolk raises concern over shipping corridor

https://timesofindia.indiatimes.com(city/thiruvananthapuram/fisherfolk-raises-concern-over-shipping-corridor/articleshow/66003855.cms

Fisherfolk in the state has raised their concerns over the Sagarmala project and the central plan to construct a shipping corridor at 20 nautical miles close to territorial waters. “To avoid mid-sea collisions with fishing vessels, the Centre plans to demarcate a shipping corridor from Gujarat to Kanyakumari coast along 20 nautical miles from the seashore. It would affect the fishing ground and livelihood of fishermen,” said national fish workers’ forum (NFF) general secretary T Peter. It is the right of fishermen to operate in waters up to 200 nautical miles from the Indian coast.

Fishermen are planning a nationwide agitation after the NFF executive committee meeting on October 7 in Goa and national consultation in Mumbai “We are not against the shipping corridor project, but it should not be allowed at least 50 nautical miles from the seashore. The area till 50 nautical miles from the shores should not be encroached as that would affect the livelihood of fishermen,” he said. The Centre assures to provide deep-sea fishing vessels for fishermen as part of the Sagarmala project. However, fish workers indicate that if no fishing ground is permitted, then there is no use in getting such vessels. The NFF members demand that the government should hold a discussion with fisherfolk and stakeholders of such projects before taking it forward.

Kerala: Bill to keep fish fresh across supply chain


The Kerala Fish Auction, Marketing, and Quality Control Bill to be presented in the Assembly during the next session seeks to end the exploitation of fisherfolk by middlemen and ensure the quality of fish and seafood products through the entire chain, from the fishing vessel to the end consumer. The legislation that has been approved by the Cabinet will usher in a big change in the fisheries sector, Fisheries Minister J. Mercykutty Amma said here on Wednesday. She said it would ensure remunerative price for fishermen and put an end to the use of hazardous chemicals like formalin, ammonia, sodium benzoate and urea for preservation of fish. The draft Bill seeks to put in place a system for efficient management of fish landing centres, fishing harbours and fish markets.

Management committees comprising elected representatives, officials and members of fishworkers unions would be set up for the purpose. A State-level quality control committee
chaired by the Fisheries Director would also be set up. Fish auction would be limited to permit holders and the commission would be capped at 5%. Auction would be held in the order of landing. Ice plants, chilled storage units, pre-processing and processing centres and container trucks used for transportation of fish would also be required to have a permit. The Bill has provisions to ensure hygienic handling and transport of fish. It prescribes punishment for chemical contamination of fish.

The Bill empowers the government to appoint qualified officials for inspection of fishing vessels, landing centres, harbours, markets, fish outlets, cold storage units, ice plants, processing centres and vehicles used for transportation. Violation of the terms for auction and quality control under the Act will be liable for trial by a court and punished with a fine of 1,00,000 or sentenced to imprisonment for two months, going up to a fine of 500,000 and/or imprisonment for one year for repeat offences.

Kerala: Sea erosion damage at Ambalappuzha assessed

A three-member Central team on Sunday assessed the damage caused by sea erosion in the coastal areas of Ambalappuzha taluk. The team, comprising Ashu Mathur, Adviser, Finance Ministry; T.S. Mehra, Resource Commissioner, Ministry of Water Resources; and Anil Kumar Sanghi, Joint Secretary, National Disaster Management Authority; visited Neerkunnam, Meenoottu Kadavu, Valanjavazhy and Thottapally. The team inspected houses damaged in sea erosion in the region and the destroyed fish landing centre at Valanjavazhy. They also examined the functioning of geotubes in preventing coastal erosion. Local residents said the severity of the sea erosion was increasing every passing year. District Collector S. Suhas and other officials accompanied the team. Earlier, on Saturday, the central team visited the flood-ravaged areas of Kuttanad and Chengannur taluks. They held discussions with district administration officials.

Kerala: Motor curbs for fishing vessels likely

The government is considering a proposal to impose motor restrictions on fishing vessels operating within territorial waters up to 12 nautical miles from the coastline to prevent over-exploitation of marine resources. Fisheries Minister J. Mercykutty Amma said here on Monday that only boats up to 250 hp would be permitted to operate in the area under the proposal. Vessels with higher engine power would have to seek fishing grounds beyond territorial limits, she said while addressing a meeting of fishworkers’ unions and boat owners. She said the
government was planning to introduce a district-level mechanism to curb the exploitation of fishworkers and remove the restrictions on fish landing and auction.

**Kerala: Harbour project to begin by January**

https://www.thehindu.com/todays-paper/tp-national/tp-kerala/harbour-project-to-begin-by-january/article25024368.ece

The Sakthikulangara fishing harbour development project will begin by January 2019, said Minister for Fisheries and Harbour Engineering J. Mercykutty Amma here on Saturday. The Harbour Engineering Department will be in charge of the construction and the first draft of the project will be displayed at the harbour during the anniversary celebrations of the Suchitwa Sagaram (Clean Sea) campaign. “Later, also considering the suggestions of boat owners and fishermen, the final blueprint will be prepared. The foundation stone will be laid in January 2019,” she said after a meeting at Kollam Collectorate to assess the work of Suchitwa Sagaram, a project aimed at bringing down plastic waste accumulation in the sea.

As part of the campaign, boats will not dump any plastic waste in the sea and fishermen will collect and bring back all the plastic caught in their nets. The meeting also decided to intensify the activities under the project and take steps to ensure the participation of maximum number of fishermen. “Giving incentives to fishermen, according to the quantity of plastic waste they bring ashore, is under consideration and a decision will be taken within a month. Also, we are thinking of honouring the fishermen who actively participate in the campaign, during the anniversary celebrations,” the Minister said. It was also decided to observe Cleanliness Month from October 2 to November 2. The boatowners, who participated in the meeting, has assured the district administration that they will organise various programmes, including mike announcements in coastal areas.

**Kerala: Fisheries management council to ensure sustainable fishing**


The Fisheries management council, one of the key components of the Kerala Marine Fisheries Regulation Act (KMFRA), will be a crucial step in the regulation of fishing practices and conservation of marine resources, Central Marine Fisheries Research Institute (CMFRI) principal scientist K Sunil Mohamed has said. “The council will open a platform for dialogues and discussions on ensuring sustainable fishing in a democratic way. This participatory management will address the requirements for sustainability, equity and efficiency in fisheries and coastal resources management,” he said at the two-day workshop on scientific management of marine fisheries held recently. The management council was included in the KMFRA based on a proposal from the CMFRI.
The council will function as a 3-tier system - at the village, district and state level. The council will have representatives of fishermen, government officers, boat owners, boat builders, fish traders, NGOs and scientists in it. The constitution of these councils will empower the fishermen and make them part of the fisheries management team, balancing their rights and responsibilities, said Sunil Mohamed. Intensive public awareness is needed to effectively implement regulations like Minimum Legal Size (MLS) to curb juvenile fishing. A scientific approach is needed to ensure better fisheries management in Kerala, said Kerala Fisheries Director Venkatesha Pathi.

**Kerala: CIFT develops solar fish dryers**


The Central Institute of Fisheries Technology (CIFT), under the Indian Council of Agricultural Research (ICAR), has developed solar hybrid dryers designed to improve the hygiene and quality of dry fish and ensure round-the-year operations. Traditional methods have been developed with dry fish business suffering a setback in the context of poor hygiene in traditional fish drying practices such as salting and open sun drying. Videos circulating in social media on faulty and unhygienic dry fish processing in the coastal belt have been a serious setback for the business, says a CIFT press release here. The solar hybrid dryers from CIFT is an alternative to the tradition-bound sunlight-dependent dry fish processing.

The solar dryers are popularised with financial assistance given by the Hyderabad-based National Fisheries Development Board. CIFT is conducting training programmes to attract entrepreneurs from the State. Two training programmes were attended by 50 participants. The training for the third batch is scheduled from October 10 to 12, adds the release. The training programme is being conducted under the guidance of CIFT director C.N. Ravishankar, and the course is mandated with hands-on sessions on pre-processing, drying, quality evaluation and packaging of dried fish. The participants are also provided acquaintance with agri-business incubation process of CIFT developed technologies. Manoj Samuel, head, engineering division, CIFT is coordinating the programme.

**Kerala: Shipping corridor to hit livelihood of fishers**


The fishermen under the National Fish Workers Forum have raised apprehensions over the proposed notification by the Director-General of Shipping on the designated corridor for merchant ships to avoid ship-boat collisions in mid-sea. A memorandum regarding this has been submitted to the Union ministry of shipping seeking direct consultations on the matter with fishermen of coastal states before the notification is finalised as the move would affect the
livelihood of fishermen. The designated corridor for merchant ships has been proposed to avoid ships and fishing boats collision in mid-sea.

“The fishermen are interested in finding a solution to the ever-increasing incidents of boat accidents caused by collisions, but the current unilateral move by the DGS will protect the interests of commercial shipping companies by sidelining the livelihood interests of fishermen,” said Mr T. Peter, NFF general secretary. The authorities plan to implement “a concrete traffic separation scheme for the west coast” but the fact is that no fishermen groups in the region were consulted by the ministry of shipping so far to discuss and finalise the scheme, Mr Peter added. The proposed corridor is 15 nautical miles from the coastline having a span of 20 nautical miles (37.5 km) which is inappropriate. This is the main fishing ground for thousands of fishermen who go for fishing in mechanised boats along coastal India.

The fishermen also are concerned about how to demarcate the boundary of the proposed corridor which was proposed on a map. The move will affect availability of fish for domestic use and also foreign money earned by exports, as the west coast is a major breeding ground for fish in the country. The memorandum said that the provisions in the new notification will enable the shipping companies to evade the responsibility of collision and leave the fishermen as the main culprits. The fishermen will not only lose their fishing ground but will also become liable and punishable for trespassing in the corridor, it is alleged. The NFF executive meeting to be held in Goa on October 3 will decide on conducting a nationwide protest against the move.

Kerala: Post floods, scientists find several species of fish and dragonflies new to Kerala


As relief work is underway and the residents of Kerala return to their homes to begin rebuilding their lives and the state, scientists, researchers and farmers have begun noticing some intriguing, possibly worrying, changes in Kerala’s ecosystem. WhatsApp forwards have indicated that a variety of foreign species are now being found in Kerala, with fisherfolk and others finding rare, exotic fishes that have never been found in the state before. One photo, which went viral, seems to indicate that an arapaima, a human-sized fish native to the Amazon river, was found by locals in Chalakudy river, Thrissur. Scientists and researchers, who have been studying Vembanad Lake for over a decade now, have also found marked changes in the fauna in the lake after the floods.

“We have been doing a fish count every year in the third week of May, and have these records as the baseline data available about the diversity of Vembanad Lake,” says Priyadarsanan Dharma Rajan of ATREE, Bangalore. “This year, soon after the floods, we repeated the survey again, and noticed that the catches of fish had increased several-fold.” Anu Radhakrishnan, also of ATREE, says that local fisherfolk, who returned to Vembanad’s waters on August 18 after the incessant
rain of August 15, 16 and 17, began noticing remarkable sightings of rare exotic fish almost immediately. “In the first week after the flood, we saw yields of up to 300 to 400 kg of exotic fish that had never been seen in the lake before, including fishes like the South American red-bellied pacu and the Assam wala.

There were yields of up to 700 kg of red-bellied pacu in the first week, which soon dropped to about 100 kg in a few days.” He also mentions other exotic species that have been found in Vembanad Lake after the floods, such as the African catfish, a large and voracious predator that has proven to be a huge menace to indigenous fish populations, and other unusual fishes found elsewhere in Kerala, like the alligator gar, a large sluggish carnivore. But how did these fish enter Kerala’s ecosystem in the first place? Priyadarsanan says that while the raising of such exotic fishes is actually banned in Kerala, many aquaculture farms breed them illegally. He also mentioned that many dam reservoirs introduce fishes into the dams, ostensibly to provide local tribal populations a source of income and livelihood, but ended up as a source of additional revenue for the concerned government department. Anu says, “These fishes had to come from somewhere, right?

These exotic fishes come from other countries, and the government surely knows if new species are coming into India, because they have to be quarantined first, so this needs to be checked out. There needs to be stricter regulation and implementation of the existing policies.” Introducing these fishes, many of which are sturdy hybrids that can withstand adverse weather conditions and have no natural predators in Kerala, into the ecosystem could have disastrous consequences for indigenous fish populations, and poses a severe threat to these native fish varieties. Priyadarsanan says, “Our scientists are also not developing enough breeding methods for locally available fish. Research in fishery universities needs to focus on breeding practices, creating high-yielding varieties of local fish and stock improvement, which is currently not being done.”

Across in Wayanad While Vembanad Lake and the marine ecosystem of Kerala seem to be facing rising populations of exotic fish, over in Wayanad, farmers and researchers have noticed an alarming development about a fortnight after flood waters receded: mass deaths of earthworm populations, numbering in the thousands. PU Das, soil quality officer in Wayanad, says that the flood waters have “flushed out organic matter and humus in the soil, which has caused a reduction in the soil’s water holding capacity.” This has resulted in an increase in soil temperature, causing delicate earthworms, which have a tolerance of between 15-28 degrees Celsius, to perish en masse. This extreme and unusual reduction in the earthworm population could have huge implications for soil fertility, which will impact agricultural production. Great African Snail population on the rise Meanwhile, the incessant rains and flooding in Kerala have also upped the chances of the notorious Giant African Snail spreading.

“Given that there have been good rains, lots of moisture in the soil and air, and the removal of many geographical barriers due to the floods, there’s a high likelihood of these snails being
easily carried or dispersed from the few districts their populations were restricted to in Kerala before the floods to other districts,” says NA Aravind, a Fellow at ATREE who specialises in research on molluscs. Natives of Eloor and neighbouring regions have noticed alarming invasions of African Giant Snails in their homes post the recent floods. These snails, listed as one of the top 100 most damaging invasive species in the world, like to nibble on lime and cement walls, and weaken these structures with their activities. Aravind says they pose a variety of threats to humans. “They can cause eosinophilic meningitis, which can spread to humans from their slime, either from eating them directly, which is rare in India, or from eating crops that have come in contact with their slime.

They are also notorious for causing massive damage to agricultural and horticultural crops, as they feed voraciously on more than 500 different kinds of plants. Given that they are hermaphrodites that lay between 300-500 eggs at a time, the chances of invasion are high.” The snails can be killed with salt trails, and should not be handled by direct contact. New dragonfly species found A recent study by the Periyar Tiger Conservation Foundation and the India Dragonfly Society conducted on 7 and 8 September also found 80 varieties of dragonfly species in the Periyar Tiger Reserve, including 8 new species, 3 of which are possibly entirely new to science itself. Periyar Tiger Conservation Foundation biologist Patrick David told The Hindu that the recent incessant rains might have affected the hatching of dragonfly eggs. As life in Kerala slowly returns to normalcy, it's clear that researchers will need to keep an eye on all the different ways in which the floods have affected flora and fauna in the state, and the implications that these changes will continue to have on Kerala's ecosystem.

Kerala: Participatory management councils will play a key role in fisheries sector


Establishment of participatory management councils, one of the new amendments to the Kerala Marine Fisheries Regulation Act, will play a crucial role in revamping the fisheries management system in the State, according to experts. Marine scientists who spoke at a workshop on scientific management of marine fisheries, held at the Central Marine Fisheries Research Institute, observed that the proposed management councils would ensure the involvement of all stakeholders, including fishermen, in management and policy formation in the sector. Sunil Mohamed, Principal Scientist, CMFRI, said the councils would open a platform for dialogues and discussions to take decisions in a democratic way. It will address the requirements for sustainability, equity and efficiency in fisheries and coastal resources management.

3-tier system The participatory management council, which was included in the amendment of KMFRA following a proposal from the CMFRI, will function as a 3-tier system — village, district and State. The council will have representations of fishermen, government officials, boat
owners, boat builders, fish traders, NGOs, scientists, etc. Through the implementation of these councils, fishermen will be empowered to become active members of the fisheries management team, balancing rights and responsibilities, and working in partnership with the government, Mohamed said. He also said intensive public awareness is required to effectively implement Minimum Legal Size (MLS) regulations to curb juvenile fishing. Consumer awareness is crucial in implementing the MLS regulation properly, he said, adding that implementing the same would increase the economic efficiency of the fishery, besides affording protection to juvenile fishes. In his introductory remarks, Venkatesha Pathi, Director of Fisheries, said a scientific approach is essential for better fisheries management. The fisheries department has allocated special funds for adaptive research in this regard.

**Kerala: Newly formed sandbed on ponnani beach poses threat**


The deluge that hit the state of Kerala last month has affected it in many ways, as we are discovering each day. In Ponnani beach in the northern district of Malappuram, a sandbed has formed right across the sea post the floods. The sandbed, which runs for nearly a kilometre into the sea, has been attracting scores of tourists, forcing the police to be on alert fearing safety issues. The sandbed has formed following the deposits caused by the excess rain and the opening of the shutters of the Malampuzha dam and the Aliyar dam in neighbouring Tamil Nadu. The high tides and the oversetting of the banks of the Bharathapuzha river also seems to be the reason for the formation of the sandbed on the Ponnani cove. “The sandbed began attracting tourists two weeks ago. It was formed following the floods and is about a kilometer long. People can now walk into the sea over the sandbed from the shore, but it is not safe as the sea can be rough due to high tide, which we can’t predict.

If high tide occurs after people walk into the sea, it would be difficult for them to come back, a precarious situation indeed,” Farooq a native of Ponnani tells TNM. Apparently a similar phenomenon happened in 1996 due to excess flow of water due to the change in the course of the river. Officials have now begun warning people not to walk over the sandbed,” he adds. In 2009, a similar sandbed was formed following a change in the river’s course. At the time, four young people had gotten caught in deeps waters, after which one of them reportedly drowned. The Coastal Police have begun deploying personnel to prevent people from being adventurous. “After the sandbed formed, tourists began flocking here about four or five days ago. Since then we have been warning them and have deployed police personnel to prevent them from walking on the sandbed into the sea,” Ponnani Coastal Police says.

The visitors are coming mostly from Malappuram, though there are some from the neighbouring districts of Kozhikode and Kannur. Meanwhile a video of the sandbed is being widely circulated,
which is also prompting people from outside the district to visit the beach. The Harbour Engineering Wing has also reportedly warned people from walking over the sandbed to the sea.

**Kerala: Diesel price rise hits fishermen hard**


The fishing community, already facing a serious sustainability challenge, has been hit hard by the continuous rise in the price of diesel. There has been a rise of Rs. 10 per litre of diesel over the last 10 months and the situation is such that fishermen can’t venture out into the sea for their livelihood, said Matsya Thozhilali Aikya Vedhi convener Charles George. The extra expenditure on each fishing trip even by the traditional boat is about Rs. 25,000 and the poor catch is causing immense hardship for the boat owners and the fishermen, who get paid very little on account of the poor catch. At the same time, the boat owners are forced to pay the loans they have availed to build boats. The loans come at 10 to 14% interest. Besides, the fishing boat owners have to pay the cess imposed by various agencies. Mr. George called on the government to come out with a special package for the fishermen so that they are able to overcome the present crisis-like situation.

Market intervention The fishing scene is now dominated by mackerel catch, which is a good thing as of now. However, the fish traders sometimes force the fishermen to sell at rates 10 to 14% lower than the actual price. Mr. George claimed that while the fishermen get only about Rs. 10 to 15 for a kilogram of mackerel, it is sold at much higher rate in the retail market. Besides, an abundance of mackerel catch has also resulted in the price of the fish going down over the last month. Under these circumstances, the government must also come forward to make a market intervention so that the fishermen get remunerative price for their catch, he said. As the government has been addressing issues of sustainability and the problem of juvenile fishing, it has also to come out with a relief package and make market intervention to save the fishing sector, he added.

**Kerala: How Keralaâ€™s largest lake worsened flood: Water panel**


Congestion in the carrying capacity of the Vembanad Lake, the largest lake in Kerala, which could only absorb a fraction of the water that drained into it from overflowing rivers made the Kerala floods starker, the Central Water Commission (CWC) has found. This severely inundated districts such as Kottayam and Allapuzha, a senior CWC official told The Indian Express. The Vembanad Lake was able to absorb only 0.6 billion cubic metres (BCM), of the 1.63 BCM caused due to excessive rainfall and inundated over 480 sq km and inflated to nearly three times
its size. “High rainfall during this period and lack of reservoirs in the upper reaches of the rivers that drain into the lake, worsened the flooding,” the official said.

The CWC has now suggested increasing the capacity of the spillway through which rivers such as Pamba, Manimala, Achenkovil and Meenachil drain into the lake and the barrage through which the lake spills into the ocean. According to CWC sources, the situation may have been better if the capacity of the lake was larger. “The capacity of the lake might be less due to the siltation which is a natural process, and there could have been backflow because the outlet was unable to discharge as much into the ocean. This is a coastal lake which also interacts with the backwaters. One possibility was the dredging of the lake but since it is an eco-sensitive zone, dredging was not recommended,” said the CWC official. In its first analysis after the Kerala floods, which claimed at least 480 lives and caused widespread damage, the CWC has squarely put the blame on two spells of intense rainfall during the month of August — a two-day-period over August 8-9 and later a three-day-period over August 15-17.

Over 50 per cent of the rainfall received between August 1-19 fell over a three-day period, said official sources. With management of dams in Kerala at the heart of the debate over its purported role in causing last month’s floods, the CWC has suggested a review of rule curves of all large reservoirs in the state – to ascertain how much water should be released when reservoirs reach certain levels. This, the CWC official said, is even more essential for dams with live storage of over 200 million cubic metres. The recommendation from the apex technical body in India for water management comes a few weeks after Ministry of Earth Sciences secretary Dr. Madhavan Nair Rajeevan had said that not just in Kerala but there was “no scientific dam water management across India.” “As per my understanding, no big reservoir has a decision support system. So we don’t know when to open them, how to open them,” he had said. According to the CWC, the dams “neither attenuated the floods nor aggravated them,” the official said.

Sources told The Indian Express that the flooding conditions may not have changed drastically even if the water in reservoirs was much below Full Reservoir Level, due to the “severe storm conditions.” Specific to the Idukki dam, CWC sources said: “Idukki dam absorbed much of the runoff and the outflow from the dam was less than inflow during the intense spell of rainfall. So, it did act as a flood cushion.” Gates of 35 dams in Kerala were opened in August to deal with the massive inflow, with the Kerala State Electricity Board Limited coming under criticism for its oversight. It is learnt that the rainfall runoff generated during these intense spells was so high that the flood moderation effect of the dams was restrained. The topography of Kerala too contributed, said official sources, with the travel time of the runoff in the catchment area barely a couple of hours long before the water reached the reservoirs. The CWC official said that review of rule curves for reservoirs was essential based on historical data which will determine how much water should be released each month over the monsoon period. “Most of Kerala’s reservoirs are small barring a few,” the official said.
Kerala: Traffic corridor to avert ship-boat collision


A designated traffic corridor for merchant vessels sailing along India’s western seafront will be ready in a fortnight as a possible remedy for the increasing incidence of mid-sea collisions involving commercial ships and fishing boats. Consultations are in the final stages for “a concrete traffic separation scheme for the west coast”, from the Gulf of Kutch and the Gulf of Khambhat (Gulf of Cambay) down through the coast of Maharashtra, Goa, Karnataka, and Kerala till some distance beyond Kanyakumari in Tamil Nadu, according to K.P. Jaya Kumar, nautical adviser in-charge at the Directorate General of Shipping. It was in the wake of the recent surge in mid-sea collisions, especially along the Kerala coast which witnesses dense fishing activity, that the DG Shipping came up with a broad framework for a designated navigation corridor for merchant ships. “The process is now under way to finalise the project – to mark the corridor on the map – which will be done in about 10 to 15 days,” Capt. Kumar told The Hindu over telephone. Sources, meanwhile, suggested that the final draft would be issued and publicised in consonance with the provisions of international maritime regulations for merchant ships to follow. Officers of the Coast Guard said the proposed corridor is 20 nautical mile wide and about 15 nautical miles away from the coastline. “But it will not be uniform all along, as the corridor will have to be positioned in such a manner that it doesn’t pass through dense fishing zones,” Sanatan Jena, Coast Guard Commander for Kerala and Mahe, said. “We cannot ruin the livelihood of fishermen.” The Coast Guard is taking inputs from State Fisheries Departments to ensure that zones rich in fishing resources are kept out of the contours of the proposed corridor. “But there’s a need to sensitise the fishing community not to wade into the corridor once it’s delineated,” Mr. Jena said. Another senior Coast Guard officer said sustained campaigns were needed to make fishermen aware of marine fishing regulations. “Specifically to Kerala, a good percentage of fishing boats are registered and colour-coding compliant. But there’s serious lapse in carrying life-saving equipment on board. Basic things like ensuring that the seagoing personnel on board know swimming or the fundamentals of communication go a long way in saving lives,” said an officer on condition of anonymity.

Kerala: Scientists to assess biodiversity loss


The Kerala State Biodiversity Board (KSSB) is setting up a multidisciplinary team of 100 scientists from various research institutes to assist panchayat-level Biodiversity Management Committees (BMCs) to carry out a rapid assessment of the biodiversity loss caused by the recent floods in Kerala. A consultative meeting convened by the KSBB here on Tuesday constituted a
core committee to lead the mammoth study, the first of its kind in the State. The format for the assessment has been approved and the core committee comprising 12 scientists has been tasked with preparing a manual of procedure to be given to the BMCs. KSBB chairman S.C. Joshi said the data collection exercise was expected to be completed by mid-October. “The information will then be subjected to a detailed analysis to come up with a response plan for restoration of ecological restoration,” he told The Hindu.

The rapid assessment will cover the damage caused to agricultural biodiversity and rare, endangered and threatened species in diverse ecosystems. It will also study the possible spread of alien invasive species in the wake of the floods and their impact on endemic species. The impact of the floods on the riverine and aquatic ecosystems is another thrust area. Dr. Joshi said the board had initiated steps to mobilise the BMCs, many of which were dysfunctional. “Once the manual of procedure for the rapid assessment is finalised, the BMCs will get down to the job with the support of the multidisciplinary team of scientists,” he said. The consultation was attended by scientists from government institutions such as the Kerala Forest Research Institute, Jawaharlal Nehru Tropical Botanic Garden and Research Institute, University of Kerala, Kerala Agricultural University, Central Marine Fisheries Research Institute, M.S. Swaminthan Research Foundation, Central Tuber Crops Research Institute, Zoological Survey of India and Institute of Climate Change Studies as well as non-governmental agencies, including the World Wildlife Fund, Centre for Environment and Development, Thanal, and Ashoka Trust for Research in Ecology and the Environment. The KSBB has drawn up a three- pronged strategy to address the impact of the floods on the ecology and biodiversity of the State. The rapid assessment is to be followed by a chain study to understand how the disaster has affected various ecosystems. The third part of the strategy will focus on developing a long term action plan for ecological restoration.

Kerala: Mass suicides feared if no proper assistance given to farmers of Munroe Island


Fish farmers of Munroe Island (Munroe thruthu) in Kollam have been severely hit by the devastating Kerala deluge. No surprises here; as inland fisheries in most of Kerala have been affected by the flood fury. But what makes the case of Munroe Island special is that it is, like most of Kuttanad in Alappuzha, a land lying below the sea level. There is not much hope for such a place in case of a deluge and the farmers here are still counting the losses; hoping for financial support from the government to restart their lives. “Farmers in this village have lost everything. They need at least Rs200,00 per hectare to restart their farming,” says Binu Karunakaran, President of Munroe Island Panchayath (Village Council). “We have only small-
scale farmers here. They are not in a position to raise the money themselves. Especially when they have already suffered huge losses.

The government should come up with some special financial package to support them and I am afraid we will otherwise be seeing mass suicides here,” Karunakaran said. Gopalakrishnan is a Munroe Island farmer whose livelihood has been devastated by the flood. He was one of the pioneers of fish farming in the area. He started it some 22 years ago by taking loans and with the help of government agencies. Gopalakrishnan was a successful farmer who cultivated prawn, pearl spot, crab all of which had huge demand in the market. He also has fish hatcheries. In fact he holds a record for developing 600,000 hatchlings from a single mother prawn, says Gopalakrishnan. “In the early days it was like a goldmine,” says he. “Especially after we started growing the prawns. We made good money,” Gopalakrishnan said. They had also faced occasional issues. Like when prawns fell prey to various diseases. And the returns later dwindled due to high prices of fish feed, which is imported from Vietnam. But business was more or less okay until this year.

Most of his fish have been washed away or dead. It was especially hard because he - like others - was keeping his crop for sales during Onam. Like most of the fish farmers, he knows only one job and he is not ready to give up very easily. But it is not a very easy task and farmers alone cannot repair the damage inflicted on huge tracts of land by the flood waters. For example, for fish farming the required pH level of water is 7. However, post flood, there is a change in pH levels of the water in the area has become acidic. This needs to be rectified fast. What makes matters worse is that the barriers of most of the canals and ponds have been damaged by the flood. They need to be repaired before salinity can be fixed and it is not a task the farmers alone can do. Binu Karunakaran said that fish farmers in his village lost more than Rs15million and he has already informed the authorities of the impact of the floods. They are trying to protect whatever stock has been left and move on with life, but without definitive support from government agencies, there will not a bright future in this business for a long time to come.

Kerala: Rebuilding Kerala: Lessons from Aceh


The deluge in Kerala and the challenge to rebuild a ‘New Kerala’ reminds me of my four-year involvement in post-tsunami efforts at Aceh Province of Indonesia to ‘build back better’ – the phrase coined by US President Clinton when visiting Aceh. I learnt in Aceh that disaster management has five phases: rescue, relief, rehabilitation, reconstruction and redevelopment. The first four are part of common discourse in Kerala. By redevelopment, however, we are alluding to using the context of a disaster to re-envision a change in the composition, pace and direction of the development process. In Aceh, reconstruction was coordinated by a specially
created agency, decreed by the President of the Republic of Indonesia. The Rehabilitation and Reconstruction Agency (BRR) was designated to operate for four years, with competent full-time staff and two oversight boards.

The Agency's mission was to “restore livelihoods and strengthen affected communities by designing and overseeing a coordinated, community-driven reconstruction programme implemented according to the highest professional standards.” There was a master plan for Rehabilitation and Reconstruction. BRR matched donor funds to specific community needs through a process that was rigorous, sensitive to local concerns and priorities, and well-monitored. BRR coordination was essential to ensure timely delivery of support and eliminate legal and institutional uncertainties in reconstruction. BRR recognized the important role of local community input and participation in reconstruction. Local government bodies, customary and community leaders, academics, religious leaders and NGOs were continuously consulted and involved in re-shaping the reconstruction plan whenever needed.

Mechanisms to trigger community-based reconstruction initiatives were critical to ensure participation – and more importantly to eliminate perception of bias or corruption. The lesson for Kerala is that reconstruction is best achieved with a separately designated, time-bound and focussed entity for execution, with sanction of the legislature and accountability to it, but with the freedom to function according to the highest professional and ethical standards. This entity should be viewed as a public-private-people partnership for building back better. Its mission should be to create a part fixed, part flexible physical master plan from a judicious amalgamation of participatory ward/panchayat-level physical rehabilitation and reconstruction plans. Each ward/panchayat should provide a vision statement for their rebuilt reality. This amalgam must then be meshed with macro-assessments of reconstruction needs which have taken seriously the geo-physical and environmental factors in nature made amply visible in the wake of the deluge.

Aid Coordination With aid pouring into Aceh (it reached USD 8 billion), the Government of Indonesia requested the World Bank to establish a multi-donor trust fund (MDF) to pool donor contributions.

The MDF activities had to be consistent with, and guided by, the Government’s Master Plan and under the leadership and direction of BRR. The MDF helped all donors allocate funds judiciously. It provided detailed spatial and financial information on the specific needs of the survivors. Procurement procedures were made simpler and transparent, shortening implementation time. Smaller donors with limited overseas experience or administrative capacity also used MDF as a channel for their aid. In Kerala, a multi-donor profile is gradually evolving for assisting in reconstruction. Aid from central government, foreign nation states and international development agencies and banks have fixed arrangements and channels to reach the coffers of the state. Kerala can also make project proposals for specific short and long-term needs, availing of soft loans and grants from a range of sources including the World Bank and
the United Nations system. The Kerala Diaspora is ready to answer the Chief Minister’s call to pledge a month’s earnings for this cause.

They will pledge more if the state can guarantee that hard-earned money they contribute can, if they so indicate, be utilised for specific projects intended for designated places and people. Kerala needs a special purpose financial trust facility for overall and nuanced aid coordination. This facility should have the Chief Minister and Finance Minister at its helm, but the operational charge needs to be given to qualified bureaucrats and experts with experience in dealing with the financial management of disaster reconstruction. Linking Aid to Execution In Aceh, when dealing with the post-tsunami relief, information technology and local expertise was not as developed as in Kerala today. The BRR depended on e-mail, SMS, satellite phones, GIS, and regular ground-checks. Matching funds and personnel to exact locations for reconstruction work took time due to complete destruction of road infrastructure. Delays gave rise to doubts about credibility of the process.

Local-level coordination and execution were dependent on physical meetings with paper charts. At BRR there were the occasional power-point presentations and rare video conferencing arrangements. Despite these shortcomings, credibly linking aid and execution helped form strong partnerships and investments were thereby effectively utilised. Information about quantum, location and utilisation of aid was made more transparent. In Kerala today, the ubiquitous smartphone, provides transparency, accountability and empowerment. Citizens’ photos of damage or progress of restoration can spread through social media networks. Our talented IT personnel, equipped with open source and open hearts, can make a one-to-one match between anyone’s donation with the specific reconstruction needs of a village, a people or special cause of her choice. The twinning offers, both donor and recipient and transparency and accountability at almost zero marginal costs. This enhances the trust of individual and institutional donors. The result is more aid. Redevelopment Challenges For Aceh, the ‘gift of the tsunami’ was total provincial autonomy granted by Government of Indonesia in matters of political governance, customary, cultural and social expression and management of natural resources, among others.

The Government of Aceh became open to a new development paradigm for natural resources giving serious consideration to co-management – where state, community and market – coalesce from the lowest level upwards to protect and utilise the real wealth of society for a just, participatory, sustainable and self-reliant process of development. In Kerala, our settlement pattern, food grains, cash crops, tourism, power sources, fisheries, and easy access to fresh water are a few essential attributes which arise innately from the special geophysical contours of the state. The recent floods have highlighted once again the inevitable need for greater partnership of state and community to utilise and manage these precious natural resources. We must utilise the golden opportunity, thrown up by crisis, to re-imagine and re-design how we situate ourselves within the context of Kerala’s salubrious natural environment. In the context of global climate change, if we do not wish another deluge, let us forge a measured balance between ‘deep
ecological activism’ for conserving nature on the one hand, and on the other, a well-planned reconstruction of our habitations, our choice of cash crop agriculture, a re-look on our dams, a willingness not to disturb the banks and sand of four rivers, and an agreement to leave our beaches as playgrounds for the sea.

To achieve this, we need, like Aceh, a renewed political engagement, in a new framework, where our commitment is not to narrow political, class and caste identities but open to envisioning and co-creating a new Kerala, within the purview of its natural bounties, with the pledge to build back better. Tsunami of private aid The Aceh tsunami was the first major disaster seen worldwide on live TV reportage. The impact on hearts and purse strings of viewers was without parallel. In Aceh, after the tsunami their next problem was the tsunami of aid. Direct private aid, channelled through local and religious institutions, was hard to stop, but they created their fair share of contentious issues on the ground. Allegations of corruption, unwarranted compensation to those who suffered less or did not suffer at all, were rampant. In Kerala too, NGOs and religious organisations have their clientele and obligations towards them. They may not be willing to pool their resources into any common kitty, particularly if controlled by the state. It is hard to trample on the rights of such organisations.

However, these acts of kindness and favouritism must be recorded at the local panchayat level, to discourage their beneficiaries making duplicate claims to aid from public funds. Affected households, from upper echelons of our society, may not lay claim to government financial assistance. They need to be separately registered. Along with others they will require assistance for getting duplicates of legal documents, linking back to the electricity grid and road network. Thus, dealing with the official reconstruction apparatus becomes inevitable. How to turn this crisis into an opportunity of sorts? Aceh Province bears close resemblance to Kerala in physical features – west facing coastline, hills in the east running parallel to the coast and a plenitude of rivers flowing westwards. Some common socio-cultural traits make a Keralite nostalgic. They include the ‘kadai kopi’ (coffee shop) with the single newspaper and contentious political arguments in the morning.

Many Acehnese trace their origins to Ponnani in Malabar. In Aceh, the monster 8-metre tsunami wave of December 2004 swallowed over 150,000 persons in less than 30 minutes, often reaching over 5 km inside the coastline. It totally wiped out coastal towns and villages, leaving the traumatised survivors in a state of shock. In Kerala, the well-coordinated and heart-rending rescue phase is over. Relief emanated from every corner of the state, country and abroad. Undoubtedly, the best in us manifests in the worst of times. The floods are receding, relief camps closing and people slowly trudging back warylly to their silt-and-mud-filled homes. Rehabilitating people is marked by an up-swell of universal goodwill and fraternal feeling without any consideration of the barriers and identities that divide us in good times. The narrative of the discourse at all levels – affected households, local communities, and various tiers
of governance -- has shifted to thinking about priorities and strategies for reconstruction. How can Kerala turn this crisis into an opportunity of sorts?

**Kerala: Fishers in distress as puffer fish roam coastal waters**


The monsoon has been gracious this year bringing bountiful showers but the lives of fishermen remain in limbo as they have been restrained from venturing into the sea for most of the days due to extreme weather conditions. Fishermen, who returned to the sea after a long break on Monday were shocked to see shoals of puffer fish (Lagocephalus Inermis) prowling the coastal sea. Puffer fish, which prey on other species caught in the net, also damages fishing nets. Fishermen had played a key role in rescuing the thousands stranded in the flooded houses from August 16 onwards as the rains and the subsequent opening of dams had triggered a deluge. “This monsoon has been extremely disappointing for the fishermen as they have been getting only small mackerel and anchovy. The price of mackerel has plummeted to around Rs 100 per kg and there has been a steep decline in the availability of other species including oil sardine. The livelihood has been affected and many families are reduced to penury. The government should intervene to support the community.

“Usually the species (puffer fish) appear in the post-monsoon period, however, this time they have arrived early,” said Fishermen Coordination committee president Charles George. According to experts, the drastic decline in predator fish population has led to an increase in population of puffer fish. “There has been an increase in the presence of puffer fish in the coastal sea during the post monsoon period since 2006. They damage the nylon nets and prey on the other catch, particularly squid and cuttle fish, thus decreasing their commercial value. The puffer fish has a spiny or prickly, loose skinned, ribless body, which helps it to gulp large quantity of water and take the shape of a prickly ball to escape from predators.

They prey on anchovies and squids,” said Central Marine Fisheries Research Institute principal scientist K Sunil Mohamed. Cobia, catfish, skipjack tuna, king seer and shark are the major predators of puffer fish. There has been a drastic decline in the population of catfish, cobia and shark in the coastal sea, which has contributed to the increase in the population of puffer fish. The catch of cobia declined by 44 per cent after 2007 and the shark population has plummeted by 70 per cent. “It’s liver and gonads are toxic to human due to presence of tetradotoxin, which can cause asphyxiation and death,” said Sunil Mohamed.

**Kerala: Halt in search operation; families of missing fishermen worried**

The floods in the state affected many people, displaced lakhs and killed hundreds. However, for the families of the seven fishermen, who were on-board the fishing boat Oceanic which collided with a ship and sank in the Arabian Sea 23 days ago, the floods came as a double whammy. For the Navy, which was engaged in search for the fishermen had to cut short the operation to aid in flood relief and rescue. The families, say officers, are distraught. Oceanic had set off from the Munambam harbour with 14 fishermen on board. While two of them were rescued, the bodies of five fishermen were recovered in the ensuing search operations. The search operations were progressing in full swing till August 14. However, the sea turned rough on August 15 due to heavy rain and the Navy and Coast Guard had to stop the search. The heavy downpour then triggered the worst flood Kerala witnessed in a century and the focus shifted towards flood rescue and relief.

Who are the missing men? Of the seven missing fishermen are Rajesh and Jinesh, brothers of Yesupalan, the captain of the fishing boat. Yesupalan’s body was recovered on August 13. The other missing men are Sahayaraj, Saalu, Paulson, Arun, all natives of Ramanthurai in Tamil Nadu’s Kanyakumari district and Bipul Das, a native of West Bengal. The Navy had deployed INS Sutlej, a survey ship specialising in underwater search operations, and search and rescue ship INS Nireekshak which located the wreckage of a boat near the collision site. The Navy and Coast Guard also recovered the remains of the missing boat’s wheel house. “Though the Navy located the boat’s wreckage, its divers could reach only a depth of 50 m. The sea is 75 m deep at the collision site and the biggest question was how to recover the wreckage,” said Colachel Fisheries assistant director Ajith Stalin. “The search was abandoned following the floods and the families of the missing fishermen are in distress.

The Tamil Nadu Government has written to the Kerala Fisheries Department, the Navy and the Coast Guard seeking help to recover the wreckage,” Stalin said. It was Desh Shakti: The Coastal Police had confirmed the ship involved in the mid-sea collision was Shipping Corporation’s crude oil tanker Desh Shakti. Mattanchery police inspector Santhosh had visited Mangaluru, conducted underwater scanning and identified the dented paint of Oceanic on the oil tanker’s hull. There were also scratches on the hull. The police had arrested Desh Shakti captain B S Ahluwalia, a New Delhi native, second captain Nandkishore Garu of Rajasthan and seaman Rajkumar of Bihar. The trio was interrogated and produced before the Judicial First Class Magistrate Court I in Ernakulam and were released on bail later. However, the court had ordered the detention of Desh Shakti at Mangaluru port till further orders.

The Shipping Corporation is paying ₹7 lakh per day as anchorage fee. Of the seven missing fishermen are Rajesh and Jinesh, brothers of Yesupalan, the captain of the fishing boat. Yesupalan’s body was recovered on August 13. The Navy had deployed INS Sutlej, a survey ship and search and rescue ship INS Nireekshak which located the wreckage of a boat near the collision.
Kerala: CM lauds saviour fishermen

https://www.telegraphindia.com/india/cm-lauds-saviour-fishermen-255666

Kerala chief minister Pinarayi Vijayan on Wednesday lauded the "brave fishermen" who had taken part in the biggest rescue operation the state has ever seen, handing them certificates of acknowledgement at an event organised by his government. "A big salute to the brave fishermen of Kerala," the CPM leader said at the event in Thiruvananthapuram. "They joined the rescue mission realising that a lot of people were in grave danger and they needed to be rescued." The felicitation came a day after Congress president Rahul Gandhi promised a separate ministry for fishermen if the party came to power at the Centre. "God's own army will have its own ministry," Rahul had said in Alappuzha on Tuesday. Vijayan, widely appreciated for his crisis-management skills, urged residents of the state to maintain the unity they had shown during the deluge, holding up the fishermen as an example. "Our fishermen did not think about their jobs, income or their families," he said.

"They volunteered to make the impossible possible by rescuing thousands." The chief minister sounded confident that Kerala would recover. "We are living in the most precious land in the world. People the world over are doing their bit to help us in the reconstruction," he said. He cited the example of two Americans who visited him in the morning to hand over a cheque for Rs 10 crore that they had crowd-funded on Facebook. "There are lots of such people who see this injury to Kerala as their own injury," he said. State fisheries minister J. Mercykutty Amma said it was around midnight of August 14 that the first call to deploy fishermen came from Pathanamthitta district. "It was difficult to call each of them individually, so we used the public address system to wake them up," she said. Many fishermen, she said, were called back from the sea. "They sailed back to shore and immediately joined the operation." Everyone played their part, she said.

"We couldn't have moved the boats and fishermen to the flooded areas without professional loaders and policemen who seized all available trucks to ferry them to districts. What the people of Kerala witnessed were unbelievable scenes of large numbers of fishermen and their boats in the massive rescue operation." Video clips of long convoys of trucks carrying fishermen and their boats had gone viral even before the saviour army hit the rising waters. Mercykutty Amma said 4,500 fishermen had taken part in the rescue. "We promise to honour each one of you," she said. Some fishermen injured in the rescue are being treated at private hospitals at government expense.

Kerala: Rs. 548-cr loss to fisheries, harbour sectors

According to preliminary reports, Fisheries and Harbour Engineering sectors have incurred losses to the tune of Rs. 548.47 crore in the floods, said a press note issued by the office of Minister J. Mercykutty Amma on Tuesday. The market price of the boats completely damaged in Thiruvananthapuram, Kollam, Pathanamthitta, Kottayam, Alappuzha, Kannur, Ernakulam and Thrissur districts comes to around Rs. 26 crore while Rs. 21.5 crore is needed to repair partially damaged boats. Fishing equipment and nets estimated to cost Rs. 34 lakh have been completely destroyed and Rs. 10 lakh will be required to repair the ones partially damaged in the floods. A loss of Rs. 43.27 crore and Rs. 42.65 crore have been estimated for the homes of fishermen that were destroyed and damaged in the floods. A loss of Rs. 10.3 crore has been reported in terms of damage to vehicles, office buildings, furniture and other office equipment. The aquaculture sector alone has incurred loss of Rs. 109.72 crore.

**Kerala: Carnivorous fish from illegal farms pose threat to indigenous breeds**


Fishermen netting fish in fresh waters are a worried lot as several carnivorous fish illegally bred in farms are suspected to have escaped to rivers and lakes following the recent flood. They worry especially about fish like Piranha and African catfish, which were illegally farmed at various parts of Kerala, especially in Alappuzha and Ernakulam district. Last year, fish farming was done in around 400 hectares in Ernakulam district alone, and a majority of these places have been affected by the recent flood. In Alappuzha district also, flood waters have seeped into paddy fields which were used for fish farming. “In Kuttanad, the majority of farms were breeding red-bellied fish which is a kind of Piranha. These fishes will prey on the indigenous breed in backwaters of Alappuzha if they reach water bodies during the flood. We don’t know whether these breeds will pose danger to human. Some people were growing African catfishes at small tanks.

These fish also might have entered rivers and backwaters here.” George Joseph, a fisherman at Nedumudy in Alappuzha, said. Asked about the dangers posed by foreign carnivorous fish, S Mahesh, Deputy Director, Fisheries Department, Ernakulam, said the indigenous breeds will be affected if these foreign breed fish reach rivers and lakes. Fisheries Department had served notice to numerous farms which were breeding African catfish and Piranha. Farming such fishes is a violation of Kerala Inland Fisheries and Aquaculture Act. “We had issued a notice to some five farms that were breeding banned fishes. There are possibilities of these fishes entering rivers and lakes during the flooding. They will pose threat to the indigenous breeds. The presence of these fishes can be confirmed only if someone spots it or fishermen net them,” Mahesh said.

However, these Piranha fishes may not survive at the saline water. “These fishes may survive only in fresh waters. Whether they can breed in Kerala conditions has not been confirmed. If
there is any problem, the only way possible is to net all these carnivorous fish, which is not an easy task,” Mahesh said. There are also fish like Tilapia which are not carnivorous, but may affect other indigenous breeds. “These dangerous breeds of fish are smuggled to India and breed illegally at farms. We serve notice once we get information about farms that are breeding illegal fish. A fine of R10,000 is slapped for breeding such fish,” an officer with Fisheries Department said. ILLEGAL FISH BREEDING Fisheries Department had served notice to numerous farms which were breeding African catfish and Piranha

**Kerala: Floods show India must radically revise its disaster relief policy**

[https://scroll.in/article/891794/kerala-floods-show-india-must-radically-revise-its-disaster-relief-policy](https://scroll.in/article/891794/kerala-floods-show-india-must-radically-revise-its-disaster-relief-policy)

With the Kerala floods finally abating, the affected communities are wary of what the long road to recovery will entail. However, relief from the government for losses to their homes, livelihoods and agriculture is expected to lighten the burden. In this context, it is important to examine the norms for disaster relief in India. The first phase of the floods in Kerala’s Kuttanad region in July brought into focus inadequacies in the scope of relief. As the state’s agriculture minister noted, Rs 95,100 for a destroyed home was insufficient. As the flooding worsened across Kerala, the state government announced relief of Rs 4 lakh each for the families who lost their homes and Rs 10 lakh each for those who lost both their homes and land, but even this was perceived to be insufficient. The usual practice in the wake of a disaster is for the affected state to ask for central assistance. The Centre then disburses funds from the Calamity Relief Fund, set up under the Disaster Management Act, 2005.

The funds come with a set of rules detailing their utilisation (for instance, they specify Rs 95,100 for a completely destroyed house). Though the rules are revised regularly – the latest revision was done in 2015 – they are still problematic. One size doesn’t fit all The rules do not differentiate between states when detailing the sums to be paid as relief (except in case of destroyed homes in hilly areas for which the amount is slightly higher). In a country as diverse as India, a uniform relief amount is unfair as the costs of living, labour and construction vary hugely. India is already cleaving into a prosperous South and a poorer North, so a sum of money that is adequate as relief in Bundelkhand is grossly insufficient in Goa or Kerala – and this disparity is set to only widen. The norms explicitly state that money paid from the Calamity Relief Fund is not meant to be compensation for loss of life and property: “Relief is to reduce the level of suffering and mitigate the distress so as to bring out the affected people from the shock and trauma of suddenly losing their means of livelihoods”.

In popular parlance, this relief is often mischaracterised as compensation. The rules are seemingly blind to the occurrence of disasters in urban areas. While they cover agriculture, fisheries, livestock and handicrafts for relief, there is no mention of vendors or small and
medium enterprises that are commonly found in urban and semi-urban areas. The rules are also silent on relief for people living on rent, again a largely urban phenomenon. Given that India is rapidly urbanising – the urban population is now estimated at between 47% and 63% – and urban areas are prone to disasters because of poor planning, this is an obvious lacuna that needs to be plugged. Exclusions abound Generally, following a disaster, revenue officials visit the affected areas and identify the people entitled to relief after assessing their losses. This process is given to misuse and corruption and often genuine claimants are left out. The norms already exclude homes that are “unauthorised”.

While this is meant to disincentivise building of homes in disaster-prone areas such as floodplains, it discriminates against the poor and marginalised. Historically excluded from land ownership and pushed further to the margins in today’s inflated real estate markets, a substantial number of Scheduled Caste and Scheduled Tribe families live on land typically classified as encroachment on common land. If applied strictly in Kerala today, the relief rules could exclude a large number of Adivasi households who have been fighting a long, and as yet unsuccessful, battle to get titles to the land they live on. Relief norms for agriculture also contain significant exclusions. There are two modes of assistance and two categories of farmers eligible to receive relief. The justification for this distinction between small and big farmers is “focussing on the poorer sections of the affected people, considering overall financial implications”. There is another exclusion that is not mentioned explicitly: that of sharecroppers and agricultural labourers.

Typically excluded from formal credit and agricultural extension services, their livelihoods are the most vulnerable to disasters. Yet, the norms only mention farmers without specifying if they include sharecroppers. Not a comprehensive list The Calamity Relief Fund covers a specific list of disasters. The list, while broad, does not fully capture India’s disaster risk profile. It excludes, for example, conflict, heatwave and coastal erosion. However, it is not static and the Centre keeps adding to it. Still, this puts states in a spot when responding to unlisted disasters. In such cases, the norms allow for providing relief from the State Disaster Response Fund, but not more than 10% of the Fund’s annual allocation. This relief too must be paid as per the rates specified in the central norms. Limited capacity of states The implementation of the Goods and Services Tax has led to a steady consolidation of financial power at the Centre and away from states. In India, disaster management is primarily the responsibility of states.

But lacking sufficient financial leeway and restrained by central relief norms, they are unable to tread their own path in providing disaster assistance. Kerala plans to provide enhanced relief for damaged houses under its Life Mission, a project to provide quality low cost housing. It is unclear if money from the Calamity Relief Fund will be used to offset the costs under this project, but the financial burden for the state is likely to be huge given that over 26,000 homes are estimated to have been damaged. In disaster-hit districts, farmers can avail various crop insurance schemes. There is no such provision for damage to homes. Since the relief for
damaged homes is grossly insufficient, states should encourage communities living in high risk areas to take disaster insurance. This can enable states to provide enhanced relief to the affected people, and help offset cost variations across states.

**Kerala: Harbour management committees on the anvil**


The Fisheries Department has decided to start Harbour Management Committees across the state to oversee the local-level maintenance of harbours. In an interview with Express, Fisheries Minister J Mercykutty Amma said these committees will also conduct day-to-day activities of the harbour concerned. District Collector of the harbour concerned will be the committee’s chairman. It will have joint director of Fisheries, deputy director of Fisheries, Matsyafed district chairman, Harbour engineering superintendent engineer and prominent trade union representatives nominated by the government as members. Of the 24 harbours in the state, harbour management committees will soon be constituted for 12 harbours, the minister said. She said the harbour management committee will function on the lines of Munambam Harbour Management Society, which has been functioning for the past several years successfully. The minister said the government will pass the Fish Auctioning Marketing and Quality Control Bill in the next session of the Assembly. The Bill envisages to do away with middlemen in sale of fish and make the transaction transparent. The minister said the government intends to provide fresh, unadulterated fish.

**Kerala: Cage fish farmers suffer huge loss in flooding**


Cage fish farmers across Ernakulam district suffered massive losses in the recent floods. Farmers of Pizhala, Kadamakkudy, Kothad, Aluva, Gothuruthu, and Kottappuram had seen their fish cages getting washed away, and fish had either gone missing or were dead,” said P.V. Santhosh of Thottakkattukara near Aluva. A senior scientist at the Central Marine Fisheries Research Institute (CMFRI), which has been encouraging farmers to take up cage fish farming, said most farmers lived near waterbodies that saw massive flooding. A majority of them are yet to return home from relief camps, and a process is under way to quantify the financial loss they have suffered, she added. The scientist also said that efforts would be made to see whether the fishermen could be compensated.

Sreekumar Vasudevan of Kadamakkudy, a veteran cage fish farmer, said around 150 fish cages had been washed away or seriously damaged in and around Kadamakkudy panchayat. The flooding and crop loss are also a setback to efforts by the CMFRI to spread the culture of cage
fish farming. In a recent move, the institute had announced the launch of a ?15-crore project to help fish farmers launch around 500 cage farming units in the State. The programme is supported by the National Fisheries Development Board, Hyderabad. Mr. Santhosh said he had taken up farming pearlspots, tilapia, and catfish. By a rough estimate, he said, he had lost four cages costing around ?10 lakh. The cages had fish ready for harvest during the Onam season. He now plans to advertise in newspapers appealing to people to return the cages if they found them. He said he had spent around ?80,000 per cage, fabricating and mooring them in the waters.

Kerala: 65,000 people rescued by fishermen during floods: Kerala Minister


Braving driving rain and raging waters, fishermen from Kerala had rescued 65,000 marooned people from flood hit areas in the state during rescue operations, Fisheries Minister J Mercykutty Amma said on Sunday. In the worst hit Pathanamthitta district alone, about 70 per cent of the total number of people trapped were rescued by local fishermen who had to all along work in harsh weather, she said. "Fishermen in 669 mechanised country boats rescued a total of 65,000 people marooned in all districts, braving the torrential rains and floods," she said at a function organised in Kochi to honour the fishermen. The minister said the government had a clear vision when it decided to prepare fishermen from the sea coast for rescue operations. The fisheries department resolved to field the fishermen for rescue operations on August 15 when the state started experiencing unusually heavy rains and floods.

Announcements were made through mikes in areas around their homes, including along the Kollam coast, urging the fishermen to launch rescue operations in flooded inland areas, J Mercykutty Amma said. Fishermen responded and came from far and near, transporting their mechanised country boats in trucks seized by the government for the purpose, she said. Many fishermen who had ventured into the sea were called back and sent for rescue operations, she said. "Kerala will always be grateful to the fishermen. We have shown the world that if we stand united we can face any such calamity", the Minister said. She said though all sections of society had taken part in rescue and relief operations, fishermen were being honoured as the government wanted to bring them into the mainstream. MPs, MLAs, leaders of political parties and fishermen's outfits participated in the function. The death toll in the floods has touched 302 and over four lakh people are still in relief camps.

Kerala: Fisheries Department to honour its heroes

Around 70 per cent of rescue work in Pathanamthitta during the floods was carried out by fishermen while 15 per cent of victims were rescued by Army and another 15 per cent by the local people, said Fisheries Minister J Mercykutty Amma. As many as 2,826 fishermen from across the state reached the flood-ravaged regions and rescued more than 65,000 people stranded in various parts. Funds for the maintenance and repair of boats as well as the money to be given to fishermen per boat will be provided from the Chief Minister’s Distress Relief Fund. She told Express that Chief Minister Pinarayi Vijayan will felicitate the fishermen involved in rescue operations on August 29 at Thiruvananthapuram. The Chief Minister will give away certificates at the felicitation function.

The Minister said the Fisheries Department had coordinated the rescue operations from the start and on August 15, as many as 33 boats were involved in the rescue operations. However, when more areas went under water, fishermen came in large numbers and there were around 669 boats involved in the rescue operations. The Fisheries Department provided lorries for transporting the boats, fuel for the boats and arranged food for those engaged in rescue work, she said. “We started our own control rooms in Chengannur and coordinated with Revenue Department control rooms to get ground-level information on the people stranded and their priority status,” she said. “There were instances when we required lorries for transporting boats. Interstate permit lorries which had come to deliver materials were made to carry boats meant for rescue operations.

The police seized the vehicles and made them available to transport the boats. Barrels of fuel, along with food for the fishermen, were transported in police vans, with our control rooms coordinating the effort.” In addition to the promised ₹3,000 per boat for a day, she said, the Fisheries Department will also provide ₹600 a fisherman. “We have given directions to repair damaged boats and engines in any suitable workshop as the fisheries workshop will be full of boats so that the fishermen don’t lose too many days trying to get their boats repaired,” she said. The Fisheries Minister said the state government has worked out several projects to bring the fishermen community into the mainstream. The government is planning to do away with the middleman culture in the industry and to make provisions to sell the catch directly.

Kerala: Floods - Residents owe fishermen more than a few words of thanks and social media memes

https://scroll.in/article/891482/kerala-floods-local-residents-owe-fishermen-more-than-a-few-words-of-thanks-and-social-media-memes

A WhatsApp post currently doing the rounds in Kerala comprises an image in which a fisherman wearing a red cape, oar in hand, stands near a boat on which rests a cut-out of the state. The accompanying message reads: “Hollywood has Spiderman, Batman, Ironman, but we Keralites have all under one name – fishermen.” Some may consider this post to be an exaggeration,
considering that a vast number of people across various categories of society – including students, professionals and armed forces personnel – have been involved in the rescue operations for the worst flood to hit Kerala in a century. But these marine fishers are indeed the heroes of these operations. Navy officials, the press, people on social media, politicians across party lines and thousands of local residents who were rescued by them have commended their efficient and selfless service over the past few weeks, especially in the worst-flooded districts of Pathanamthitta, Alappuzha, Ernakulam and Thrissur.

The involvement of fisherfolk in the rescue effort is remarkable considering the fact that they belong to the lower rungs of Kerala’s socio-economic ladder, are often invisible to other residents of the state, and neglected by the government. Despite this, they mobilised swiftly and efficiently to join the rescue efforts – often at their own cost – and utilised their skills and equipment to help save thousands of lives. The citizens of Kerala owe them more than a few words of thanks and social media memes. Invaluable help Nearly 1,000 fishermen and 500 of their fishing boats were involved in the rescue operations in sorties widely covered by TV, print and social media. Many of them even brought their own initial stocks of fuel and paid for the costs of transporting their boats by truck to the flooded inland districts. Their unique assets – motorised boats and GPS – and their ability to navigate flood waters fearlessly proved to be invaluable during the rescue efforts.

In Alappuzha alone, fishermen rescued 16,000 people using their boats, according to a statement from the district collector. Marine fishermen (as distinct from the women in their communities) are rarely seen in such large numbers in the midlands of Kerala. In fact, some of the people they saved, especially those from well-to-do families, interacted with them at close quarters for the first time during the course of their rescue. The invisibility of these fishermen to ordinary Keralites is primarily because their occupation takes them out to sea, where they brave the waves to catch the fish without which most Keralites cannot enjoy their meals. When they get back from work, they have other jobs to do, like mending their nets and preparing their boats for the next day’s trip. In normal times, they have little time to interact with mainstream society. Another post doing the rounds on social media is a confession of sorts, and provides a glimpse into how some Keralites view members of this community.

It says: “My tuition master used to jokingly say that if I did not study I would end up as a fisherman. But this prejudice changed today when I heard that my cousin sister was rescued by fishermen from a luxury apartment building. They refused to take a bundle of money offered by her saying she was like their own sister. My sister said she cried her heart out” What next? With the floods now abating, the fishermen have returned to their homes and their livelihoods. With the state’s attention turning towards rehabilitation flood victims – where fishers have no role to play – their brave actions will fade in public memory. But the rescuers have also sustained damages and injuries. For instance, many of their boats were damaged by the debris concealed by the flood water, which is not a risk they face at sea. Some of them were injured during the
rescue efforts too. Political parties are now competing to organise functions to felicitate them. But are long speeches and shawls an adequate expression of gratitude to these heroes? Consider this. Marine fishing is a livelihood with the highest occupational risks. These fishermen face the wrath of unpredictable nature every day. Data shows that one Kerala fisherman dies at sea every four days.

If life at sea is risky, life on land is also increasingly becoming so. Several fishing communities in the state have been fighting to save their homes from the sea, which has been ravaging coastal fishing villages every year due to a combination of natural and human made factors. In fact, while people’s attention was focused on the floods, the damage to houses on the coast because of the ingress of the sea due to strong winds and other factors has not received much publicity. Also, now with unprecedented quantities of fresh water, silt and all forms of debris and pollutants pouring out into coastal waters, fishers anticipate unexpected changes in the behaviour of fish and their ability to harvest them. This has the potential to hurt their livelihoods. But this is not all. Coastal fishing communities have been outliers in the much-touted Kerala model of development for years, with their human development indicators lagging significantly behind the rest of Kerala.

The community has also just about recovered from the trauma of last December’s Cyclone Ockhi, during which they lost more lives at sea than has been lost during the current floods. The response of Kerala’s civil society towards their plight in the aftermath of Ockhi was at best lukewarm. Even agencies like the Coast Guard and Navy had a delayed response time during this disaster, constrained as they were by their strict protocols and inadequate facilities. Some suggestions It is clear then that the citizens of Kerala must do something for the fishers who helped them. Here are a few suggestions that could perhaps be a more fitting “Thank you.” First, a proper local-level assessment must be made of all the damage to the boats of fishermen who aided the rescue effort. Quick assistance must be rendered to them so they can get back to fishing at the earliest. Second, the damage to houses on the coast due to the unexpected fury of the sea in August – particularly to homes of fishermen who helped in the rescue – must, as a priority, be compensated from the Chief Minister’s Distress Relief Fund.

Third, the government and disaster management authorities in Kerala, who tend to view the fishing community as permanent recipients of relief measures and disaster aid, must pick volunteers from among them and recognise them as a skilled cadre of permanent disaster response teams. Fourth, recognising that there is no alternative to the traditional skills of fishers, agencies such as the Coast Guard, the National and State Disaster Response Teams must have statutory provisions to recruit youth from these communities. These recruits may not have high educational qualifications, but their skills will prove invaluable in crisis situations like the floods the state has just seen. Fifth, there must be more formal government recognition of the heroic efforts of fishers in the rescue operations. Along with them, many other unsung heroes from other walks of life could be felicitated.
November 21, World Fisheries Day, may be an appropriate occasion. Finally, the rescue stories of fishers from different parts of Kerala must be recorded by an appropriate agency like the Kerala Council for Historical Research. Institutional memory of crisis events – something India critically lacks – is an imperative guide for the future. Taken together, these measures can be a good way for us to really repay the community that rose to the occasion despite their own neglected status in society, becoming superheroes in the process.

Kerala: Local boatmen become heroes during flood rescues in India's Kerala


Divya G. clung to a floating banana plant, then used a rope to pull herself to safety through neck-deep water as floods inundated her home in southern India. After more than a day camped with her family on the upper floor of her neighbor's two-story house, they were spotted by a fishing boat and rescued. "We saw a boat coming down our lane and all of us started screaming for help," said Divya, 32, from Chengannur, one of the areas hit hardest by flooding in Kerala state last week. "The boatmen helped us into the boats and brought us to the relief camps." The worst floods in a century in Kerala have killed hundreds of people and left dozens missing and about a million sheltering in temporary camps. Thousands of army, navy and National Disaster Response Force (NDRF) teams were deployed in the rescue efforts. More than a dozen rescue officials, flood victims and others who spoke to Reuters said the unsung heroes of the massive relief operation were fishermen and other local people with boats, who volunteered to help rescue tens of thousands of stranded people, often long before official rescue teams could arrive. "They were in tears when we saved their lives.

They treated us like God," said fisherman Stephen Pallithottam, one of hundreds of local boatmen who joined the rescue mission in the Chengannur area. "They touched our feet and said they will never forget us in their lives." 'Biggest heroes' Mohamed Ansheed, whose family was rescued in Malappuram district, some 170 km (105 miles) from Kerala's financial hub Kochi, said he was deeply indebted to the fishermen. Ansheed also witnessed one rescue in which a local fisherman went on all fours in knee-deep waters, offering his back for women to step on to climb into a rescue boat. Images taken at the scene went viral on social media. "I will never forget that day. They helped a lot of people," said Ansheed, adding that while NDRF teams had to halt their own rescue missions at sundown for safety reasons, local fishermen worked into the night with headlamps and rudimentary tools.

Many survivors interviewed by Reuters at a Chengannur relief camp recounted harrowing tales of fast-rising floodwaters on the night of Aug. 15. "It was as if water levels were rising by a foot every five minutes. Even standing on tables or chairs was pointless," said M. Sneha, 20, who was rescued by boatmen that night. Kerala, which markets itself to tourists as "God's Own Country" and is famed for its scenic lagoons, lakes and canals, has a lengthy coastline and is home to...
thousands of fishermen and boat tour operators. The role played by many of them in the rescue operation is now being lauded by both flood victims and politicians. "The biggest heroes are fishermen, they came in 600 boats and rescued people," said India's Tourism Minister K.J. Alphons, who hails from the state. Lowest strata of society' Kerala's Chief Minister Pinarayi Vijayan said the state would honor boatmen who participated in the rescue effort, reimburse them, and repair boats damaged in the operation.

Shijin Jose Antony, a priest at a church in state capital Thiruvananthapuram, helped organize the deployment of 130 boats and some 500 fishermen in rescue operations in Pathanamthitta and Alappuzha districts. "When the fishermen came forward to join the operation, we informed the government, which made arrangements to transport the boats and fishermen to areas where their help was required," he said. Shiji Dency, a fisherman from Ernakulam district, joined the rescue operation at Aluva and, along with five fishermen from the area, helped rescue about 1,000 people over five days. Dency says there were no army, navy, or NDRF teams at the location when they arrived. "We were helped by the local people who were familiar with the area," said Dency, adding they navigated narrow, flooded lanes with cars floating by to reach some victims. "We are the people in the lowest strata of society," he said. "The people who were trapped in the flood were rich. We felt bad when they pleaded with folded hands to save their lives. It was a heart-rending scene."

**Kerala: Ignored fishermen turn saviours in India floods**

https://m.gulf-times.com/story/603591/Ignored-fishermen-turn-saviours-in-India-floods

They carried their boats onto trucks to get there and braved the filthy, swirling waters before most other rescuers arrived. Now hundreds of fishermen are being hailed as the heroes of India's Kerala floods crisis. One man got on all fours with his face in the water so women could step on his back to board a rescue boat. Others had to suffer abuse from people angry because the official rescuers took so long. India's Tourism Minister K.J Alphons has called the fishermen the "biggest heroes" of Kerala's disaster and state Chief Minister Pinarayi Vijayan has announced a cash reward for each of them and a ceremony to pay tribute. Robin Richard and other fishermen from ports like Kollam are suspicious. Their community is disparaged by many in Kerala. Now they just hope the authorities keep their promise to pay for damage to boats and the fuel they used to rescue several thousand people.

"When we suffered in a cyclone last year no one took notice of our plight but now everyone's attitude has suddenly changed," Richard, 42, told AFP. Hundreds of traditional wood and fibre boats left Kollam, a tourist destination on the Kerala coast, after appeals for help were made on Wednesday last week, Richard said. They were pressed into service in some of the worst flood zones of Kerala, where about 420 people overall have died in monsoon rain in recent weeks. Praise and abuse "At least 150 fishing crews were working non-stop here at the peak of rescue
operations," an official in Alappuzha district, one of the worst-hit, told AFP. Michael Solomon, 56, a Kollam fisherman for almost four decades, told how he and colleagues lifted their six-metre-long (20 feet) boats up onto a road to be loaded on trucks and taken to flood zones. "We have been going into the real sea since we were children, so these waters were nothing," he said. But many boats suffered damage after hitting cars and other obstacles on flooded roads. Some crashed into houses.

"I hope the government keeps its word and gets the boats repaired. An operational boat is our only source of livelihood," he added. Manoj Francis, 40, who works with Solomon at Kollam beach, said he had been shocked when he first saw the flooded houses. "There was extensive damage. People were at the top of their houses and at many places entire buildings were under water," he told AFP. The flooded villages and towns became a vast maze and the fishermen often operated alone for hours on end. They have been widely hailed on social media. "We call them 'fisherman' but they are 'Supermen'," wrote Rajiv B. Menon on Twitter. "Some of them travelled 120kms to Chengannur to save lives of people stranded, facing death, due to the deluge. Take a bow," he added. Many rescued families have told how the fishing flotilla reached them before any official help.

"They arrived like saviours. No local government officials came to us or gave us any warnings before that," said Ravindran Achary, the 62-year-old head of a nine-member family, now living with other flood refugees at the Union Christian College in Kochi. He said the group, which includes five small grandchildren, only escaped their house because a fishing boat arrived out of the blue in their urban neighbourhood in Kochi. Despite the praise and attention, some fishermen said they were not universally welcomed. "While most people were generally happy to see us some of them were understandably angry and agitated," Richard said. "I think some of it was taken out on us. Some of us were abused, with people complaining why it took so long," he added. Richard, Manoj and Solomon hope the government and Kerala's people do not forget their efforts as water levels fall and life slowly returns to normal.

**Kerala: Government to encourage fishing boats to tap solar energy**


A policy is in the making to encourage the fishing boats in the country to tap the potential of solar energy. The objective is to convince fishermen to use solar panels for the boats’ auxiliary power requirements such as lighting, net handling, etc. “Prototypes have been developed and are functional in the backwaters of Kerala. The extrapolation to fishing boats is a vision at present, and consultations are on with interested entities. Discussions have been held with maritime boards, International Solar Alliance and some ports,” Malini V Shankar, director general of
shipping and secretary to the Government of India, told Express. She said studies need to be conducted on the relative cost of boats powered by solar power and other renewable fuels.

“Comparison will have to be done on life-cycle cost and not on mere capital and operational costs. The study is expected to reveal if any subsidy will be necessary for promoting solar-powered boats and if so, how would it compare with the existing subsidy,” Malini said. K K Lajid, assistant director of Fisheries, said fishing boats require 100 HP and above. “It’s not a practical idea to have solar-powered fishing boats as they would require huge solar panels. Solar-powered boats are feasible only for inland fishing, which requires just 2-6 HP,” he said. The Central Institute of Fisheries Technology (CIFT) has taken the lead in developing prototypes for seagoing boats, which can generate auxiliary power using solar energy. M V Baiju, senior scientist, CIFT, who is in charge of the project, said the solar prototype developed by the institute includes a 3.63-m-long catamaran type (twin hull) FRP inland fishing craft and a seagoing class multi-purpose fishing vessel.

“Solar power is suitable for only small boats, those which use less than 20 HP. Ideally, it’s best used for auxiliary boats,” he said. CIFT has also just built one 8-m-long solar fishing boat for reservoir fishing-cum-aqua tourism, which will be launched by the Union Minister for Agriculture. Malini pointed out Kerala has already taken the initiative of converting traditional boat to solar power and is operating a passenger boat on the backwaters. “Students in an engineering college in Kashmir have developed a 12-seater passenger boat which is run by solar power for operations on the Dal lake. The state government can play a major role in promoting solar power,” she said. CIFT takes the lead: The Central Institute of Fisheries Technology (CIFT) has taken the lead in developing prototypes for seagoing boats, which can generate auxiliary power using solar energy.

Kerala: Floods impacting migrant workers


The floods in Kerala, it is feared, are turning out to be a humanitarian crisis for the people of the northeastern States like Assam. With their dwelling places inundated and unemployment and poverty staring at their face, thousands of inter-State workers have fled the State. The sudden outflux of the workforce is snowballing into an economic crisis in their families with the drying up of income sources. A large number of workers who fled overnight were not even left with money for sustenance as they could not collect their wages or settle the wage arrears with their employers. Most of the dwelling places of these workers were in low-lying areas. Without power, food, drinking water and job, many decided to go back.

Panic calls from the families too prompted the stranded workers to leave. The closing down of relief camps and the possible delay in the opening up of the employment sector too influenced
Kerala: Why flood-battered Kerala is hailing its fishermen as superheroes

https://indianexpress.com/article/india/kerala-floods-fishermen-relief-rescue-operation-5317511/

Not all heroes wear capes, some wield oars and shovels. Take for instance the fishermen who have emerged as the unsung heroes during the floods in Kerala. Braving inclement weather and treacherous waters, hundreds of fishermen helped rescue thousands of people marooned across the affected areas. Their grit and experience in turbulent waters helped facilitate the rescue operations carried out by security forces and NDRF in areas where air lifting was not even feasible or just not available. The fishermen reached out to the worst-affected areas, spending their own money to transport their mechanised boats and fuel in trucks. Incidentally, just a few months ago these same fishermen were reeling from the aftershocks of the Ockhi cyclone and are still themselves recovering. Venturing into the remote corners with their vessels, they played a decisive role in rescuing people from critical areas like Chengannur and Kuttanad and provided relief materials, essential food items and drinking water to rescue camps.

Most of the fishermen involved in the herculean task hail from districts such as Malappuram, Kollam, Kannur, Thrissur, Ernakulam and Thiruvananthapuram. Most of them live in dire conditions, working day and night to make their ends meet, but still took the risk. Majid M K, a native of Malapurram district, narrates his experience of joining the rescue mission in Mattathur, Thrissur. “We were struggling to manoeuvre our boat because of strong water current. There came a point when we worried for our own lives,” the 43-year-old says, his voice choking. “One of my boats got damaged after hitting against a wall. We had to abandon it and carried on with our rescue operation in another boat,” Majid continues. Rescuing an elderly couple from a flooded house, he says, was the most memorable moment of his life. “They thought that they were going to die. To save themselves from swelling waters, the couple, in their 70s, had stacked two beds on one another.

They had almost given up. Their eyes welled up with tears after they were rescued. I will never forget that moment,” he recalls. Razak Kottin, another fishermen involved in rescue operation, said he and his friends did not do it for monetary purpose. “We did a total of 80 trips and rescued around 150 people from Chalakudy over the course of two days,” says Razak who along with his friends took two boats to Chalakudy, one of the most affected areas in the flood fury. “We didn’t go there expecting monetary benefits. Instead, we could empathise with them. We did it for our people,” he says, adding that they realised the gravity of the situation after reaching Ground zero. CM Pinarayi Vijayan was quick to acknowledge the efforts of fishermen like Majid and Razak.
Vijayan declared that all fishermen who took part in the rescue mission would be felicitated. “The fishermen intervened in a great way. Many of their vessels got damaged.

The government would compensate them for the loss suffered. Apart from that, a boat would be given Rs 3,000 a day and the state would meet the fuel expenses,” he said. As per official figures, more than 210 people have lost their lives and thousands injured in one of the worst monsoons the state has seen in a century. Kerala Chief Minister Pinarayi Vijayan has put out the initial estimates of loss at Rs 19,512 crore. With memories of December 2004 tsunami tragedy still fresh, these fishermen perhaps have a better understanding of the helplessness of those trapped in coastal areas. These ‘sons of the sea’ truly deserved to be called bravehearts of the ongoing rescue mission. For when flood fury ebbs and Kerala limps back to normal, the people of the state should not forget the services of these fishermen bestowed upon them.

Kerala: Unsung saviours of Kerala floods: From Trivandrum to Kozhikode, fishermen take inspiration from Ockhi tragedy


Described as one of the worst since 1924 by Chief Minister Pinarayi Vijayan, the rains in Kerala have left over 350 dead and rendered thousands of people homeless. According to the latest tally, 80,000 have been rescued so far. Over 1,500 relief camps have been set up across the state that currently house at least 2,23,139 people. In a multi-part series, Firstpost will attempt to analyse the short-term and long-term impact of these unprecedented floods on the lives of the people, economy of the state, and the environment.? If there was one defining moment that stood out among the endless efforts made to salvage the hapless victims of Kerala's worst-ever floods, it was that of a young man offering his back as a stepping board for the women of Vengara in Malappuram to board an NDRF rescue boat. This man, 30-year-old KP Jaisal is not NDRF personnel.

He is just a local resident of Tanur. But more significantly he is a fisherman who was under no obligation to go for a rescue operation. But this week's unprecedented rescue and relief operations across the state had this one indelible presence — the fishermen stretching from coastal Thiruvananthapuram in the south to Kozhikode in the north. While this report was being filed, close to 1.25 lakh people stranded at various parts of the state have been saved by the fishermen with just their country boats and a never-say-die spirit for company. Close to 600 boats from every possible coastal area in the state dashed to the affected districts of Pathanamthitta, Alapuzha, Kottayam, Ernakulam, Thrissur, Malappuram and Kozhikode from 15 August. More than 3000 fishermen also gave up their livelihood for close to a week to engage in what had been the biggest rescue and relief operation in the state's history. Even when the Indian Army, Navy, air force and the NDRF could not break the shackles of nature's fury, it was the
fishermen who sailed into the rapid waters of the rivers like the Pampa, the Periyar, the Chalakudy, the Achenkovil and elsewhere paying little heed to their own personal safety taking food, water and medicines to stranded people and getting them back to dry land.

"What the fishermen did in the state in the last few days have no parallels. They are our real heroes. When they return home to their own districts, the administration there should ensure that they are given a heroes welcome," Chief Minister Pinarayi Vijayan told media persons on Sunday. Modus Operandi From Kollam district alone, more than 157 boats had left the shores to travel inland to save people. The author met up with Basil Lal Hubert of Kollam who is not only a leader among the fishermen community but also a syndicate member at the Kerala University of Fisheries and Ocean Studies. He explained that it all started on the night of 15 August at 7 pm when a request was received from Kollam district collector to send two boats to Pathanamthitta district to help a few stranded people in the flooding waters. We were only happy to do that. But in half an hour, Hubert says the picture started changing.

"From two boats, the request went on to ten to which we could only respond with six over night as many were at sea. But by dawn the realization struck everyone that they were looking at a big humanitarian crisis. By the evening of 16 August, it was a complete SOS situation because the news that reached us was that thousands may perish if we don't act on time," Hubert said. The call to make was to simply pool in whatever resources you had and rush to affected areas, he added. "This is where we were all a bit worried. We are moving all our boats but then it was not like going into the sea. That is something which comes natural to us. But here it was uncertainty that stared at us. But even I was surprised at the way the mobilisation happened and how the entire fishing community in Kollam responded to the crisis," Hubert said. The fishermen of Kollam did not sleep that night.

They went from home to home to convince the families for the need to get into rescue mode. By 4 am on 17 August, a huge number of them were ready with their boats atop trucks, many of them seized by the police on the highway to enable this quick movement. By 10.30 am on 17 August, close to 54 boats had reached the rescue destination. Though they were told to leave for Chengannur in the beginning, the more precise locality of Pandanad was told to them later when they reached. After deboarding from the trucks, the men got into action which would then go on to save thousands by the end of August 19 th, a no mean task given the sheer obstacles they had to put up on the ground. Pandanad which had been the epicenter of the floods in Pathanamthitta district was sinking fast without the knowledge of most of the people in the district administration, one of the primary reasons why the Navy or the NDRF which was engaged in other areas could not be mobilized for rescue in Pandanad on time.

"What happened in Pandanad explains the entire situation in Kerala at the onset of the flooding. Nobody really understood the extent of the calamity that was developing. By the time they did it was too late and there was chaos in coordinating between the armed forces and the district
administration. That was where the best came out of ordinary citizens like the fishermen who taught us a lesson or two in crisis management," Joseph C Mathew former IT advisor to State government and a resident of Chengannur. From Ockhi to Kerala Floods By the time the fishermen and their boats gathered in numbers, the flooded Pampa river was often changing its course at more than one place and flowing at an unimaginable speed eating up most of Pandanad and adjoining areas marooning thousands on the terraces of their homes.

The men battled through the waters to save as many as they could but soon found it tough to battle the very strong current which was not allowing them to maneuver their boats among the man made barriers of cement and metal that were standing up as obstacles to reaching the stranded people. Ignacious from Thiruvananthapuram recollects how hard he and the team on his boat had to fight to reach some of the houses in Pandanad. Even in the midst of such fury there was something that kept him going. "I was stranded for more than 24 hours in the sea during the Ockhi cyclone, holding on to a broken boat before I was airlifted. So I know very well the agony of being stranded and thinking of death. There it's the wide open sea. But here when we are so close to some of them, then why don't we just go and get them out. That's what kept us crossing the waters," said Ignacious. The Ockhi cyclone that struck the shores of south India in November last year had claimed 218 lives.

The fisherfolk say that they took inspiration from that tragedy when they plunged in to save people in the last few days. "Ockhi was a very big tragedy for us. We had lost so many of our people and the pain of it is still fresh in our minds. We did not want yet another tragedy of that dimension to hit Kerala. Our community may not have been on the receiving end but certainly we wanted to do our bit to prevent such a big tragedy. This was a spontaneous reaction from the fishermen community. Nobody told us we had to do this. We just wanted to," Jackson, a prominent fishermen leader from Thumba in Thiruvananthapuram told First Post. Jackson goes on to say that anyone in the fishing industry would agree that it was the time of the year the catch was at the biggest. Leaving that for a week was unthinkable. But that is exactly what the fishermen did.

"It was not just the fishermen who went for rescue that kept away from the sea all these days. But those back in their villages also refused to go to sea in solidarity with those engaged in rescue operations. Also they were acting as back up for those in the operations," added Anto, another fishermen from Neendakara in Kollam. And their sacrifice indeed prevented a bigger tragedy from unfolding in Kerala. Thousands were brought out from Pandanad alone. Most of them who could have perished had these men not reached them on time. "We were stranded for two days without food and water. None came to rescue us. Finally when we saw a boat we were actually surprised that it was a fishing boat. These fishermen from Neendakara saved us, they are the real heroes," says a survivor. While this report was being filed most of rescue had finished and the fishermen and their boats were returning to villages a satisfied lot.
Even in the midst of that satisfaction of having saved so many lives, they still have an apprehension because if reports from the ground are true at least 80 percentage of their boats have suffered one kind of repair or the other having had to put up with so many man made obstacles while doing the rescue. Some have broken propellers and motors and some are broken altogether. The state may have declared a price amount of Rs 3,000 per day per fishermen apart from reimbursing full diesel. However, the state needs to step in to repair their boats at the earliest. For a community that has always been at the receiving end when it comes to braving the sea or putting up with red tapism that follows every natural calamity that strikes their shores, there is a renewed hope at the moment - that they have indeed proved their worth and more in the society and its time that we pay back what they deserve.

**Kerala: Don't want money for saving fellow humans': Kerala fisherfolk refuse Rs 3000 from govt**


A leader of fishermen, who have won widespread praise by rescuing hundreds caught up in the Kerala floods, on Monday refused to accept Rs 3,000 offered to each member of the community by Chief Minister Pinarayi Vijayan. Khais Mohammed from Fort Kochi said in a video post that he and his colleagues were happy to hear the words of praise from the Chief Minister for the role they played in going to the remotest areas amid pouring rain and dangerous waters to rescue the marooned. "We are really happy that I and my friends rescued several people. What made us happier was when you said that we (fishermen) are your army," he said. "But after that, we heard that for our services we will be paid Rs 3,000. Sir, that made us really sad as we do not want money for saving the lives of fellow humans," Mohammed said.

He, however, added that all the fishermen were happy that the government had promised to repair their damaged boats free of cost. "That's good news. But we do not want money for saving lives," he added. Fishermen from major fishing centres reached the worst-hit Pathanamthitta, Alappuzha, Ernakulam and Thrissur districts with their boats after unprecedented rains and the opening of sluice gates of dams spread misery. Kerala is slowly recovering after facing the worst floods in the century. Over 370 people have lost their lives due to the deluge and thousands have been rescued. Nearly 82,000 people were rescued on the first day of operations. The Centre, which was being urged to declare Kerala floods as a natural disaster, has finally declared it as a calamity of a serious nature.

**Kerala: Fishermen have saved thousands of lives.**

After unrelenting rain over the last two weeks made it a worse monsoon for Kerala in a century killing at least 200 and displacing over 10 lakh, fishermen have turned out to be saviours and unsung heroes. They were the first to respond to the crisis. Hundreds of fishermen rushed to inundated areas -- Pathanamthitta, Alappuzha, Ernakulam and Thrissur districts -- with their boats. Twitter has given thumbs up to their spirit and meme machines have also come up with interesting things. The fishermen were roped in by the government as shutters to dams in the state had to be opened when water levels reached the maximum capacity.

"They went to places where other people or even the forces conducting rescue operations could not go," one of the locals said. The fishermen started around 6 am, rowed through the day and returned late in the evening. "They packed food for the marooned men and women, brought them out of buildings and fed them," another local said. Chief Minister Pinarayi Vijayan appreciated their efforts. Union minister KJ Alphons called them the "biggest heroes". The state government has decided to pay Rs. 3,000 per day for their work and an additional amount for any damage to their boats. But some of the fishermen have refused to accept the money. "We are happy to hear the kind words of praise from the Chief Minister. But we don't want money for saving lives," said Khais Mohammed from Fort Kochi.

**Tamil Nadu: Kanyakumari fishers rescue 126 stranded in Kerala**


In just nine hours after they began rescue operations, fishermen from Eraviputhenthurai coastal fishing hamlet in Kanyakumari district evacuated 126 residents of Chengannur town in Alappuzha district on Sunday. Their delight was, however, overshadowed by the death of an aged woman, whose body they retrieved and sent to the government hospital for postmortem. Twenty fishermen of the village led by S Justin started to the flood-hit district on the request of fisheries officials from Kerala. “We were ready to go there but did not know whom to contact. So we informed fisheries officials in Kanyakumari district to let us know if we were needed.

Late on Saturday night, we got a call from officials that we should go to Ernakulam as that region was badly affected and inundated,” he said. Talking to TOI during a short break between rescue operations on Sunday evening, he said that they started from Eraviputhenthurai at 1 am on Sunday, equipped with three motorised fibre boats, 700 litres of kerosene for the boats, supplies worth Rs. 50,000, for the recued people, 5,000 water bottles and power banks for their mobile phones in four vans. They had to pay Rs. 12,000 towards transport for each boat. They were around 110km from Thiruvananthapuram and heading to Aluva around 8am on Sunday, when some people from Alappuzha stopped them and said that many were still stranded at Chengannur. There was difficulty in connecting with officials, as there was no cellular network.
The team split into three and went in search of victims stranded in their houses in many
directions. Each team took one or two locals.

Kerala: Crisis arose due to destruction of ecologically-sensitive zones in Western Ghats

https://m.economictimes.com/news/politics-and-nation/crisis-arose-due-to-destruction-of-
ecologically-sensitive-zones-in-western-
gaths/articleshow/65474577.cms?utm_source=APPusers&utm_medium=whatsappshare&utm_ca
mpaign=socialsharebutton

A geographical analysis of areas that suffered maximum damage this monsoon show that they
were all classified as ecologically-sensitive zones (ESZs) under the Western Ghats Expert
Ecology Panel report (WGEEP). The report was binned by both UDF and LDF governments,
with both Idukki and Thamarassery bishops throwing their weight behind the political parties.
The UDF government even passed a resolution in the assembly rejecting the report saying that it
went against public interest. The maximum damage inflicted by monsoon in the past ten days
were in Wayanad and Idukki. Areas like Munnar, Thamarassery, Vythiri and Thiruvambady
were classified under ESZ as per the WGEEP report. Kerala has 15 taluks under zone-I, two in
zone-II and eight within Zone-III. Idukki districts topped the zone-I list and yet maximum illegal
buildings came up here.

Wayanad followed the ‘Munnar model’ and nature hit back with a vengeance. People don’t
understand that WGEEP report is not against development as claimed by Kerala Congress
politicians and church authorities. The report allows sustainable development in zone-II and
zone-III. The report said that since zone-I is core forest area, which lies close to Western Ghats,
there is a ban on land use for non-forest purpose or agricultural activity. However, it allowed
extension of village settlements to accommodate increase in population. It also allowed road and
public infra expansion with MoEF nod. Wayanad and Idukki have maximum taluks in zone-I.
Zone-II was allowed to renovate and extend existing structures such as hotels and resorts. Zone-
III was allowed use of land for non-agri purpose. Permission for activity was to be given only
after considering various socio-economic parameters of the area.

“It is important to understand that we need to preserve the buffer zones around the forests in
Western Ghats or the region will fall like a pack of cards. If we don’t protect the region,
landslides and flash floods will follow claiming livelihood and lives,” said Madhav Gadgil who
headed the WGEEP panel. Quarrying is another major issue in both these districts. There are
1,700 illegal granitecrushing units in Kerala. Environmentalists said instead of making more
stringent regulations to mitigate the impact of climate change, irregular rainfall and cloud bursts,
the state relaxed quarrying rules. It allowed quarrying within 50m of residential localities. “It is
an irony that we announce compensation for property damage after landslides when we could
have mitigated these impacts and saved an ancient ecosystem that is the principal source of
drinking water for Kerala,” said former chairman of state biodiversity board V S Vijayan, who was also a member of WGEEP panel.

Kerala: Sons of the sea turn frontline saviours


When the floodwaters began to swallow their slender state a night after Independence Day, the poor and “lower caste” fishermen in Kerala sensed danger. And they decided it was time to venture into the waters in the opposite direction they’d routinely row out for a livelihood, into the hinterland away from the seas. Today, four days later and amid a death toll of 210, a section among them is busy rescuing residents of four villages in south-central Alappuzha district. That belt around Chengannur has turned out to be among the worst-affected in the deluge the state last saw in 1924 with such ferocity. “This is our fourth day into our service, totally selfless,” says T Peter, who is the general secretary of the National Fishworkers’ Forum that has 10 lakh members and is spearheading the Kerala operation. “Around 2,000 of our men, taking their motorised country boats totalling 600, have rescued thousands of people marooned in inland areas. There are still a few left, and we will work till the last person is saved.”

Thiruvananthapuram-based Peter, who edits a fishermen journal Alakal (Waves), says it all began modestly. “At the dawn on August 16, ahead of fishermen typically going into the sea at 8 am and amid heavy rains, we exhorted our district units in Kollam, Alappuzha and Ernakulam districts to send five boats each to flooded areas. Soon, we saw more and more of our men getting involved in rescue operations voluntarily.” Some, with the GPS facility, accessed the most interior of places even before the Army, Navy and Air Force could. “We followed no protocol; it is all for a good cause,” says Peter. “Our men are strong, physically and mentally. Flood cannot instil fear in those who used to fishing in turbulent seas!” In Kochi, Charles George has members of his Matsya Thozhilali Aikya Vedi (United Fishworkers’ Forum) working in 12-odd islands around the coastal city.

“Mind you, these were the land bodies formed in a deluge seven centuries ago,” he adds, referring to a 1341 deluge that swallowed historical Muziris and moulded Kochi as a natural harbour. George’s outfit, affiliated to the TUCI under the CPI(M-L), began by first sending country crafts in container terminals to Goshree Island. “From there, our engine-fitted boats, of all size and totalling around 130, shifted people across the archipelago to the mainland,” he adds. “We made similar efforts in Aluva (around the swollen Periyar).” National award-winning actor Salim Kumar was among the hundreds the forum saved on the weekend. Peter points out every passing day of rescue operation meant a cut on the fisherman’s income, however, meagre. “We just wouldn’t mind it. Neither are we bothered that the same elite we rescue, seldom stands with us during our times of misery,” he adds.
George notes that fishermen are usually called the second line of defence across India’s coastline. “But in these floods, we effectively proved to be the frontline saviours for many,” he says. Peter adds: “We are keen on forming a taskforce from the state’s 222 fishing hamlets to act during tragedies. I’d suggest the government announce ‘Matsya Ratna’ awards for the best of its workers.” Cognitive scientist Rubeena Shamsudheen, a Malayali working at Central European University in Budapest, notes the gritty Kerala fishermen are working in a disaster zone. “A boat will have an outboard engine driver, an oarsman, an expert swimmer and a local guide,” she notes on Facebook. “They bring back 20-25 people in a trip.”

Kerala: 'Huge disaster': Deadly Kerala floods displace over 800,000


More than 800,000 people have been displaced in Kerala, as the death toll from the worst flooding to hit the southern Indian state jumped to at least 370, with losses to infrastructure pegged at almost $3bn. As the rains subsided on Sunday, relief efforts focused on rescuing those marooned in isolated places for days and airdropping supplies to others, police and officials said. Kerala has been lashed by torrential monsoon rains since the end of May, triggering landslides and flash floods that have swept away entire villages. Incessant downpours since August 8 have killed more than 190 people and left thousands more stranded. "In a matter of three to four days, we have been able to move nearly 850,000 people to shelters," TM Thomas Isaac, Kerala's finance minister, told Al Jazeera. "I think the total number of displaced persons, including those who have been moved to relatives' or friends' houses, would be well over 1.5 million," he added in a phone interview from Alappuzha, Kerala.

On Sunday alone, 22,000 people were evacuated from their homes, but a large number of people continue to voluntarily live in flooded houses. "We saw many people whose ground floors of their homes were knee and waist-deep in the water," said Al Jazeera's Andrew Thomas, reporting from Andoor. "They are living upstairs because they want to stay where they are," he said. "So, the overall figure of people whose homes have been flooded and have been affected by this disaster is in the millions," Thomas added. "It really is a huge disaster in this part of India." Unsung heroes Thousands of army, air force and navy troops, along with the National Disaster Response Force (NDRF), are undertaking the search and rescue operations. Fishermen from across Kerala have also come together to aid the relief efforts. "The fisherfolk have played a very remarkable role," said Isaac, Kerala's finance minister. "About 500 fisheries boats have been at the forefront of the rescue and shifting operations.

"The fisherfolk have been able to move to interior lakes systems and rivers to help the people." On Saturday, fisherman Jaisal KP, a 32-year-old resident of Tanur, rescued three stranded women - one with an infant - in the Malappuram area. "NDRF personnel who were leading the
rescue operations informed us they won't be able to reach the place where these women were stranded," Jaisal told Al Jazeera. "I, along with my co-workers [fishermen], helped them. We have no safety guards or any equipment. We are risking our lives to rescue these people." Anunand, 22, who was trapped for four days in Paravoor, was also saved by the fishermen. "If it wasn't for them [fishermen], I would've died inside the flat," the graduate student told Al Jazeera in a phone interview. On Monday, the military will continue to fly helicopters in order to drop aid materials in the more remote communities, Al Jazeera's Thomas reported. Rebuilding As of Sunday, two districts out of the state's 14 were still under red alert. The Indian government has pledged $71m for flood victims, but Isaac said the state will have to re-negotiate to get a "better deal".

"One-third of the roads have been completely damaged and the cost of rebuilding them would come over $1bn rupees ($14.3m), so this is a very serious matter." Around 100,000 houses will also have to be rebuilt and large amounts of plastic rubbish - comprising mostly water bottles provided in aid packages and washed away by the floodwaters - will have to be cleared out, he added. The state government will reach out to multinational agencies to rebuild the water systems, Isaac said. "This calamity also points to some serious imbalance in development and the environmental consideration," the finance minister added. "Hope this disaster will prompt us to pick a more sustainable development path." The amount of rain that has fallen is unexpectedly high this year, according to Al Jazeera's senior meteorologist Steff Gaulter. "Normally, by this point in the monsoon season, we expect to see about 1,649mm of rain. But this year it was 2,344mm. This is well over what we'd expect in the entire monsoon season, and we still have another month to go," she said.

Kerala: The Life of Labour: Fisherfolk to the Rescue in Kerala Floods

https://thewire.in/labour/labour-news-india-sanitation-workers-dead

As floods continue to ravage the entire state of Kerala leaving thousands stranded in harm’s way, the fishermen have joined rescue efforts. KSMTF, the fishworkers union in Kerala has mobilised its members and deployed them in coordinated teams with team leaders to different flood-affected regions. Equipped with manoeuvrable fibre boats with a draft of about 1 foot, they are able to reach inaccessible areas to rescue stranded people. Their team leaders coordinate with the state rescue teams. The boats are also provisioned with water, safety equipment and fuel which have been collected by the fishing community. Speaking to the media, the fishermen maintain that they are showing the gratitude for the support they received in the aftermath of cyclone Ockhi that claimed many lives of fishermen and devastated coastal regions. The National Fishworkers Federation has also given a call to fishers from neighbouring states to support the rescue and relief efforts.
Kerala: Floods: Fishermen set a new model in rescue mission

Kerala fishermen who had borne the travails of Ockhi are setting a new model in rescue mission. Fishermen from Thiruvananthapuram, Ernakulam, Kollam and Alappuzha have joined the rescue mission in more than 100 country boats in various flood affected areas in the state. Kerala swanthantra matsyathozhilali federation has set up regional centres to coordinate the mission. Each team on the field has been assigned a leader who has been directed to work with revenue authorities, police and disaster management team. The design of the twin engine country boats made of wooden and fibre make is expected to be really helpful in places with strong undercurrent and unexpected flow of water. "It can go through any narrow lane. We will have 2-3 persons on board, the engine driver, the path guide and a helper. In addition to that we can board 10 people safely. A minimum depth of 50 centimetres is enough for the boat to move and we are equipped with wooden poles to traverse ahead safely," said Jack Mandela, a fisherman who is part of rescue team from Veli.

His team is engaged in rescue operations in Pandalam. In Thiruvananthapuram, boats have been transported along with fishermen from Thumba, Veli, Vizhinjam and Thuluvila. Teams have been deployed to Chengannur, Pandalam, Pathanamthitta and Aluva. From Kollam, country boats have been sent from Vadi, Thangaserry and Neendakara and teams from Thrikkunnappuzha and Arthungal in Alleppey have been sent for rescue mission. From Ernakulam, teams have been sent from Chellanam, Saudi beach, Vypin and Maravukadu. While in some cases, the fishermen have been supported by local police to mobilise transportation, in many places they are shelling out money from their own pockets. Each boat is equipped with fuel, drinking water, life buoys and searchlights.

"For us, it’s time for expressing our gratitude for all the help we have received during Ockhi. Many of the fishermen who are taking part in rescue operations have forsaken their daily jobs and are mobilising everything on their own. This is not a random move, we are doing it as a co-ordinated mission using team leaders on the field and in regional centres who keep guiding the field teams as per direction from revenue authorities," said T Peter, National fishworkers forum general secretary. The fishermen had loaded the boats at around 2 am on Friday and started off early in the morning.

Kerala: Fishermen help the army in rescue operations

Fisher folks from Kollam and Thiruvananthapuram have joined the Army and state police in rescuing people stranded in Pathanamthitta district following floods in Pampa river and its tributaries. About 130 fishermen who knows swimming have been pressed into action by the Trivandrum Latin Church diocese. The fishermen have arrived in Pathanamthitta with 50 fishing boats.

Kerala: Death toll reaches 114, more rains forecasted till Saturday

Kerala University has postponed all exams for graduate courses. The state government has also rescheduled Onam vacation for government schools from August 17 to August 29. "Today there are 52 different teams of the Army, Air Force, Navy, Coast Guard and NDRF. With additional teams coming, we feel rescue operations would be speeded up," Vijayan said. Pathanamthitta district in central Kerala continued to be the worst affected in the last 24 hours as thousands of people are trapped in their homes in the towns of Ranni, Aranmula and Kozhencherry. Around 50 people from Pathanamthitta were airlifted on Thursday and brought to the state capital. Meanwhile, fishing boats from Kollam reached the flooded areas as the rescue operation with the aid of defence personnel continued. "We have requested more fishing boats and fishermen who have experience in operating the boats.

They have all started arriving in the Pathanamthitta and Chengannur areas," the Chief Minister said. Reports said hundreds of people are perched on the roofs of their houses in Pathanamthitta, where attempts to airlift some marooned families have failed. Traffic on the national highway between Ernakulam and Thrissur is being regulated since last night. Rahul R. Nair, Ernakulam Rural Superintendent of Police, said hundreds of people need help. "Shortage of boats is the biggest problem," said Nair. "We have been stuck on the road for hours now and we are going to Chennai for the marriage of our cousin sister. The prospective bride is in the vehicle. We do not
know how we will reach there," said an anxious relative of the bride. Train operations between Ernakulam and Angamaly have also been stopped, but operations resumed through the Alappuzha sector to the state capital, while the Kottayam sector remains closed. Likewise, the train services resumed operations through the Nagercoil sector.

The current crisis took a turn for the worse when, in a first, the sluices of 33 dams across Kerala were opened on Tuesday following incessant rains in the higher reaches of the ghats. The famed tourist destination of Munnar continued to be in a bad shape, an official said. The Sabarimala temple also remained cut off by the river Pamba. The hilly district of Wayanad, connected to Kannur and Kozhikode through a hill highway, has also been badly hit with the overflowing Banasura Sagar dam waters creating havoc. Several landslides were reported in the area. In Wayanad alone, more than 20,000 people have been put up in relief camps, authorities said. Earlier in the day, Prime Minister Narendra Modi spoke to Chief Minister Pinarayi Vijayan and asked the defence forces to speed up rescue and relief operations. "Have asked Defence Ministry to further step up the rescue and relief operations across the state.

Praying for the safety and well-being of the people of Kerala," the Prime Minister said, according to a statement. Cabinet Secretary P.K. Sinha chaired a meeting on the Prime Minister's instructions and asked the Army, Navy, Air Force, Coast Guard and the NDRF to mobilise additional manpower, boats and helicopters to scale up the relief measures in Kerala. An official spokesperson said food packets and drinking water were rushed to the state. A Navy spokesperson said the Southern Naval Command has suspended all routine training activities and shifted its focus to the highest state of readiness in the wake of the situation in Kerala. The spokesperson said all available resources for rescue and relief efforts in Ernakulam and Trichur have been mobilised. The heaviest rains and floods witnessed in the states since 1924 have caused massive destruction with Adamages to crops and properties that the state has estimated to be over Rs 8,000 crore.

Kerala: IMD issues red alert in 12 district; Cochin airport suspends flight operations


India Meteorological Department has issued red alert (heavy to very heavy rainfall in most places) for Wayanad, Kozhikode, Kannur, Kasargode, Malappuram, Palakkad, Idukki and Ernakulam Districts in Kerala until Thursday. The heavy rainfall has claimed the lives of as many as 39 people. On Tuesday, Kerala Chief Minister Pinarayi Vijayan had informed that as per the preliminary report, the total damage due to floods in the state is estimated to be worth Rs 8316 crore. Vijayan requested for an additional Rs 400 crore from the Home Ministry to carry out immediate relief and rehabilitation work in the state. Earlier, Cochin International Airport
today suspended all flight operations till 2 pm as water level has increased in the airport area following continuous rains and the opening of dam shutters in Periyar river.

The decision to suspend the operations was taken after shutters of the Idamalayar and Cheruthoni dams, part of Idukki reservoir, were opened last evening to release excess water. The airport is situated near the Periyar river bank. "Operations suspended to/from Cochin International Airport till 1400 hrs...due to flood level in and around Airport," an airport spokesperson said this morning. The Cochin International Airport Limited (CI AL), which decided to suspend the arrival operations at 4 am to 7 am today as a precautionary measure, took the decision to shut the airport till afternoon after reviewing the situation. The arrival operations at the airport were suspended for two hours on August 9 in view of possible inundation in the airport area. The operations were resumed later on. Torrential rains, overflowing rivers and a series of landslides have claimed 40 lives in Kerala. Meanwhile, four people on fishing vessel Anugraha have been rescued by the Navy.

ALH helicopter and INS Garuda assisted in the rescue. Among the rescued are Sures, Sivan, Babu and Alby from Vypin. They've been taken for a medical examination in the Naval base. There are three people still missing. The fishing vessel was reportedly 12 nautical miles northwest of Alapuzha. Meanwhile, the Neyyar dam shutters has been raised by 12 inches. This is a first such case of the shutters of the Thiruvananthapuram-based dam getting raised in the past 20 years. According to the Hindu, the shutters were opened to the particular level for the first time since 1994. While the maximum capacity of the dam is 84.75 m, the water has risen to a level of 84.6 m. “The shutters of the Aruvikkara dam in Thiruvananthapuram have also been raised owing to the overnight rain.

Among its six shutters, shutters number 2, 4 and 5 have been raised by 150 cm and shutters number 1 and 6 by 50 cm. Three of the four shutters of the Peppara dam in the district have also been raised by 50 cm each,” the report added. The Met Department has issued a 'Red Alert' (for Wayanad, Kozhikode, Kannur, Kasaragod, Malappuram, Palakkad, Idukki and Ernakulam districts till Thursday, August 16. Kerala resident James Wilson, was live tweeting the condition of rains in the state. "It started heavily even in Thiruvananthapuram. Heard that Mudirapuzha arm of Periyar receiving heavy rainfall and Madupetty Dam shutters are opened. Mullaperiyar is at 136.60 ft at 12noon today," he tweeted on Tuesday.

**Kerala: Boat collision: One more body fished out**


The body of yet another fisherman, who was among the nine missing following the mid-sea collision of fishing boat Oceanic with a ship off the Kochi coast on August 7, was recovered on Sunday. The officers are yet to identify the body, which is being brought to the shore in a fishing
vessel. With the recovery of one body on Sunday, the total number of missing persons is now seven. On Saturday, the body of Shiju, the only Malayali missing in the fish wreck, was recovered. Meanwhile, the officials have more or less confirmed that the erring ship in the collision was Desh Shakti, a crude tanker owned by the Shipping Corporation of India. An examination of Desh Shakti, which is now berthed in Mangalore, by Mattancherry CI Santhosh, has revealed the paint of the fishing boat is dented on the hull of the crude tanker. “We need to lift the fishing boat, which is lying at a depth of 75 feet, to confirm that the paint is the same. However, lifting the boat will be a costly affair,” said a source.

Body sighted 44 nautical miles from Kochi An official release by the Southern Naval Command said the body was sighted 44 nautical miles from Kochi in a highly decomposed state. The body was recovered by INS Sutlej, a survey ship specialised in undertaking underwater search operations. Sutlej was deployed to locate the wreckage since August 9, the Naval spokesman said. Shiju’s body was also found in the same area and was recovered and sent to fishing boat FV Munambam Harbour through fishing boat St Antony, which was in the area. “The Southern Naval Command has been undertaking an extensive and continuous operation from August 7 to locate the missing fishermen of the ill-fated fishing vessel Oceanic which was hit by an unknown merchant ship,” the spokesman said. Out of the 14 persons on board, two were killed in the incident and three were rescued by a nearby fishing boat. The remaining nine personnel were reported missing. The Navy had deployed one warship INS Jamuna and an ALH helicopter immediately to the area for locating the wreckage and the missing fishermen.

Kerala: Search for 9 missing fishermen in Kerala continues

https://www.outlookindia.com/newsscroll/search-for-9-missing-fishermen-in-kerala-continues/1364742

The Indian Navy and Coast Guard today continued their search for the missing crew of a fishing boat which capsized after it was hit by a merchant ship at high seas about 24 nautical miles off Munambam harbour near here. The fishermen went missing after the boat was hit by the ship on Tuesday. At the time, 14 fishermen were on board the boat. Three fishermen were killed and two injured in the incident, police had said. The boat had 11 fishermen from Tamil Nadu, two from West Bengal and one from Kerala. "No missing person has been located as yet," a Defence spokesperson said here. The spokesperson said the Indian Navy and Coast Guard have pressed into service their ships and aircraft to search and locate the nine missing fishermen of fishing boat 'Oceanic.' Kerala Fisheries Minister J Mercykutty Amma held a meeting with representatives of civil administration, Navy and Coast Guard last night to review the rescue operation being carried out in the high seas.

According to a government release, the minister said the search operation would continue till the fishermen were traced. Four ships and three helicopters of the Navy and Coast Guard were
continuing their rescue mission, government sources said. "As regards the search at sea, the navy has recommenced aerial search since morning. An ALH helicopter was sent early in the morning followed by a Dornier aircraft by Coast Guard... besides all the ships in the area since yesterday," the Defence spokesperson said. During the air search yesterday, a 10-metre capsized boat, identified as 'Al Ma Rahan', was found in the area, a defence release said. Offshore patrol vessel INS Sunayna, with a full-fledged naval diving team on board, has joined the rescue effort. Officials of the Mercantile Marine Department, Coastal Police, Forensic Experts and underwater surveyors would examine the Indian merchant vessel which allegedly hit the boat. The ship, which fled the scene soon after the incident, was directed by the Navy to anchor at Mangalore coast.

**Kerala: 'Living victims' of Ockhi: Compensation sought at Kerala HC**


A petition has been filed before the Kerala High Court seeking compensation for those fishermen who are unable to continue fishing due to the mental trauma from Okhi cyclone. The petition filed by Elias John of Statute in Thiruvananthapuram said he has come across several fishermen who have lost the courage and will power to venture back into the sea on account of the psychological trauma they suffered from the cyclone while they were at sea. Many of the fishermen who were out fishing when the cyclone struck had to face a nightmarish ordeal for more than 48 hours, when the cyclone subsided and they were rescued. Most of the fishermen are traditional fishermen who use country boats, which cannot take much thrashing at sea, whereas even fishermen with bigger, stronger, and well-equipped trawlers were killed or lost at sea during the cyclone, the petition filed through advocate C Unnikrishnan said.

The fishermen who are ‘living victims’ saw their boats getting destroyed, their colleagues dying, and they had to face very high waves and high-velocity, howling winds. They repeatedly ingested water and had to struggle to get some air to breathe. They were thrown around in the sea continuously for many hours, even at night, without any food, water, or any sort of nourishment. They are now deeply traumatized and unable to venture out to sea to eke out a living, the petition said while pointing out that the authorities have not recognized the plight of the ‘living victims’ of Ockhi.

**Kerala: Fishermen need govt protection, say unions**


Fishermen have demanded that the government stand with them and ‘not punish the victims’, Joseph Xavier Kalapurakkal, president of Kerala Boat Operators’ Association, has said. He
claimed that over the past six years, there have been 38 accidents in the sea involving fishing vessels and large ships. However, in all these cases, fishermen had not been defended properly, he said. Charles George of Matsya Thozhilali Aikya Vedi said that the Union government had failed in international legal fora repeatedly in the Enrica Lexie case in which two fishermen were shot dead by Italian marines. More recently, the government allowed vessel Mayuri Nari to proceed despite a mid-sea collision on July 8, said Mr. George.

Protest action Mr. Kalapurakkal said that fishermen planned to launch a series of protest action against such government failures even as he called for stringent safety measures to ensure the safety of fishermen at the sea. Mr. George described the Kerala coast as a Bermuda Triangle for fishermen because of the repeated accidents off the State’s coast in recent times. He said that the fishermen community had been demanding that large ships that violate laws related to keeping to the shipping channel be punished. However, the agencies concerned had always failed to implement the rules of the sea, he claimed.

**Kerala: Tanker splits boat into two**


Three fishermen died and nine were missing after an oil tanker rammed into their boat off the Kochi coast early on Tuesday, ripping the vessel apart, before sailing away in the pre-dawn darkness. Among those feared drowned in the Arabian Sea was a man from Calcutta identified as Bikash Das. Two of the 14 fishermen on the boat, Oceanic, have been rescued - Naren Sarkar, also from Calcutta, and Edwin from Tamil Nadu. Police sources said the boat, which had set off from Munambam harbour in Kochi on Monday evening, was around 28 nautical miles (a little over 50km) from the coast when the tanker, suspected to be the Mumbai-registered Desh Shakti, hit the vessel around 4am. Edwin has told the police that the tanker hit the boat from behind when most of the crew were asleep, the impact splitting the smaller vessel into two. The ship then slowed down before gaining speed without making any effort to rescue the fishermen.

The live tracking portal, marinetrack.com, showed the tanker, scheduled to dock at Basra port in Iraq on August 13, had set sail from Chennai on Friday. Kerala fisheries minister J. Mercykutty Amma said the government would bear all medical expenses of the injured fishermen and initiate action against the ship's crew. "We will conduct a proper investigation and take stringent action," she said. The dead fishermen, whose bodies were brought ashore by other fishing vessels that were the first to reach the shattered boat, were identified as Yaqoob, 57, Manikudi, 50, and Yuganathan, 47. Yuganathan's brother, Sagayanathan, said the three were among 11 from Tamil Nadu who were on the boat - all from one extended family in Kanyakumari.

Among the others still missing is Shiju, the lone Malayali on the boat. The crew of the first fishing vessel that reached the splintered boat said they saw debris floating around and a large patch of diesel from the sunken vessel's fuel tank soon after sunrise at 6.30. They then rescued
the two fishermen who had clung on to floating debris and immediately informed the port in Kochi. P.P. Chitharanjan, chairman of Matsya fed, a state-run fisheries body, said five Coast Guard vessels and two naval helicopters had been deployed for search operations. At least 40 fishing boats from the region were also in search of the missing men. "We are doing everything possible to look for any survivors. The three bodies that were brought ashore will be sent to their families at the earliest," he told reporters. Fishermen complained about repeated incidents, saying at least six had been reported since 2017. "Since fishermen have the right to ply their boats up to 200 nautical miles in Indian waters, it is the duty of marine enforcement authorities like the Indian Coast Guard to provide them security.

We urge the state and the central government to initiate action against erring officials," T. Peter, general secretary of the National Fishworkers Forum, told The Telegraph. In one incident in June last year, three fishermen were killed when a Panama-flagged cargo ship, Amber L, collided with a fishing boat around 12 nautical miles off Kochi. The bulk carrier had rammed into the fishing boat that had 14 men on board. Then too, fishing boats in the vicinity had rescued the fishermen. In February 2012, two fishermen were shot dead by Italian marines on board the oil tanker Enrica Lexie. Two marines, Massimiliano Latorre and Salvatore Girone, who were arrested later, had told the police they had mistaken the fishermen for pirates. Both have since been allowed to go back to Italy on the condition that they would return whenever summoned.

**Kerala: Stern action against juvenile fishing**


The government has announced stern action against fishing vessels found to be involved in juvenile fishing following the lifting of the trawl ban. An official pressnote quoting Fisheries Minister J. Mercykutty Amma here on Tuesday said any attempt to indulge in juvenile fishing, taking advantage of the replenishment of fish stocks during the trawl ban period, would be dealt with firmly. The 52-day ban was imposed to give a chance for the stressed populations of several commercially important fish species to recover during their breeding season. The pressnote said the trawl ban, combined with the sustained crackdown on unsustainable fishing practices, had helped to replenish fish stocks.

**Kerala: New Bill promises fair trade at fish harbours**


The fish auction Bill, aimed at modernising the primitive mode of auctioning at fishing harbours in the State, is expected to curtail exploitation by middlemen and provide unadulterated fish to consumers. The Kerala Fish Auction, Marketing, and Quality Control Bill, approved by the State
Cabinet recently, proposes to regulate the operation of fish-landing centres, fishing harbours, and markets under a professional management system. It will ensure the safety of seafood. Fisheries Department officials say the Bill is part of the government’s continuing efforts to free traditional harbours from the domination of middlemen who are blamed partly for the perpetual indebtedness of the fishing community. A transparent auctioning system under a new committee headed by the District Collector will be a major feature of the Bill.

Role for Matsyafed “The Kerala State Cooperative Federation of Fisheries Development (Matsyafed) has been making productive market interventions to bring in some order in the sector and provide unadulterated fish to the consumers at affordable price. But, it has also been helpless in several areas,” said Fisheries Deputy Director Mariam Hazeena. She said the Bill was likely to give more teeth to Matsyafed to take forward the interventions. Though the Bill has been approved by the Cabinet, its detailed provisions are yet to be made available to the district units of the Fisheries Department or Matsyafed. As per the preliminary details, the conventional auctioneers will have to end their traditional type of auctioning at the harbours and secure prior permission for at least three years to pursue the business.

They will be asked to submit an application to a designated officer for clearing the application and allot a specific place for carrying out business. Ordinary buyers Also, one of the major changes going to be effected in the business is the opportunity for ordinary buyers to take part in the bulk- or small-quantity auctioning of fish. Now, local buyers are hardly encouraged to take part in the auctioning process manned by a few middlemen at harbours. Many a time, only cheaply priced varieties reach the auction hall as middlemen carry out the trade of superior varieties for third parties even before unloading the fish at the harbours. The Food Safety Department squads too are keen on the implementation of the Bill as it will largely restrain the trade of adulterated fish at the beginning point itself and ensure better access for the common buyer to have quality fish. Food Safety Officer P. Jithinraj says the Bill will make the business more healthy and transparent.

Kerala: Fishing boats without licence under lens


The fisheries department are on the lookout of 50 fishing boats that are operating without any valid licence or registration. Officials said that checking has been beefed up in Munambam, Thoppumpady and Kalamukku harbours by the marine enforcement wing. A trawl boat without licence was impounded from Munambam fishing harbour on Saturday. The confiscated boat was released after paying a fine of Rs2.5 lakh as per the Kerala Marine Fishing Regulation (KMFR) Act, 1980. Last year alone, Rs 3.5 crore was paid as fine to the fisheries department in Ernakulam. "It is mostly the boats from Colachel in Tamil Nadu that venture into the sea without
proper registration or licence," said Lajid K K, assistant director of fisheries station in Vypeen. A total of 1,470 registered fishing boats are there in Ernakulam district. The boats are recognized by their colour.

"There is colour code for the boats. The boats from Kerala are painted deep blue and orange whereas those from Tamil Nadu are green. It is white for Lakshadweep," said Lajid. The workers in the registered boats are provided with biometric cards. Sections 6, 7 and 9 of the KMFR Act prohibits fishing vessels to go for fishing without valid registration and licence from the fisheries department. The act allows the assistant director of fisheries station in Vypeen to issue registration and licence to fishing vessels in Ernakulam district. The act also prohibits fishing of 58 varieties of juvenile fishes, which are commercially important pelagic species. If trawls boats are confiscated after fishing, the whole catch would be impounded by the fisheries station and will be auctioned. The fisheries department tightened their inspections at Chambakkara and Aluva markets to confiscate fish from unregistered boats. Tamil Nadu boats mostly sell their catch here. The confiscation of fishing boat Holy Mother, which was impounded on Saturday was led by a team that included Lajid K K, fisheries assistant director, civil police officers Siju C P and Dinesh KM.

Kerala: No special package for Ockhi-hit fisherfolk in Kerala, says central government


The Union government has categorically stated that it is not considering Kerala’s request for a special package for Cyclone Ockhi affected fisherfolk, over and above the relief that was granted, as per the existing norms of disaster management. In response to a question in Parliament on providing a special package, the government said, “The proposal at a total cost of Rs 741.60 lakh for providing assistance to Ockhi Cyclone affected traditional fishermen in the State of Kerala was received in Department of Animal Husbandry, Dairying & Fisheries (DADF), Ministry of Agriculture & Farmers Welfare (MoAFW) from Government of Kerala during 2017-18, and an amount of Rs 194.40 lakh was sanctioned as per entitlement to meet the Central liability/share under the Centrally Sponsored Scheme (CSS) on ‘Blue Revolution: Integrated Development and Management of Fisheries’ for implementation of the above said proposal.”

The Union Ministry was responding to a question raised by NK Premachandran, a parliamentarian from Kerala, on Tuesday in the Parliament. Premachandran had asked whether the Union Government proposes to implement special package for the welfare of fisherfolk for compensating their loss due to cyclone Ockhi disaster and if so, the details thereof. Answering to the question, the Minister of State for Agriculture & Farmer’s Welfare Krishna Raj said it is not. In March, replying to a calling attention in the Kerala Assembly, on the necessity to solve the
crisis faced in rehabilitation of the victims of cyclone Ockhi due to non-allocation of sufficient funds by the Centre, Kerala Fisheries Minister J Mercykutty had said that the Centre is yet to approve a special financial package of Rs 7,340 crore. This amount was sought by Kerala for rehabilitation and reconstruction of the Ockhi-hit coastal villages. She had said that Chief Minister Pinarayi Vijayan would take up the matter with the Centre and exert pressure on it for clearing the relief package.

Cyclone Ockhi crossed the sea near Kanyakumari, the southern tip of mainland India, on November 30. An estimated 52 people in Kerala and 11 in Tamil Nadu died in the cyclone, while many others went missing. Though it changed direction near Kanyakumari and headed towards the Lakshadweep Islands in the Arabian Sea, it caused havoc and destruction in the southernmost districts of Tamil Nadu and Kerala, particularly Kanyakumari district of Tamil Nadu and Thiruvananthapuram district of Kerala. There were reports that damage throughout Kerala was around Rs 1,843 crore and in Tamil Nadu, damage was estimated at more than Rs 1,000 crores. Meanwhile, National Fishworkers Forum general secretary T Peter told The News Minute that it’s quite disappointing to hear that the government has said no to the special package. “Special Package was one of our main demands.

It is unfortunate to hear that they have said no to it. We are having a meeting with parliamentarians tomorrow. We will raise this issue there.” “Financially, fisherfolk are still struggling to cope with the losses. We thought that the special package would help them,” Peter said. Fr Lenin Raj from Latin Archdiocese of Trivandrum confirmed to The News Minute that they had asked for a special package for the fisherfolk. “We had submitted the proposal officially,” the Fr said. It was the Latin Archdiocese of Trivandrum which was leading the rescue and rehabilitation programmes following Ockhi disaster. However, The News Minute was not able to get a comment from the Archdiocese representative, who was coordinating the Ockhi relief programmes when this report was filed. In its reply, the Union Ministry also detailed that as per the details received from the Nodal Ministry for Disaster Management i.e., Ministry of Home Affairs, the Union Government has released an assistance of Rs 76.50 crore from State Disaster Response Fund (SDRF) and Rs 133.00 crore from National Disaster Response Fund (NDRF) to Kerala to support the affected people.

Similarly, an amount of Rs 413.55 crore (Rs 280.50 crore from SDRF and Rs 133.05 crore from NDRF) were released to Tamil Nadu for carrying out immediate relief measures. When Premachandran asked whether the Union government proposes to provide special assistance to the fisherfolk in the cyclone Ockhi affected areas during the trawling season, the reply detailed that no such proposal is under consideration. And when the parliamentarian asked about the details of action taken by the Union Government for compensating the fisherfolk and boat owners for their loss of net and other fishing instrument due to cyclone Ockhi, the Union Ministry replied that an amount of Rs 194.40 lakh was sanctioned by DADF, MoAFW to Kerala.
for replacement of FRP Boats and providing Sea Safety equipment to the Ockhi Cyclone affected traditional fishermen.

**Kerala: Coastal erosion ravages Kerala village and reignites debate over how to protect homes from the sea**


When the south-west monsoon gained strength in the second week of July, ferocious waves from the Arabian Sea breached the sea wall in the coastal village of Chellanam in Kerala’s Ernakulam district, ravaging more than 700 houses and driving 1,400 residents to the safety of government-run relief camps on July 15. The villagers returned home five days later, when the rain had subsided, to find huge piles of sand and garbage in and around their homes. “Monster waves damaged the foundation of our home and brought truckloads of sand into it,” said Treesa, a village resident who lives in the Companyppadi neighbourhood. “We took three days to clear it.” The sea left a trail of destruction in Chellanam. It damaged hundreds of houses, blocked toilets and other drainage systems and contaminated open wells. “We do not have water to drink at the moment as our well is filled with waste,” said Henry, who also lives in Companyppadi.

Joseph, who lives in Vachakkal neighbourhood of the village, said the strong monsoon gales destroyed the roof of his house. “The tiles of my roof were blown away in the wind,” he said. “I am living under a leaking roof. I hope I can fix it when the fishing season begins after the current trawling ban.” Coastal erosion and flooding had also ravaged Chellanam village eight months ago, when Cyclone Ockhi hit Kerala’s coast in December 2017. “We spent many days in the relief camp at that time,” said 70-year-old Rosy, who lives near the Velankanni Church in Chellanam. “There seems to be no end to our miseries.” This back-to-back disaster has revived an old debate here on how the village could be better protected from the sea. Coastal erosion Chellanam village is a thickly populated fishing village that is part of Chellanam gram panchayat. It lies on a sliver of land, with the Arabian Sea to the west and Kerala’s backwaters to the east. Because of its location, the whole area is highly susceptible to coastal erosion and was marked as such by the state government in 1986.

More than 13,000 people reside in Chellanam village, with around 1,000 houses situated very close to the sea. Its residents have been demanding for many years that the state government strengthen the existing sea wall and construct a breakwater. The villagers say that the height of the existing sea wall – a 3-metre high structure built of rocks – has reduced considerably as the waves have gnawed away at the sand at the foot of the wall. Sea walls are embankments erected to prevent waves from encroaching upon or eroding coastal land, while breakwaters are offshore structures constructed parallel to the shoreline, which, among other things, are meant to prevent beach erosion. The village residents even resorted to protests to press for their demands. They
went on a hunger strike at the Cyclone Ockhi relief camp in December, and the Chellanam Coast Protection Committee organised a hartal in May.

Both protests were withdrawn after the villagers received assurances from the government. Though the government has sanctioned the sea wall project, the irrigation department, whose job it is to build the structure, has not started construction yet. Officials in the department blamed the delay in construction on the unavailability of rocks. “Restrictions on quarrying have reduced the availability of rocks in the state,” said executive engineer Abdul Shukoor. “We will be soon piloting a project to build a sea wall using geo tubes.” In this method, massive tubes filled with sand are placed near the high tide line to help reduce the impact of waves on the coast.

Temporary solution The delay in the construction of the sea wall has prompted the Chellanam gram panchayat to look for a temporary solution. Last week, it hired earth movers to make piles of sand in front of all houses near the sea wall. “We call it sand bunds,” said panchayat president Mercy Josey.

“It is an age-old practice.” But an official with the irrigation department said the bunds were a waste of public money. “Sand bunds will not last for more than three days,” he said. “Why are they wasting money on such work?” Village residents concurred. “It will last only for a day,” said Ninan George, a resident of Companyppadi. “It is a gimmick. Only a breakwater can save us.” The government has other plans to address the problem. It is encouraging people who live less than 50 metres from the shore to relocate. In January, it announced a rehabilitation package for those willing to do so. Under this proposal, Rs 10 lakh will be given to each family – of which Rs 6 lakh will be to purchase land and Rs 4 lakh to construct a house. But the offer has had few takers. Panchayat president Josey said only 20 people have opted for the plan so far. “It was against our expectations,” she said. Jacob, 33, a fisherman who lives less than 50 metres away from the sea in a neighbourhood near Karthyayani temple, said he would not accept the offer. “It is impossible to buy land and construct a new house with Rs 10 lakh,” he said. “I will think about it if the government increases the package.

Otherwise, I will stay here until I die.” He added: “Let the government build a breakwater and sea wall without wasting time in announcing such irrelevant packages.” ‘Breakwater not the solution’ Experts in coastal management, however, said that the breakwater Jacob and other villagers are so keen on will further exacerbate the problem. They said that sea erosion in Chellanam started after the construction of the Kochi port in 1926, and that the periodic dredging to remove sand from the bottom of the port added to the erosion. The port lies 16 km north of Chellanam. “It changed the sand movement ecosystem and caused erosion,” said AJ Vijayan, an expert in coastal issues. He said the recent construction of a harbour in Chellanam – it was inaugurated in 2010 – worsened the erosion as it obstructed the natural movement of sand and sediments from the south to the north during the monsoon. “Harbour construction begins with the construction of breakwaters, which are barriers built in the middle of the sea to tame the waves and ensure tranquil waters,” he said.
“Breakwaters block the flow of sand and sediments. Thus sand and sediments remain on the southern side of the structure, resulting in accretion on the south and erosion on the north,” he said. Beaches along Kerala’s 580-km coastline face erosion during the south-west monsoon months of May-September, and minor erosion during the north-east monsoon in December and January. During this time, high-energy storm waves pull sediment and soil away from the shore. After the monsoon is over, low energy waves bring back the eroded sediment and soil. The cyclical process of erosion and accretion ensures that beaches remain intact. Researchers say that artificial structures like seawalls, breakwaters and groynes – structures that are meant to help control coastal erosion – in fact aggravate erosion by disrupting the natural movement of sediment. They say these structures are one of the main reasons for erosion along the Kerala coast.

The Environment Impact Assessment Guidelines for Ports and Harbours, prepared by the National Institute of Ocean Technology for the Department of Ocean Development in 2010, mentioned that breakwater construction could lead to major changes to the shoreline due to erosion or accretion. A 2010 study by the National Centre for Sustainable Coastal Management found that as many as 106 groynes and 25 breakwaters have been constructed along 310 km along the coast – over half of Kerala’s coastline. The study warned that any attempt to halt the natural movement of sediment using such structures would result in the disappearance of beaches. The study advised that proper precautions must be taken prior to erecting any structure along vulnerable coastal stretches.

Despite the warning, breakwaters and groynes continue to be constructed along the coast. A research paper on the coastal issues affecting Kerala, published by the Nansen Environmental Research Centre in Kochi, stated that about 370 km of Kerala’s coast is subject to coastal erosion of various magnitudes due to one or more or a combination of several factors. These include the early onslaught of the monsoon and the strong waves it brings with it, geological factors and a rise in the level of the sea. Vijayan warned that another breakwater would do more harm than good. “The gram panchayat has a length of 19 km and width of just one kilometre,” he pointed out. “Construction of another breakwater will eventually result in the disappearance of Chellanam.”

Kerala: Ockhi relief is an ocean away for fisherfolk


When a boat from Colachel rescued Martin and his mates from the cyclone-hit sea, he thought the worst was over. But getting stranded in a turbulent sea was nothing compared to what awaited him on shore – months of uncertainty and penury. His boat, along with two others docked in the same area, had broken down in Cyclone Ockhi, which struck in November 2017.
They had to return leaving behind nets, engines, and other equipment. After completing the paperwork, Martin has been waiting for the promised compensation all these months. “An official said it would have been easier if any five of us on board had died. It seems making it to the shore alive was a big mistake,” he says. Martin has been jobless since then and fishing is his only vocation. The 35-year-old sustained injuries in the accident and is undergoing treatment. “I have two daughters and to call the past few months hard will be an understatement. I have accumulated enough debt to drown me and each month I take new loans to pay the interest alone,” says the fisherman from Poovar.

Martin’s losses come to over Rs.7 lakh. All he received from the government is the Rs.5,000 for his initial medical expenses. “They say they will include me on the next list. But I am in no position to wait another year for the help,” he says. Antony and Kennedy, two traditional fishermen from Jonakapuram, have the same story. “Every week we go to the Kollam collectorate and the Fisheries Department office to check the progress. Each time they come up with an excuse. There has been no help so far,” says Antony. Last December, Jithin ventured into the sea with a 16-member crew, but never returned. When the rescue teams reached the location, only three fishermen were alive and the vessel had long vanished into the depths of the sea. Jaffath, the owner of Jithin, puts his loss at Rs.80 lakh. “I submitted all the papers, but nothing has been sanctioned so far. All I got was a letter from the Fisheries Department confirming that they have received my application,” he says.

Kerala: Trawling ban ends tonight, but worries far from over

https://www.thehindu.com/news/national/kerala/trawling-ban-ends-tonight-but-worries-far-from-over/article24556501.ece

The harbours at Shakthikulangara and Neendakara went abuzz after a 52-day hiatus on Monday in preparations to mark the end of the annual trawling ban. Repairs done and equipment back in place, around 3,800 motorised boats across Kerala will venture into the sea on Tuesday midnight after the fishing holiday. ‘Only in Kerala’ But though it’s a time for the fisherfolk to be jubilant, this year they seem less excited and more apprehensive. “This time we are going to sea without many expectations due to many reasons. This year we had a 52-day ban, but while motorised boats stayed off the waters, others carried out large-scale fishing. Apart from crafts that use ring seine nets, there were mini-trawlers and together they have brought to shore tonnes of fish. This time thousands of mini-trawlers kept sweeping the sea floor for days using customised nets. In India, Kerala is the only State where such practices are allowed and this is one reason why we lost the number one position in the industry,” says Peter Mathias, president, All Kerala Fishing Boat Operators Association.

Monsoon impact If the monsoon is good, it’s believed that the fishermen will come back with a good catch including the most-sought-after karikkadi shrimp. “We had good rains this time, but
we also had a large fleet of non-motorised country boats and fibre-reinforced plastic (FRP) boats. With more than 34,000 boats in the sea during the period we are doubtful about how much of the stock is left.” Mr. Mathias adds that this year chances for accidents are also high as the authorities have failed to carry out dredging works on time. Weather kept the fisherfolk off the sea many days this year. “In the last few months we faced heavy rain and rough sea repeatedly. If it continues people working in small motorised boats will be left jobless. Though everything seems fine today, nothing can be predicted. We are keeping our fingers crossed,” says Rody, fisherman.

**Kerala: Network on ornamental fish breeding launched**


An all-India network project on ornamental fish breeding and culture, a collaborative research project involving seven fisheries research institutes across the country, was launched here on Saturday. Aimed at developing adequate technologies in breeding, seed production and culture of freshwater and marine ornamental species, and helping maintain the sustainability of the industry, the project has seven fisheries research institutes under the Indian Council of Agricultural Research (ICAR), New Delhi, partnering with the Central Marine Fisheries Research Institute (CMFRI). Speaking at the event, ICAR Deputy Director General J.K. Jena said there was a need for a strong linkage between researchers and industry partners in the ornamental fish sector in the country to utilise the potential resources available in India. He also said that the network research project would address issues facing ornamental fish industry in India.

“Though the potential for the development of ornamental fish trade in India is immense, a proper mechanism is yet to be established to boost both overseas and domestic trade of the varieties. The Government of India has identified this sector as one of the thrust areas for development to augment exports. For the trade to prosper, the three pre-requisites are quality, quantity, and sustainability. In India, marine ornamental fish species diversity is rich in the reef area of Andaman and Nicobar Islands, Lakshadweep Islands, Gulf of Mannar, and Gulf of Kutch. The freshwater ornamental fish resources are rich in the rivers and streams of the Western Ghats and northeast India,” he added. “The project envisages scores of objectives including the development of ornamental fish villages with strong marketing ties,” CMFRI Director A. Gopalakrishnan said.

“It [project] focuses on developing a value chain approach from seed collection, culture and export of various ornamental varieties by ensuring environmental and socio-economic sustainability, product quality and overseas access to ornamental fish industry in India,” he said. Technology for ornamental fish breeding and culture, a major thrust of the project, will provide
additional income to rural and urban people as well and generate employment opportunities. “Establishment of regional hatchery units and satellite hatcheries under public-private partnership (PPP) mode is one of the expected outcomes of the project, he added. The Central Institute of Freshwater Aquaculture (CIFA), Bhubaneshwar; Central Inland Fisheries Research Institute (CIFRI), Barrackpore; National Bureau of Fish Genetic Resources (NBFGGR), Lucknow; Central Institute of Brackishwater Aquaculture (CIBA), Chennai; Central Institute of Fisheries Education (CIFE), Mumbai, and Directorate of Coldwater Fishery Research (DCFR), Bhimtal, Uttarakhand, are the other research institutes involved in the network project.

Kerala: The floods hit this farmer more than meningitis did

https://www.thehindu.com/news/national/kerala/the-floods-hit-this-farmer-more-than-meningitis-did/article24514406.ece

At the age of 22, he suffered meningitis that left him in the ICU for nine months and permanently paralysed both his arms. Despite having physical limitations, he overcame all odds to become a successful farmer. But Sham Roy, 50, now feels that he is finally defeated by nature’s fury as he has lost everything after floods washed away his model fish farm spread over 1.65 ha, plantains and livestock at Edathua in Kuttanad. “We had suffered losses last year and were looking towards a bumper harvest from the fish farm to compensate it. However, the floods have shattered all our dreams and thrown our lives into total disarray,” he told The Hindu. Mr. Roy, winner of several awards for best practices in the farming sector, had been growing 1.7 lakh fish, including Catla, Rohu, Anabas, Grass Carp, and Tilapia. “Except Anabas, the rest of the fish had attained growth and were ready for harvest.

Although, we made arrangements including fencing to prevent the flooding of our farm, the floodwaters have swept everything. We have suffered a loss of Rs.9 lakh, including Rs.8 lakh in fish farming alone,” he says. As he count the losses, the spectre of loan recovery from banks is looming large over his family. Government subsidy “I am eligible for 50% government subsidy, which comes to around Rs.2.5 lakh. The government has already provided Rs.75,000 and the rest will only be received after harvest. Now, I’m not going to get that amount. Further, I have taken two loans, Rs.4.5 lakh from the Kalavoor Cooperative Society and another Rs.95,000 from the Kerala State Handicapped Persons Welfare Corporation.

The Corporation has already served a notice with a deadline of July 31 to pay ?1.17 lakh,” Mr. Roy says. Preliminary report Fish Farmers’ Development Agency (FFDA) project coordinator Aruna S. Andrews said that they had submitted a preliminary report to the State government. “Model fish farms in 37 ha have been destroyed. We are on the process of determining the damages,” Ms. Andrews said. The floods have affected all kinds of farmers in the Kuttanad region. According to the Agriculture Department officials, crop in 9,765 ha has been damaged either due to bund breaches or by flooding.
Kerala: Govt panel denies use of formalin in fish


A Kerala government-appointed committee for welfare of fishermen and allied workers has ruled out involvement of Kerala fishermen in supplying and transporting formalin-laced fish to the state of Goa in the wake of allegations that such laced fish was coming from the southern coastal states. The Kerala committee, led by its chairman C Krishanan and along with K Dasan, C K Nanu, M Naushad, M Vincent besides Geetha Gopi and N A Nellikkunnu, briefed media persons in Vasco on Wednesday in the presence of Vasco MLA Carlos Almeida, vice president of All India Malayalee Association T Ravishankar, AIMA Goa unit president Lalu Abraham and its secretary C Prasad. The committee is on a study tour to Goa in order to know the working of fishermen and their problems. The committee will visit other states-Gujarat Rajasthan and Delhi.

The report pertaining to the problems and working of fishing communities from all the visiting states will be submitted to the Kerala government in order to implement new schemes, if any, for the betterment of the fishing community in Kerala state. “The charges levelled by some fishermen of Goa mentioning name of Kerala state and their fishermen in transporting and supplying formalin-laced fish are baseless and false. Kerala government has seized thousand kilos of fish with formalin and has also attached vehicles involved in transportation from some other states (not Goa). The Kerala government is ensuring no formalin-laced fish is transported to any of the states in India and, therefore, a strict vigil is maintained at the borders by concerned authorities,” said Krishanan. The prices of fish in Kerala have come down to a great extent due to formalin controversy, he added.

“There are some powerful people involved in transporting and supplying formalin-laced fish, however, names of locals and innocent fishermen are being dragged into the controversy,” said Vincent. “On behalf of Kerala government, we can assure the Goan people that no fish with formalin will come to Goa from Kerala,” said Vincent and stated that a joint effort of Central and state government was needed to bring in a legislation to ensure good fish availability in the country. The committee members said that the fishermen in Kerala are dependent on fishing activities and that they earn their livelihood through fishing business. “The Kerala government has resolved all the issues of the fishermen community, on priority. The Kerala government has made a budgetary provision of Rs 2,000 crore for the fishing community and also spends crore of rupees on students from that community;” said the committee members. It was disclosed that the government in Kerala, under Sagarmala project, is constructing coastal highway connecting North and South Kerala by investing Rs 5,000 crore which would benefit the fishing community.

Vasco MLA Almeida expressed gratitude to the Kerala legislators for their visit to Goa and clarifying the issue in order to strengthen the bond between Goa and Kerala. He said that thousands of people from Kerala are settled in Goa and that they have made immense
contribution in various fields such as education, health and others. Earlier, Kerala legislators visited Mormugao Port and thanked the MPT authorities for rendering help in terms of medication, food, water, diesel etc to the distressed fishermen from Kerala during Ockhi cyclone.

Kerala: Stateâ€™s fisher societies to sell toxin-free fish


In the wake of increasing incidents of the seizure of formalin-laced fish, the state government has intensified its efforts to promote fishermen societies to set up stalls selling fish safe for consumption. One of the chemical-free fish marketing chains was launched at Cheranalloor on Sunday. The unit will sell fish bred through cage farming and in ponds using natural fish feed.

“Nowadays, people are going after chemical-free natural products. They are ready to buy such products from any centre which can guarantee their safety and health. Hence, the efforts by the Cheranalloor Society is praiseworthy,” said Fisheries Minister J Mercykutty Amma. She said the major challenge faced by fish farmers is the increase in the price of fish feeds. “The government will take steps to make sure fish feeds are available to the farmers at a reasonable price. The government has succeeded in encouraging people to venture into fish farming.

We are confident of bringing in more self-help groups into the production of good quality fish feeds,” she said. The Cheranalloor unit will also sell organic vegetables cultivated using natural manure. Min bats for self-sufficiency in fish seed production Facilities like the aquaculture training centre in Njarakkal will help the government’s efforts to attain self-sufficiency in fish seed production, Fisheries Minister J Mercykutty Amma said here on Sunday. Inaugurating the facility, she said the agriculture and fishing sectors should be strengthened for the state’s economic growth. “For inland farming, the biggest challenge is the non-availability of quality fish seeds. Hence, it is necessary to attain self-sufficiency in fish seed production. The Pokkali fields, which are used for fish and prawn farming during offseason, will help in seed production to an extent,” she said. “We will take steps to expand Pokkali farming in all the available areas suited for it,” she said.

Kerala: Ockhi widows lend govt compensation for a living


Repaying the steep loans of their husbands was a priority for the women widowed during Cyclone Ockhi. Having done this with the first instalment of ¢10 lakh the government gave to the kin of missing fishermen (declared dead), the widows lent a sizeable portion of the remaining amount. The interest they get helps to meet their monthly expenses. Most of the fishermen who died at sea had bought boats on loan. Seven months after they lost their sole breadwinner and
their vessel, the women, while waiting for the government jobs that were promised, are grappling with the burden of debts which their husbands had left them. Some boats were less than a year old, and so the debts amount to several lakhs.

A widow from Thatheyupuram, who did not want to be named, had to repay a loan of `9 lakh. Her husband, and three others, had bought a boat a few months before the cyclone hit last November. She lent the remaining `1 lakh to her friends and family. "I get `2,000 per month as interest. It helps me get monthly provisions, but it is not enough," she said. Some of her friends have lent up to `8 lakh. Another 26-year-old widow, a mother of two, has lent `6 lakh to two people in her village. "I get an interest of `12,000 a month. It is decent for me to run my family. I am not greedy. I gave the money on loan as advised by my family and well-wishers as the interest from the bank would be much lesser," she said, and added that she is determined not to spend from the second instalment. The loan system works on trust and understanding with no written surety for the money lent.

"The borrowers are known to us. We believe that they will not cheat us. The village elders and families of the lenders and borrowers are made aware of the transaction," said a young widow. Father Darwin Peter, the parish priest of St Mary’s Church in Vallavilai village, where nearly 33 fishermen died during the cyclone, said that most women have lent a part of their compensation. "I advised them not to depend on it and to learn some skill and start a living till the government gives them a job," he said. But some women who interacted with TOI, said they were forced to depend on the interest for a living. They hoped that getting a government job would ease their financial situation. The families are determined to save the second instalment, to be credited to their bank account in September, for their children’s future.

They plan to use the interest from the bank for their children’s education. For a few of them, the cyclone had shattered their lives in a way that the compensation hardly can provide any security for the future. Jeena, 29, of Thoothoor whose husband Sanjeev died at sea has to repay the housing loan of `14 lakh borrowed last year. A mother of two girls, she has spent a major share of the first instalment to repay the loan. She will be using a sizeable portion of the second instalment too, leaving her with a few lakhs to maintain her family. It is for women like her that a government job is the only hope. The fisheries department officials said they have sent a detailed list of beneficiaries to the government and they are waiting for the orders to be handed over to them.

**Kerala: In this coastal village in Kerala, sea is both the benefactor and the adversary**


When 53-year-old Rita Arackal and her family went to bed on Sunday night, sleep just wouldn’t come to them. They would twist and turn, but they could hardly close their eyes. In their two-
room humble home situated less than 100 metres from the Arabian sea, sleep was very often a luxury. On Sunday, as fierce rain pounded hard on the tiled roof, they could hear the sea waves crashing against the coast. By midnight, seawater, aided by rain, began seeping into their compound, inch by inch. By 4 am, when Rita awoke to the sound of gurgling water, her worst fears had come true. The sea had truly entered her home, the second time in less than a year. Rita’s home in Chellanam, a tiny village wedged in between the sea and the backwaters located 20 kilometres off Kochi, is not the only one troubled by sea erosion.

Clobbered by torrential rain over the past few days, over 100 households in the village are reported to have suffered extensive damage sending close to 1500 people scurrying off to the nearest relief camp set up by the government. Every monsoon, the story is the same in Chellanam. “When the sea gets rough, people are rushed to the relief camp at the nearby St Mary’s High School. This is the constant practice here. There’s never been any change,” said Augustine, 52, a local fisherman. A sturdy sea-wall accompanied by groynes, which would be able to check sea-erosion, has been the long-lasting demand of the people of Chellanam. When Cyclone Ockhi swept through the Kerala coast and flooded homes in the village last year, the locals, determined not to allow the situation slip out of their hands, sat on a hunger strike for weeks. Finally, the government’s hand was forced and the district authorities gave administrative sanction to build a seawall and geotubes (polymeric bags filled with sand) to provide resistance against a rough sea.

However, six months later, the district administration has nothing to show for in Chellanam on the status of the project. “We had brought in geobags from Gujarat as a temporary measure until the monsoon recedes. It should have remained for about four months. But, clearly, they have been washed away. Honestly, we did not predict such strong erosion of the sea,” said Sheela Devi, Ernakulam deputy collector. “Building a seawall is a big project. We need stone boulders. But because the quarries are scarce, we are not getting boulders,” she added. When IndianExpress.com visited Rita’s home on Monday afternoon, she stood knee-deep in water in front of her home. A hundred meters away, giant waves, as high as 15 feet, crashed one after the other against parts of a concrete wall that now lay in tatters. As coconut trees swayed violently in the wind, the remnants of the sandbags, deposited by the local authorities, were there for everyone to see.

The sea-water, overcoming a bunch of scattered boulders, kept flowing through a narrow lane, past sandbags deposited at the entrances of homes, into Rita’s front-yard and finally into the bedrooms and kitchen of her home. Steel utensils, coconuts and plastic furniture, all parts of the house’s interiors, now floated listlessly in the front-yard. “Enthoru avastha aanu ithu (What a situation this is!),” sighed Rita, standing in the front-yard. Inside, her aged mother, Mariakutty (85), lying on a bed surrounded by water, cried out in pain. “Ente mone (My son),” she calls out. “How can we leave her alone? My son, daughter-in-law and grandchild went to the relief camp. I stayed here to look after her. Last time, when Ockhi came, we somehow lifted her and ran out.
But this time, the water level has gone much higher,” says Rita. “Since morning, we are shivering because of the cold.

We can’t even cook food. Even if we could, would it go down our throats?” she asks, with a distinct sign of helplessness. Back at the relief camp, set up at the local high school, hundreds of people, mostly women, sat in small groups in the corridors and classrooms, sharing nuggets of how they escaped the rising water. A separate corner of the school has been turned into a makeshift kitchen, with the locals hunched over massive vessels in which food is being prepared for the camp-mates. While rice, vegetables and water have been provided by the authorities, the women have taken responsibility of cooking food for the village. KD Prasad, vice-president of the local panchayat, said people would be asked to remain at the relief camp until the water subsides and the sea becomes silent. But that would take a few days as the India Meteorological Department (IMD) has predicted more rain in the days to come.

Since the sea is rough, fishermen have been advised not to venture out as well. “We are getting food three times a day. It’s comfortable but we cannot stay here for long. We will leave the moment they permit us to go. I am praying to the Lord to save all of us,” says 64-year-old Subhadra, sitting on a wooden bench in the school corridor. Her friend, 60-year-old Sarasu, sitting beside her, has bigger problems on her mind. Back in her flooded home, she says, her partially-blind husband is giving her daughter, who recently underwent a heart surgery, company. “She (her daughter) didn’t want to come, wading through the water. So right now, she is on the bed, probably under three layers of blankets, shivering in the cold. What can we do? We honestly don’t know how to survive,” she murmured, as her words got lost in a clap of thunder indicating a fresh spell of rain. Staring at the dark clouds in the sky now accumulating over the school, the brows on Sarasu’s forehead tightened. “Ee varunna mazhakku nammude pera mungum (In this spell of rain, our home will sink),” she said.

Kerala: Fisheries sector must take initiative to protect marine wealth


The fisheries sector should take the initiative to protect the marine wealth, Fisheries Minister J Mercykutty Amma has said. “We are not able to fully utilise the possibilities in the fisheries sector and to achieve this, we should develop new technologies,” the minister said. She was inaugurating the annual convention of College of Fisheries Panangad Alumni Association (COFPAA), ‘SHOLE 2018’ here on Sunday. The minister honoured Laly S K and Priya E R, scientists of the Central Institute of Fisheries Technology (CIFT) who developed the kits to detect chemical contamination in fish. Several self-employed people working in the fisheries sector were also honoured during the event.
Kerala: Checks on juvenile fishing intensified

https://www.thehindu.com/news/cities/Kochi/checks-on-juvenile-fishing-intensified/article24402469.ece

In the backdrop of rampant juvenile fishing, the Fisheries Department has swung into action, carrying out checks on fishing boats arriving with catch at fish landing centres in the district. An official of the department said that two boats had been detained on Wednesday after the department received information that juvenile mackerels had been caught. However, the official said that on examining the fish, it was found that the bulk of them was not below the minimum legal size prescribed by the State government. However, the boat owners and fishermen were let off with a warning against engaging in juvenile fishing. The official said that the department was also conducting inspections to prevent unhealthy fishing practices like pelagic trawling in which two boats are used as a pair to fish. Charles George of Matsya Thozhilali Aikya Vedi said that there had been reports of pair trawling off the shores of Alappuzha, Ernakulam, and Thrissur recently, and that the department should take action against such practices.

He added that both traditional fishermen and boat owners had agreed to refrain from juvenile fishing, and that initial reports on juvenile mackerels being caught were bad news owing to the precarious fish availability situation off the Kerala coast. He appealed to the Fisheries Department to take stringent action against any boat engaged in juvenile fishing and called for awareness campaigns among fishermen about the danger to fish resources posed by juvenile fishing. Mr. George claimed that traditional fishermen had adhered to the call for refraining from juvenile fishing in the past, but that the Chellanam incident on Wednesday was a pointer that the community needed to be made aware of the situation. A meeting is being convened on Friday to discuss the issues as traditional fishermen in Ernakulam district have followed the norm against juvenile fishing so far, he said.

Kerala: Fisherfolk at sea: Rise in incidents of ships colliding with fishing boats


While incidents of ships colliding with fishing boats causing concern among fishermen, officers with the Mercantile Marine Department and Fisheries Department opine that there is a need to improve safety features and ensure the safety of fishermen at sea. “There is a pattern in these midsea collisions. The Government of India has ensured the safety of fishermen at sea in the Nation policy on marine fisheries. These steps should be implemented. The ships have to alert the fishing vessels in its course to avoid collision. Though merchant vessels proceeding to international destinations do not have to move closer to the shore, many vessels enter the coastal sea illegally to facilitate their Indian crew to use their mobile phones. The government should initiate action against the ships violating the norms,” said Kerala Matsya Thozhilali Aikyavedi.
president Charles George. However, officers with the Mercantile Marine Department said Mayuree Naree, the Thailand registered ship that collided with Divine, the traditional fishing canoe, did not enter Kerala’s coastal sea.

“The ship was proceeding in the international waters 18 km off the coast and the traditional fishermen had entered international waters though they were supposed to fish only within 12 km from the shore. The accident occurred when the fishermen were resting and they didn’t notice the approaching ship. The ship crew also failed to alert the men in the boat. The ship was on its way from Gujarat to Paradip in Odisha and we have directed the captain to report at the nearest port,” said an officer with the Mercantile Marine Department. The Fisheries Department inspected the boat on Monday and found it completely damaged. The fishermen also lost their fishing gear.”

“We have informed the Directorate General of fishing and the Mercantile Marine Department. The coastal police have registered a case and we will help the fishermen fight the case legally.

A petition will be filed before the Kerala High Court within two days. The fishing boat is completely damaged and the loss is pegged at around Rs 20 lakh. The fishermen are eligible for compensation but we are not sure how much amount they will get,” said Fisheries Department Assistant Director K K Lajid. As per the operating guidelines issued by the International Maritime Organisation for ships operating in international routes, the captain of the ship should alert and issue a warning to the fishing vessels crossing the path of the ship. There is a helmsman in the ship who will be monitoring the course of the ship. If he sees a boat on the course of the ship he has to alert the captain. The captain should blow fog horn and if there is no response fire warning shots to alert the people in the boat. If the boat doesn’t move out of the path the captain should use water cannon to alert the boat driver. But the ships involved in the recent incidents of midsea collision didn’t follow these guidelines, said the leader of a fishermen organisation. “Most of the crew members of these ships will be Indians.


Kerala: Govt eyes bigger catch from inland fisheries

The government is working on a plan to double the output from inland fisheries by bringing more land under aquaculture. Fisheries Minister J. Mercykutty Amma said on Monday that moves were on to launch a programme targeting a production of 80,000 tonnes, double the current output from the sector. Addressing the media here, she said the fisheries policy to be announced soon would spell out measures to harness the immense potential of inland fisheries for the economic development of the State. “Aquaculture is confined to less than 4,000 hectares in Kerala, while studies have shown that 68,000 hectares can be used for the purpose. The State currently exports only Rs.5,400 crore of fish, with production unable to match the demand for domestic consumption and export.” New methods The government, she said, was committed to promoting aquaculture. Modern methods like cage culture, recirculatory aquaculture, and zero water exchange shrimp farming would be widely adopted.

The Minister said the government would intensify the drive against chemical contamination of fish. Formalin-laced ice The next step of the campaign would focus on investigations to detect the presence of formalin in the ice used for preserving fish. “Traders are reported to be using formalin-laced ice to maximise the quantum of fish in containers. Checks will be carried out to identify the source of contaminated ice and action taken against traders.” The Minister said Kerala would take the initiative to create a consensus among south Indian States against destructive and unsustainable fishing methods. “Efforts are on to convene a meeting of ministers in August to discuss the issue,” the Minister said. Rs.2 crore as fine She said the government had collected a fine of Rs.2 crore from fishing boats violating the ban on juvenile fishing. The crackdown had succeeded in curbing the practice among fishermen from Kerala, she said, adding that it would take similar action by other States to arrest the decline in fish stocks.

Kerala: Fishermen upset with the regular weather warnings issued by Meteorological Department and the Fisheries Department


While the traditional fishermen in Kerala coast have been getting a fairly good catch due to the trawling ban and the onset of monsoon, the frequent weather warnings issued by the Meteorological Department and the Fisheries Department have left them upset. Though it is common for the sea to turn rough during monsoon season, the fishermen say they are receiving alerts almost every week cautioning them against venturing into the sea. On Saturday, the Meteorological Department issued an alert advising the fishermen not to venture into the sea as strong winds and rough to very rough sea conditions are likely over the Southwest, Central and North Arabian sea. “This is the season why we get a good catch.

The weather warnings will trigger panic among the fishermen and they will be restrained from venturing into the sea. This has adversely affected their livelihood. The IMD should divide
Kerala into three zones and issue warning on a zonal basis,” said Kerala Matsya Thozhilali Aikyavedi president Charles George. Fisheries Department deputy director S Mahesh said the department has been issuing regular alerts to caution the fishermen.

Tamil Nadu and Kerala: Rumours of formalin in fish hits trade


Rumours that fish sent from Tamil Nadu to Kerala was laced with formalin has affected the trade in the state, particularly in Chennai. With a ban on fishing along the west coast in place, fishermen in places like Kasimedu in Chennai had been sending most of the catch to Kerala and other places. The quantum of the loss is yet to be ascertained. In order to assuage buyers, officials of the fisheries department and the Food Safety and Standards Authority of India (FSSAI) conducted thorough checks at the fishing harbor and fish markets and found, apart from finding decayed fish in a couple of places, none laced with formalin. Search teams used a kit developed by Tamil Nadu Dr J Jayalithaa Fisheries University. FSSAI officials said they were working with the fisheries department on the issue and that fish samples were collected and tested in Tuticorin and Kanyakumari districts.

The fishermen, however, do not seem satisfied. South Indian Fishermen Welfare Association president K Bharathi said the government instead of just conducting checks should also spread awareness among people. "The fish that had formalin traces were sent from Andhra Pradesh to Kerala and not from Tamil Nadu," he added. Fishermen in the state had begun getting a good catch very recently after the ban ended but have again been hit by the rumours, he said. Tuna from Tamil Nadu was one of the most sought after in Kerala and used to fetch up to 120 per kg. Now, traders in Kerala have rejected it. "There are no takers even after the price was reduced," he said.

Kerala: Govt urged to check outside fish


The Kerala Swathanthra Matsya Thozhilali Union has alleged that there was an attempt, under political pressure, to suppress the inspection being done on fish brought from outside Kerala for chemical contamination. The fishers’ union said the government must take steps to prevent contaminated fish being brought into the State from outside. The checks must be carried out at the check-posts and consignments being brought by train too should be checked. File review plea

The union said the government should file a review petition on a High Court order, which said that trawling ban is applicable to traditional fishermen too.
The traditional fishermen do not use trawl nets and the matter should be properly explained to the court, the union said. The fishers said they should be taken into confidence to bring about some regulations in the fisheries sector.

**Kerala: No restrictions on traditional fishers**


Even though the High Court has said the restrictions imposed by the State government during monsoon season fishing are applicable to traditional fishers also, the latter need not worry as traditional fishing does not involve bottom trawling, the Fisheries Director has clarified. There would be no change in the current situation that could stop traditional fishers from going to the sea, a statement issued by the Fisheries Director said. The High Court judgment said that the State government had the right to protect marine wealth and the interests of traditional fishermen. The judgment had been pronounced in a case filed by an organisation of boat owners in Kollam against the State government’s order banning bottom trawling by mechanised boats during monsoon season till July 31.

**Kerala: Formalin fear hits traditional fishermen hard; middlemen reap benefits**


The seizure of nearly 9,600 kg of fish, preserved in toxic chemical formalin, last month has come as a dampener for traditional and small-scale fishermen in Kerala. Following the formalin scare, fresh catch is being procured by middlemen at an alarmingly lower rate. The fishermen who were selling mackerel fish for Rs 40-50, a week ago, are being forced to give them away for a meagre Rs 2. The soaring oil prices are also adding fuel to the exploitation of fishermen by both wholesalers and middlemen. "For the last one week, our vulnerable situation has been encashed by middlemen who buy products at a nominal rate. The fish thus procured are usually preserved and sold back when the prices go back to normalcy. Every day we have to spend around Rs 3,500-4000 for venturing into the sea. It is disheartening for us as we are not even able to get back Rs 500," says Napolean Louis, a fisherman from Pulluvila.

Lack of support mechanisms or famine packages from the government during distress period is a serious problem being faced by the fishermen community. "Government bodies such as Matsyafed’s intervention should be enhanced and the agency should directly take part in the auctioning of fish in all harbours across Kerala. Such efforts should be done at least during crisis situations," said T Peters, President, National Fish Workers Forum. “Currently, this is the harvest season, and we generally expect some good returns during this period. But this year, owing to the Formalin scare, there is hardly any demand for fish. People with vested interests are spreading
rumours to make people believe that the entire fish being sold in the state is poisonous," said Mariadora, a fish vendor from Kollam.

"The rumours being spread against traditional fishermen are baseless. There is a strong lobby of poultry owners and online fish-sellers working behind such rumours", said T Peter. Lack of effective checking at toll gates and railway stations also poses a major hurdle to prevent adulterated fish in the state. According to Charles George, President of the Kerala Matsya Thozhilali Aikyavedi (Kerala Fisheries Workers Union), "A collaborative effort by health, food safety, fisheries and Local Self Government departments can settle the issue to an extent. Effective check on formalin usage has to be started from ice-manufacturing stages." In order to counter the rumours, a group of fisherfolks from the coastal area held a demonstration in front of the Secretariat by cooking and serving fish delicacies to alleviate fear among the public. Following the series of demonstrations, the state government has ensured stringent punishment by reforming Kerala Fish Auctioning, Marketing and Quality Control Bill.

The legislation, which is expected to revamp the methods of sales and marketing is slated to be presented in the next Assembly session. Kerala Fisheries Minister J Mercykutty Amma had earlier told NIE that as the proposed Bill enlists stricter penalties for the miscreants, unhealthy practices in the fish sale could be rooted out. “With the FSSA having certain limitations, what we envision under the Kerala Fish Auctioning, Marketing and Quality Control Bill is to introduce penalties including a fine of Rs 1 lakh to Rs 2 lakh or imprisonment or both in cases of using adulterant substances in fish. Only such stringent provisions could address the menace to a certain extent,” said Mercykutty. The Food Safety Department had launched 'Operation Sagar Rani' last month with the special focus on fish stock, following a directive from the Health Minister K K Shailaja in this regard and a total of 21,600 kg of fish with formalin had been seized after kickstarting the initiative.

Kerala: KIIFB-funded project to improve marketing of fish


The Kerala Infrastructure Investment Fund Board (KIIFB) has approved a concept note by the Department of Fisheries for substantially improving the condition of schools in coastal areas across the State and to provide a fillip to efforts to help better marketing of fish. Ernakulam district is likely to get two modern markets under the proposed programme, approved by KIIFB. Fisheries Department sources said on Tuesday that as per the concept note, facilities at coastal schools would be improved and modern market facilities established. The proposal is for a total investment of ?480 crore in a phased manner. A detailed project report would be prepared on the basis of the concept note by Kerala State Industrial Development Corporation, sources said. Since KIIFB wants a special purpose vehicle (SPV) to carry out the programme, Kerala State
Coastal Area Development Corporation has been designated as the SPV, sources added. They said that once the project received the final approval, the programmes would be completed within three years.

Fish sales The proposed marketing programme comes close on the heels of efforts by the State government to crack down on sale of fish contaminated using dangerous chemicals. Extensive checks are now being carried out to detect consignments of fish arriving in the market. At the same time, Fisheries Minister J. Mercykutty Amma had recently reiterated that the government would clear the way for establishing a culture of direct sale of fish by the fishermen themselves. The Minister had said here on Saturday that the government endeavoured to establish the culture of direct marketing of quality fish by avoiding middlemen. Fisheries apex cooperative Matsya fed would be strengthened to speed up the process. Primary level fisheries cooperatives centred on fisheries harbours will be financially backed through Matsya fed to enter the fish auction process. The Minister had said, steps were taken to formulate laws to deal strictly with contamination of fish.

**Kerala: Fish traders left in limbo as demand plummets**


Close on the heels of the seizure of formalin-laced fish stock under Operation Sagar Rani, the prices of fish being brought here for sale from other States have plummeted along with the fall in demand. The most-sought-after fish varieties like sardine and mackerel are now priced between Rs.100 and Rs.140 a kg as buyers remain apprehensive of contaminated stock in the market. The prices of these varieties had crossed ?200 after trawling ban came into force. “Though the catch from coastal areas is absolutely free from dangerous preservatives, buyers are seemingly reluctant to believe it. A majority of local fish traders are now finding it hard to clear the stock every day,” says P. Shibu, a fish merchant.

He also points out that buyers are insistent on the supply of local catch though clean fish brought from neighbouring States are available at lower prices. Meanwhile, large-scale traders are procuring less quantity of fish from non-Kerala suppliers. Till recently, local markets had been banking on non-Kerala stock to meet daily demand following trawling ban. “Usually, the trawling ban period is the ripe time for local fishers to earn a little extra with the help of country boats. However, with the steep decline in prices, they too are struggling to have a profitable business after the day’s toil,” says Rajesh, a fisherman from Puthiyangadi. He complains that large-scale buyers at harbours too are not paying well for the stock citing propagations about contaminated fish.

People flock to harbours The number of people who visit the harbours to buy fresh fish has gone up after the seizure of formalin-laced fish stock. However, wholesale trade is proving impractical
unless those who purchase fish in small quantities come together to participate in bulk auctioning. As boat owners, agents, and fishers are not interested in entertaining small-scale buyers, getting small quantities of fresh fish from harbours continues to be a hard task. Moreover, the setting up of kiosks for small-scale buyers too has remained a non-starter. Meanwhile, the corporation authorities confirm that they will continue with safety inspections at harbours and fish markets to prevent all possible attempts to sell contaminated fish in the open market. Though no unhealthy stock has been seized from the city, inspections will continue in view of public safety, they say. Various fishermen’s organisations too have come out in support of the stringent enforcement measures.

Kerala: New law to prevent adulteration of fish, says Kerala Fisheries Minister J Mercykutty Amma


Welcoming the Kerala High Court decision to strictly implement trawling ban rules, Fisheries Minister J Mercykutty Amma on Saturday it will not impact the traditional fishermen who operate on small boats. “The government will introduce a new bill to ensure that good quality fish arrive in markets and to empower fishermen against exploitation by middlemen,” the minister said while addressing a gathering as part of the inauguration of the Matsyafed District Office at Thoppumpady in Kochi. She said the High Court order will not affect country fishing boats, which operate even during the trawling ban season. However, there are reports that even small boats are netting juvenile fish which are against the law. Strict action will be taken against those involved in juvenile fishing. Following the implementation of various preventive measures, the fish wealth has increased by 12 per cent last year.

The government collected more than `2 crore as the fine amount from people involved in juvenile fishing during the past two years. “A bill will be introduced in the Assembly enabling the fishermen community to decide the price and conduct the auctioning. They can ensure good quality fish reach the markets. We will ensure the prices of the fish sold in Kerala are fixed by fishermen and not middlemen. The new law also ensures stringent punishment against those who engage in adulteration of fish. We will also increase checking at ice plants,” she said. Mercykutty Amma promised Matsyafed’s activities will be enhanced by which the agency can directly take part in the auctioning of fish in all harbours across Kerala. The welfare organisations representing fishermen communities will be strengthened. These organisations will be provided with funds so that they can take part in the auctioning at harbours. Loans will be provided to these bodies through Matsyafed. According to Mercykutty Amma, adulterated fish come to Kerala from other states. A kit has been developed to check adulterated fish.
Kerala: Cage-farming project to augment fish production


State-run Central Marine Fisheries Research Institute (CMFRI) will implement a Rs 15-crore cage-farming project in Kerala to increase the domestic fish production, CMFRI said on Thursday. India is the second-largest fish producer in the world after China and accounts for nearly 6% of global fish production. The programme is aimed at improving the living standards of those in the coastal regions of the state, besides ensuring availability of quality and fresh fish across the state. CMFRI will help in setting up 500 cage farming units which can rear species such as sea bass, pearl spot, cobia, pompano and red snapper. Marine Products Export Development Authority (MPEDA) had recently commissioned a multi-species aquaculture complex at Vallarpadam in Kochi. The farmers will be offered subsidy and technical support to carry out the cage culture under the scheme, which is funded by the National Fisheries Development Board (NFDB), Hyderabad.

The programme assumes significance in the wake of discussions on the quality of fishes coming into Kerala from other states. According to CMFRI sources, 40% of the total expense will be given as subsidy to the farmers who can conduct farming individually or in groups. Women and those from the SC/ST category will get 60% subsidy. In addition, three Aqua One Labs will be set up in the state to help farmers for the smooth conduct of the cage farming. The Lab will provide services such as water quality check, sediment analysis, seed transportation, disease management, among others. CMFRI will also manage setting up of a small scale fish feed mill by providing subsidy. Approval will be given only after the CMFRI team reviews the spot and various conditions of the water resources for farming, including environmental factors. Increased catch of oil sardines from the coast helped Kerala attain a growth of nearly 12% in the marine fish landings in 2017 with a total catch of 5.85 lakh tonne against 5.23 lakh tonne in 2016.

Kerala: Matsyafed to supply chemical-free fish


At a time when toxic chemical-laced fish continues to threaten public health, Matsyafed is set to roll out a novel programme, “Shore to market,” for ensuring both better return to fishermen for their catch and safe fish for consumption. Under the programme, a cold chain will be set in motion whereby fish brought to the shore by fishermen will be collected at fishermen cooperatives from where vehicles of Matsyafed will deliver them at markets. Fish booths, fish supermarkets, and regional fish markets would be used for the project, said Matsyafed chairman P.P. Chitharanjan at a press conference here on Wednesday. Already, 33 booths had been set up and four markets had been refurbished. Hundred more fish booths would be started at various
locations as and when the local bodies concerned handed over land. Construction of five booths had already started. The district offices of Matsyafed were being turned into fishermen-friendly centres for meeting their varied needs ranging from fuel bunks and Vyasa stores for fishing equipment to workshops.

The ground floor of such a fishermen-friendly centre in Ernakulam would be inaugurated by the Fisheries Minister on June 30. The construction work of the first floor would be launched on the occasion. Preliminary steps towards setting up similar centres in Kollam, Alappuzha, and Kasaragod districts had already been taken. Fish markets in dilapidated conditions will be given a facelift using the funds of people’s representatives, local bodies and Matsyafed. Besides, a slew of measures such as mobile fish mart in Thiruvananthapuram, fish storage base station at Vizhinjam, four new fish marts, independent status to the base station in Kottayam, organisation of feast of fishes during festivals had also been undertaken during 2017-18 for distribution of safe fish. Matsyafed is in the process of drawing up a master plan for the development of tourism projects at its fish farms at Njarakkal and Malappuram, said Mr. Chitharanjan.

Kerala: Despite norms, juvenile fishing rampant

https://www.thehindu.com/todays-paper/tp-national/tp-kerala/juvenile-fishing-goes-unchecked/article24266819.ece

If the huge mounds at Neendakara harbour is anything to go by, juvenile fishing remains a regular affair despite stringent rules against catching fish below minimum legal size. Hauled to shore by inboard engine boats using ring seine nets, this particular volume of their daily catch usually ends up in manure-manufacturing units outside Kerala. “While motorised boats stay off waters during the trawling ban, these boats, ‘kappal vallam’ in local parlance, cause considerable damage by trapping juvenile fish. In no other coastal State in India this practice is allowed during the breeding season,” Peter Mathias, president, All Kerala Fishing Boat Operators Association, says. With the trawling ban in force, only non-motorised country boats and fibre-reinforced plastic (FRP) boats are currently allowed into the sea. Yet, huge masses of juvenile fish are brought to the harbour since many boats do not use nets with legal mesh size.

“In ring seine nets, the mesh size is much smaller that makes it impossible for the juvenile fish to survive. June and July are the spawning season of fish like sardine and mackerel, and reckless juvenile fishing over the years has contributed to the vanishing of several fish species,” he adds. Mr. Mathias says Kerala has over 38,000 registered boats, among which only 3,800 are motorised. “That means more than 34,000 craft are currently operating within 12 nautical miles of territorial waters that includes nearly 700 inboard motor boats. If they do not allow this window for the fish stock to be replenished, there will be a steep decline in marine wealth,” he says. If laws against juvenile fishing are not enforced, in can lead to irreparable consequences in
long run, says V.K. Madhusoodan, a member of the environment committee of Kerala Sasthra Sahithya Parishad.

“If our annual sardine catch had been over 3.5 lakh tonnes earlier, it dipped to just 45,000 tonnes in 2016. It has slightly improved now and there are many factors, including temperature, that affect fish population. When traditional fishermen can avoid juvenile fish, boats using nets with the wrong mesh size cannot help it. The government should at least make sure that the boats are using nets with the legal mesh size,” he says. Threat to livelihood According to traditional fishermen, these boats catching juvenile fish to meet the demand of manure factories pose an enormous threat to their livelihood. “We want the trawling ban to be extended to three months as conserving the marine wealth is of foremost importance to us. But if these boats are allowed, there is no point in implementing the ban as they exhaust the fish stock,” says A. Andrews, district secretary, Kerala Swatantra Matsyathozhilali Federation. Mr. Andrews also alleges that none of the enforcing agencies are regulating this practice.

Kerala: Govt to crackdown on chemical contamination of fish/ Traders to face legal action


Minister for Health and Food Safety K.K. Shailaja has directed officials to take stern action against chemical contamination of fish imported from other States. Emerging from a meeting with food safety officials here on Tuesday, following the detection of a consignment of shrimp treated with formalin for preservation, she said inspections would be stepped up at all border check-posts and markets under Operation Sagar Rani. The police would be called in to assist officials. The Minister said officials had been directed to register a case if preliminary tests on fish samples detected hazardous chemicals. Prosecution: This would be followed by prosecution after detailed tests. Drivers transporting contaminated fish without proper documents would also face legal action. The entire supply chain would be held accountable.

Ms. Shailaja said boats bringing fish from the sea would also be inspected. Registration would be made mandatory for middlemen in the fish trade. Food safety officials would accompany the seized consignment back to the place of origin to ensure that it was properly disposed of. The government would seek a report from the Food Safety Commissioner and officials in the States concerned on the action taken. More than 28,000 kg of contaminated fish were seized from various border check-posts as part of Operation Sagar Rani since June 9 when the monsoon trawling ban came into effect. The Minister said the model food safety panchayat scheme would be rolled out across the State. The paper strip developed by the Central Institute of Fisheries Technology would be made available for the public to test samples for the presence of formalin.

Additional Chief Secretary (Health) Rajeev Sadanandan and Food Safety Commissioner M.G. Rajamanikyam were among those who attended the meeting. Meanwhile, the Kerala State
Human Rights Commission (KSHRC) has sought a report from the government on the steps taken against chemical contamination of fish. KSHRC member P. Mohanadas issued directions to the Chief Secretary, Health Secretary, and Food Safety Commissioner to furnish the details within three weeks. Demonstration: The Kerala Swathantra Matsya Thozhilali Federation staged a demonstration in front of the Secretariat here on Tuesday urging the government to crack down on unscrupulous large-scale traders from other States who resorted to the use of hazardous chemicals for preservation of fish. Fishworkers cooked fish and tapioca by the roadside and shared it with passers-by. National Fishworkers Forum general secretary T. Peter called on the government to slap non-bailable charges on such traders and promote the sale of fresh fish caught by traditional fishers.

Kerala: Toxic fish continues to haunt Kerala; 6,000 kg seized


In a major haul, 6,000 kg of fish, preserved in toxic chemical Formalin, was seized at the border check post of Walayar in northern Palakkad district today. The state Food Safety department officials foiled the attempt to ferry the chemical-mixed fish from Andhra Pradesh during a raid carried out as part of the 'Operation Sagar Rani,' a drive launched to ensure safety and hygiene at fish handling and distribution centres. As many as 6000 kg of prawns, brought in 45 lorries, was found mixed with Formalin, officials said. Last week, 12,000 kg of toxic fish, containing Formalin, was confiscated during raids in the state. Formalin is used to preserve dead bodies and prevent its decay in mortuaries. The widespread use of the deadly chemical now-a-days in preservation of fish, fruit and other food items is posing a great threat to public health. According to Food Safety official, the presence of Formalin was detected during the preliminary examination carried out using paper strips, developed by the Central Institute of Fisheries Technology.

Later, the complete fish load was sent to the chemical laboratory in Ernakulam district for further examination, they said. A 15-member-team of Food Safety officials from Kozhikode, Ernakulam and Palakkad, led by joint food safety commissioner, carried out the raid. The Food Safety Department recently intensified raids at the border check posts, with special focus on fish stock arriving from other states, following a directive from the Health Minister K K Shailaja in this regard. The minister had warned of stringent legal action against those who bring or sell chemically contaminated fish. The officials had seized a total of 12,000 kg of toxic fish, in two different raids in the state, last week. Of this, 6000 kg of fish, mixed with Formalin, was confiscated from Amaravila check post near here, while the rest was taken into custody from Walayar, they said. In view of frequent seizure of chemically contaminated fish, state Food Safety Commissioner, M G Rajamanickam issued orders to expand raids to local markets to detect chemical presence in fish.
The Kerala State Cooperation Federation for Fisheries Development (Matsyafed) will open ‘fresh fish’ supermarkets for boosting fish trade. The plan is to start 10 fish markets in three years. The first fish market will begin in Kottayam. The construction will begin on the land of Matsyafed. It will also be done in Ernakulam, Kollam, Thiruvananthapuram and Kozhikode. The fish market with modern facilities will be constructed on a 2000 to 3000 square feet land. All types of fresh fish, dried fish, frozen fish and fish pickles will be available in the market. The fish selected by the customer will be given by adding masala to make curry. They will also prepare dishes including ‘clay pot fish curry’ to attract the customers. The Matsyafed is collecting fish caught by traditional fishermen through Fishermen’s Cooperative Society. Around 30 types of fishes collected this way will reach the market for sale.

As the ‘Fishetarian mobile mart’ started in Thiruvananthapuram has become popular, three more marts will open soon. New mobile marts are starting in Kollam, Kottayam, and Kozhikode. The peculiarity of these marts is that they collect fish from traditional fishermen by 12pm and sell it to the customers within four hours. Another plan for starting ‘seafood kitchens’ on the pathways like Coffee house is under consideration. The restaurants are aimed at providing fish dishes to the customers. The first restaurant will start in Alappuzha. Fish marts to begin in 6 months. It is hoped that ‘Fresh fish supermarket’ will start working in 6 months. We have decided to begin more plans due to the acceptance from the people.

Fresh fish is fast becoming a reality for Kochiites with more than 400 cage farms coming up in and around the city. A good many are there right in the backwaters and near the islands including Kadamakudy, Pizhala and Vypin. Stretching right up to the end of the district till Kottapuram in Thrissur are another 100 cages. All you need is about Rs 3-4 lakh in investment and with all the subsidies that have been announced, it is going to become much more economical. Farmers say it requires no extra investment till harvest. “The fish is sold fresh and often at fairs. Invitations are sent to resident associations and on media. The farmers sell their own stuff and there are no middlemen involved.

The unsold fish are put back into the cages,” said Imeld Joseph, head, mariculture division, Central Marine Fisheries Research Institute (CMFRI), whose team helps in setting up the cages and trains the farmers in the business. She says that though cage farming was introduced in 2009,
it is from 2015 that the cage culture started catching up. The price of the same variety of fish vary when compared with those caught otherwise. For instance, pearl spot costs about Rs 400 when it is supplied from farms while it is more than Rs700 when it is caught by other means of fishing from backwaters. This is one reason why people are increasingly opting for fresh fish from cage farming. Cage farming also offers the farmers a chance to utilize the existing water resources which are not used for other purposes. All these factors together have helped increase the popularity of cage farming among both researchers as well as commercial producers. The farming season is mostly from the month of June to April. Mullets, tilapia, pearl spot and milkfish are among those which are commonly grown in these farms. The Krishivigyan Kendra (KVK), which works with the farmers, organizes what is called as the farmgate market organized during festive seasons or once a month and people can literally get the produce directly from the farms.

“We help the farmers form small companies and they manage all the aspects of the farming,” said Shinoj Subramannian, head, KVK. Hence, farmers have learnt to fix the rates, which are reasonable. “We have no worries about losses. If it is not sold, they are put back into the cages,” said a farmer. One of the main worries of farmers is the increasing pollution in rivers, including Periyar. “When industry units dump chemicals, it will kill our fish as well,” said Sreekumar, another farmer. “Cage farming helps clear the water pollution because people in the particular area get more watchful. Of course, during the monsoon, there is the threat of opening of dams which could result in floods that wash away the cages,” said Imelda Joseph. The farmers are also provided information about fish feed and their growth. One kg fish feed costs around Rs 40 and the protein content in the feed is around 35-38%. At later stages of growth, the protein content is reduced to around 24%. A major threat in fish farming is that diseases could spread across the water bodies and kill the entire lot. But with an alert national and international fish disease network, farmers say they aren’t a worried lot. After all, it is a risk that can come up with any kind of farming.

Kerala: Plan to extend inland fish cultivation to more areas


The district fish farmers’ development agency (FFDA) is set to extend inland fish cultivation project to more areas in the district. Following the success of the first phase of the Blue Revolution, the agency, the nodal firm for implementing the project, is set to roll out the second phase of the Blue Revolution in Kozhikode. According to figures available with FFDA, they already have 10 units of aquaponics, four units of brackish water fish cages and another two hectares of under fresh water fishery. The units started operation nearly 10 months ago and are continuing its operation in the district. The agency, however, is getting fewer takers for genetically-improved farmed tilapia (GIFT) cultivation. Though the target for the first phase of
was three hectares, they could not find farmers to achieve the target. “The limited number of fresh water ponds having 50 cent area in the district is the major reason why we could not achieve the target in GIFT cultivation,” said Dhanya Sunny, district project coordinator of Blue Revolution.

Besides, the pond for cultivation should not be situated in flood or other calamity-prone area, and should be completely disconnected from other water bodies, she added. Though the central government-aided Blue Revolution invites individuals, groups and farmers’ clubs for inland fish cultivation, over 90% of the takers in Kozhikode are individuals. The farmers either use own ponds or lease ponds for cultivating fish. The agency is planning to expand inland fish farming by inviting more farmers for brackish water-caged fish cultivation, re-circulatory aquaculture system and other methods. Individuals, groups and farmers clubs can participate in the project. The plan is to utilize maximum number of private ponds and other facilities in the district for achieving Blue Revolution. The project also aims to ensure better market facilities for fish farmers from the district. The coordinators hope to tap the potential of unused water bodies by introducing fish cultivation. Though GIFT farming requires ponds with not less than 50 cent area, any pond with more than 10 cent area could be used for cultivating other varieties, said the project coordinator.

Kerala: CRZ notification will take away state’s right over waterbodies


The proposed amendments in the Coastal Regulation Zone (CRZ) will lead to the destruction of mangrove forests and pokkali fields in the state. It will take away the state’s rights over the water bodies and lead to a decrease in fisheries resources, said Kerala University of Fisheries and Ocean Studies (KUFOS) former Vice-Chancellor B Madhusoodana Kurup. He was delivering the keynote address at the workshop on ‘Emerging issues of new coastal regulation zone notification’ organised by School of Industrial Fisheries, Cusat; Kerala Sasthra Sahithya Parishad and Kerala Matsya Thozhilali Aikyavedi at the Cusat School of Industrial Fisheries here on Saturday.

The workshop urged the Union Government to ensure the protection of the coastal ecosystem and the livelihood of the fishermen. Relaxations in the CRZ should be limited to the fishermen community, the stakeholders who attended the workshop urged the Centre. “We have decided to submit a memorandum to Minister for Environment and Forest Harsh Vardhan seeking to retain the special rights assured to Kerala,” said Kerala Matsya Thozhilali Aikyavedi president Charles George.
The government of Kerala, a state in South India, is turning to blockchain tech to organize the supply chain process of everyday groceries. The new project will specifically look to streamline the supply chain networks – including distribution – of milk, vegetables, and fish in the state using blockchain technology, the Press Trust of India reports. The Kerala Development and Innovation Strategic Council (K-DISC), the state’s think tank, will spearhead the project that will include RFID tags and the use of Internet of Things (IoT) devices to monitor transportation. With its implementation in the dairy sector, K-DISC chairman K M Abraham explained the blockchain will continuously monitor production, procurement, and distribution of milk to ensure speedy delivery to millions of people on a daily basis. In addition, the transportation of milk within specific temperatures in refrigerated trucks will also be monitored through RFID tags and IoT equipment.

Specifically, every single component of the supply chain network will have a separate ID that will be recorded on the blockchain, enabling real-time monitoring of the quality of the product at its source at every step of the chain. Fish-landing spots and farmlands will also be linked using geo-coded images, enabling real-time monitoring and verification of goods at every single step of the delivery process from warehouses and retail centers through to their point-of-sale locations of the customer. The Kerala government is also considering the use of blockchain technology for its crop insurance scheme afforded to farmers. The entire process will be ‘smarter and fool-proof’ to enable quicker processing and settlement of farmers’ claims due to crop losses from natural disasters including flood and famine, the think tank added.

Elaborating further, the authority explained blockchain technology will help ascertain if crop losses were indeed due to natural causes and will help negate disputes between insurance providers and farmers, alongside eliminating the need for middlemen altogether. Kerala is already home to a blockchain ‘academy’ in its capital city of Thiruvananthapuram wherein students are educated on blockchain solutions with a particular focus on the banking and healthcare sectors.

Kerala: Fishermen to be trained in disaster management

With emergency preparedness being the key to disaster management, the Fisheries Department has floated an idea to provide training to some 900 fishermen in the state in sea-related disasters. The proposal, which has been handed over to fisheries minister J Mercykutty Amma, is expected to be slated for approval in the next Cabinet meeting. As per the novel initiative, fishermen,
selected from 60 fishing villages, will be sent for training at Goa-based National Institute of Watersports and Mumbai-based Marine Training Academy in handling sea-related disasters. “What we plan to do is to raise up a dedicated team of fishermen having sound knowledge in handling sea-related disasters.

The fishermen who will be provided with hi-tech training in disaster management will then be designated as first responders during times of disaster,” said Mercykutty Amma. The minister said `7 crore has already been earmarked for the project. “The initiative will help the fisherfolks a lot as they will get an understanding on the interventions and activities to be undertaken when a disaster strikes. Though the Kerala State Disaster Management Authority (KSDMA) has been kept in the loop, the Fisheries Department is yet to come up with a detailed proposal on the project,” said Joe John George, State Project Officer, UNDP Project, KSDMA. M Thajudeen, deputy director (Marine), told ‘Express’ that the fishermen between the ages of 20 and 40 with ‘a sound knowledge’ on deepsea fishing will be selected for the programme.

Other than identifying 15 ‘able-bodied’ fishermen from each fishing villages, it has also been decided to identify five fishing vessels from each fishing villages which could be used during times of disasters, the deputy director said. “We will send the fishermen for a 20-day training programme at National Institute of Watersports. As it will be a certificate course, it will come handy in their job search too. The 900 fishermen will act like a reserve team. The department will seek their services as and when needed,” said Thajudeen. It is a fact that the department stated to think about such projects only after the Ockhi disaster. Indian Navy and Coast Guard had to turn to local fishermen for their advice during Ockhi rescue operations. “The local fishermen who venture into the sea have a good understanding of the waves and the wind than the enforcement agencies. We will cash in on that. The project will not only help the enrollees but will also help those who are around them,” said Mercykutty Amma.

Kerala: Coastal zone notification draws flak

http://www.thehindu.com/todays-paper/tp-national/tp-kerala/coastal-zone-notification-draws-flak/article24184065.ece

The present Coastal Regulation Zone (CRZ) notification will only benefit the real estate lobby in the country, Dominic Presentation, former Minister for Fisheries, has said. Inaugurating the State-level consultative workshop on ‘Emerging issues of new coastal regulation zone notification’ organised at the School of Industrial Fisheries, Cochin University of Science and Technology, here on Saturday, Mr. Presentation said developmental approach must give due importance to the fishermen community.

Kerala’s coastal zone is riddled with a number of natural calamities recently and it is also facing the negative impact of climate change, according to an official release quoting him. In his keynote address, B. Madhusoodana Kurup, former Vice Chancellor of Kerala University of
Fisheries and Ocean Studies, said the amendments to the recent notification weakened the existing regulation. The draft notification will take away the right of waterbodies from the State government. It will lead to a decrease in fisheries resources, besides adversely affecting the livelihood of fishermen, he observed. P. G. Sankaran, Pro-Vice Chancellor of Cusat, presided over the programme.

Kerala: Nationwide protests continue despite approaching deadline of coastal regulation notice


With June 16 set as the last date to receive public comments and suggestions on the Draft Coastal Regulation Zone (CRZ) Notification- 2018 released by the Union Ministry of Environment, Forests & Climate Change (MoEF&CC) on April 18 this year in the public domain, the fishers continue their nation-wide protest demanding to scrap the draft. In a novel protest, post cards will be sent on Wednesday to the fishing villages seeking to reject CRZ draft and to replace it with a comprehensive law to protect CRZ. While, the draft has raised concerns triggering a debate among scientists in Kerala. The fishers led by National Fish workers Forum (NFF) organised a nation wide public protest on June 11 raising the slogan ‘Restore our Coastline, Secure our Livelihoods’.

The coastal community had indicated that they will continue their agitation till such a notification is withdrawn by the Centre. “We will continue the nation-wide agitation to reject the draft CRZ which forms part of the Centre’s move to dilute CRZ rules permitting real estate and corporates even in the environmentally critical CRZ-1. We plan to send post cards to the fishers villages with the message to reject draft CRZ and to replace it with a comprehensive law to protect the coastal zone,” NFF general secretary T Peter told TOI. “On the pretext of tourism development and eco-tourism, even CRZ-1 region where no construction activity was permitted till date will now be taken over by real estate and corporate lobby. We will not permit the Centre to issue such a notification which is detrimental to the coastal zone, mangroves and environment. Such construction activity if permitted along the shores will deplete the marine fisheries and will prove a death knell to the livelihood of fishermen which cannot be permitted,” he said.

Existing CRZ notification 2011, refers to regions in the proximity of India’s 7000 km long shoreline where buildings, tourism facilities, industrial projects and residential facilities which are highly regulated. In most cases it begins from the high tide line (HTL) to about 500 metres towards the landward side. No construction activity is permitted in 500 metres from the coast according to the CRZ rules of 2011. It is sub-divided into regions based on proximity to the sea and to protect coast and environment. CRZ notification 2011 based on the Environment (Protection) Act, 1986 of the Centre was with a view to conserve and protect the unique
environment of coastal stretches and marine areas, besides livelihood security to the fishers and other local communities in the coastal areas and to promote sustainable development based on scientific principles taking into account the dangers of natural hazards, sea level rise due to global warming.

In 2011 notification, CRZ-1, classified as the environmentally most critical with ecologically sensitive areas comprising mangroves, sand dunes, coral reefs, turtles and birds nesting ground is a highly protected zone with no construction activity permitted. CRZ-II constitutes the developed land areas up to or close to the shoreline, within the existing municipal limits or in other existing legally designated urban areas, CRZ –III Land areas that are relatively undisturbed including rural areas along the coast and includes area up to 50 metres from the HTL on the landward side which is earmarked as the ’No Development Zone’ (NDZ). CRZ-IV constitutes the water area and sea bed area between the Low Tide Line (LTL) up to 12 nautical miles on the seaward side is earmarked as CRZ-IV A. Now, this current draft notification indicates that all development activities including eco-tourism may be permitted in CRZ-1 to CRZ-IV regions provided they conform to state-approved coastal zone management authorities (CZMA) plans.

“All development activities and projects in CRZ-I and CRZ-IV areas, which are regulated or permissible as per this notification, shall be dealt with by MOEF&CC for CRZ clearance, based on the recommendation of the concerned CZMA,” said officials of Kerala State Coastal Zone Management Authority (KSCZMA). While, senior scientists of Kerala State Council for Science Technology and Environment (KSCSTE) raised a mixed opinion on the draft as they point out that it lacks clarity and are concerned over certain sections which relax CRZ norms. KSCSTE chief scientist Dr Kamalakshan Kokkal told TOI that certain sections of the draft CRZ notification is more stringent than previous notification in 2011. “Current notification considers Vembanad backwater area as a ‘critically vulnerable coastal area’ with strict CRZ norms, while in 2011 notification, CRZ at Vembanad too was relaxed based on the area from HTL.

In the current draft notification, in CRZ-3A with a population density of above 2161 per sq.km, construction will be permitted 200 metres from HTL. But it is not clear whether it is HTL from sea, we presume it to be from sea. In villages with population density below 2161 per sq.km, classified as CRZ-3B no developments are permitted in 50 metres from HTL.“. If there is a state or national highway, CRZ is relaxed as constructions and resorts are permitted even in CRZ-3, though in certain areas it calls for approval by coastal zone management authority, he said. In this draft, CRZ rules applies only to public mangroves with a controlled buffer zone around and not to private mangroves. Earlier, Kerala had mangroves in about 830 sq. km. but it is also depleted with indiscriminate quarrying and now 50 sq.km and that too most of the mangroves is in private land.

So if it is implemented, Kerala will deplete most of its mangroves which will affect the environment as mangroves stabilises the coastline and prevents sea erosion, he said. KSCSTE
senior scientist P Harinarayanan also told TOI that though in this draft notification CRZ-3A is diluted permitting development after 50 metres from the HTL, it is expected to be more stringent as no construction in CRZ area will be permitted without a Coastal Zone Management Plan (CZMP) and eco-tourism projects will be permitted only in the identified tourism hotspots as designated and mapped by the tourism department”. “Even with existing CRZ rules, there are many violations by real estate and corporates. Now this draft notification by the Centre if implemented will offer leeway to their ambitions. This notification will not help protect the coastal zone, mangroves or environment in any way,” an environmental scientist from the State told TOI

Kerala: HC upholds ban on export of shark fin


First imposed, then relaxed and then re-imposed, the ban on export of shark fins has been upheld by the Kerala High Court. “Shark finning is a detestable fishing activity, leading to environmental and ecological calamities,” said the HC bench. Dried shark fin used to be exported from India as dried fish and in such good numbers that the country was its second largest exporter, say activists. The ban, which was first imposed in 2001, relaxed the same year owing to protests and then re-imposed in 2015 by Ministry of Commerce and Industry, was challenged by one marine produce exporter.

It said, “Shark fin has no domestic use, market, or value; but it has a high demand in North-East countries for making Chinese foods, soups etc. In other words, a domestically useless part of the shark is exported to foreign countries to earn much-needed foreign exchange for the country,”

The HC bench upheld the dismissal of the petition challenging the 2015 notification. The court said, “The maintenance of ecological balance demands zero tolerance.” The court also said that although hunting of shark is not banned, export its fin is as it gives way to “wholesale killing of sharks”, an endangered species.

Kerala: Oyster farming proves a financial boon for women self-help groups


Edible oyster farming seems to be providing sweet rewards for women self-help groups in Kerala, thanks to the initiatives of the Central Marine Fisheries Research Institute to commercialise the venture in backwaters and estuaries. If the recent bumper harvest of oysters and mussels by a 40-woman group near Kochi from around 16 units is any indication, these groups have successfully reaped an average of 1.5 tonnes from each unit. Currently there are 50 such groups across the State concentrating on oyster farming. Oyster meat is priced at Rs.600/kg,
while that of mussels is at Rs. 660/kg. Besides the live consumption of oysters is also on the rise in five star hotels, which is an emerging market.

Oyster farming was popularised in India through the National Agricultural Innovation Project funded by the World Bank in 2005. Later, CMFRI’s collateral efforts with the State Fisheries Department made it a profitable aquaculture venture practice along the coastal states, especially in Kerala and Maharashtra. In India, the commercial production of oyster was started in 1995 at Ashtamudi Lake in Kerala with an initial production of around 2 tonnes. Today, the figure has reached around 4,045 tonnes. Globally, China is the leading producer of oysters. Sunil Mohamed, Head of the Molluscan Fisheries Division, told BusinessLine that CMFRI oversees bivalve farming practices and oyster farming technology could very well be used to increase the income of women self-help groups in the coastal region. Simple technology Edible oyster culture, according to him, is a very simple technology and women farmers can easily understand these aspects through observation and practice.

The successful oyster farming developed by CMFRI is the ‘Rack and Ren’ method, using bamboo poles. About 25 poles are required to set up a 5x5-square-metre rack. The period between November-December is the ideal time to start farming in Kerala, which could be harvested in May. As there is no need for supplementary feed, oyster farming is less expensive compared to fish farming. The initial capital to set up the farming units is the major expense of the farming, he said. CMFRI has also developed a scientific method to clean oysters after the harvest, called depuration, a process of expelling contaminants from the gills and guts of oysters by providing them with good purified seawater before they are used for consumption. Oysters are rich in protein, lipids, carbohydrates, minerals (calcium, iron, copper, zinc, phosphorus) and vitamins. They are good sources of Vitamin B 12, Omega 3 fats, iron and zinc, which boost memory and brain functioning. Proteins in oysters are high in tyrosine, an amino acid that is used by the brain to help in regulating mood and adapting to stress.

Kerala: Stakeholders' workshop on emerging CRZ issues


Cochin University of Science and Technology(Cusat) in association with Kerala Sastra Sahitya Parishad and Kerala Matsyathozhilali Aikyavedi will organize a state-level stakeholders consultation workshop on 'Emerging issues on new coastal zone regulation (CRZ) notification'. The workshop will be inaugurated by MLA and former fisheries minister S Sarma at a function to be presided over by , pro vice-chancellor of Cusat P G Sankaran on Saturday. Kufos former vice-chancellor Prof Madhusoodana Kurup will deliver the keynote address by highlighting likely impacts and concerns expressed by various stakeholders on the changes made in the
notification with respect to coastal communities and their traditional and customary rights, ecology and environment.

It would also focus on total compliance with the basic objectives of CRZ notification issued in 1991. The workshop will be attended by over 100 delegates and discuss issues like livelihood security of fishermen and residents of coastal areas. The purpose is to compile the comments about draft CRZ 2018 notification and understand how far it is going to address the issues of conserving coastal stretches. It would also take into account natural hazards in the coastal areas, sea level rise due to global warming, etc. The comments would then be sent to the ministry on June 17. The draft CRZ notification has been issued by the ministry of environment, forest and climate change (MoEFCC) on April 18 for seeking comments from all the persons concerned. The suggestions from stakeholders have to be sent within 60 days from the date of notification.

Kerala: El Nino disturbances force Kerala's oil sardines to migrate


Has El Nino, the phenomenon that disrupts normal weather patterns, affected the marine ecosystem of Kerala’s coastal waters? The warming of the coastal sea, the decline in plankton production, the varying rainfall pattern, the change in upwelling - a process by which the cold water from the deep rises to the surface- are all sending disturbing signals. The recent findings suggested that oil sardine, Kerala’s favourite fish variety, is migrating towards Tamil Nadu coast at times of unfavourable conditions along the Kerala coast, like EL-Nino. Amidst the gloom, there is some silver lining. The state has recorded a 170 per cent increase in the landing of sardines. While the annual landing of sardin e stood at 48,000 tonnes in 2016-17, the figure went up to 1.25 lakh tonnes in 2017-18 recording a steep increase of around 77,000 tonnes. The decrease in spawning efficiency and stunted growth have set alarm bells ringing for the fisheries sector.

“The depletion of sardine stocks in Kerala’s coastal seas has adversely affected the livelihood of thousands of fishermen,” Matsya Thozhilali Aikya Vedi president Charles George told Express.“Sardine is the favourite fish variety for Keralities and the drop in catch has adversely affected the inboard fishing boats. Many fishing units have been shut down. While Kerala’s sardine catch fell to one tenth of the normal catch, the state started depending on fish coming fr0m neighbouring states.” As there is not much demand for sardine in Tamil Nadu, the fish is being sent to Kerala. While the drop in catch left the Kerala fishermen jobless, the customers are not affected as sardines from Mangaluru and Tamil Nadu are flooding the market. Charles said around 60 truck loads of sardine reach the state from Mangaluru every day. “We have noticed a rise in the availability of oil sardine in Kerala coast after 2014. While the availability of sardines in Kerala waters plunged, harbours in Tamil Nadu coast got a good catch.
There is a need to conduct a detailed study into the phenomenon. Even the taste of the oil sardine has changed,” he said. “Biological changes such as growth retardation coupled with spawning failure in oil sardine along southwest coast of India in response to EL Nino phenomenon during 2014-’15 reduced their stock abundance resulting in poor catches said CMFRI principal scientist E M Abdussamad.

**Kerala: Government distributes compensation to 731 shore-seine fishermen**


Thiruvananthapuram, June 11 (UNI) Kerala Chief Minister Pinarayi Vijayan on Monday distributed compensation to 731 shore-seine fishermen, who lost their livelihood due to the implementation of Rs 7525 crore Vizhinjam International Seaport Project. Speaking on the occasion, the Chief Minister said 2,898 fishermen will benefit from 68.89 crore compensation package and the Vizhinjam Seaport Project is an asset to the development of the state. Stating that construction of roads, weigh bridge and site office have been completed in the first phase, he said 95 percent of the required 149 hectares land has already been acquired. Announcing that 88 families were given five cent land each, he said the Government distributes kerosene to 1,734 mechanised country fishing boats plying from Vizhinjam, which invites an additional expense of 2.50 crore every three months.

**Kerala: Fish seed production: State set to be self-sufficient**


The State is poised to become self-sufficient in fish-seed production, Fisheries Minister J. Mercykutty Amma has said. Inaugurating a freshwater fish hatchery and aquaculture training centre at Neyyar dam, on Friday, she said the production of quality fish seed would help Kerala tap the potential for inland fisheries. The State government had accorded sanction for the third phase development of the Neyyar fish seed farm at a cost of Rs. 7.46 crore.

**Kerala: Bio-metric identity cards made mandatory for fishers**


Around 630 trawling vessels operating out of Kochi, Vypeen and Munambam fishing harbours will remain grounded as the 52-day trawling ban comes into effect from Saturday midnight. The Fisheries Department has issued notice to traditional fishermen, directing them to carry their bio-metric identity cards during fishing ventures as part of measures to ensure their safety. An official of the department said here on Saturday that agencies like the Coastal Police and the
Coast Guard would conduct inspections. The Fisheries Control Room will be operational, while Marine Enforcement and coastal police stations will remain alert to any situation arising from the imposition of the ban and the rough seas.

The official added that one could contact coastal police stations at Fort Kochi (0484-2215006, 1093) and Azheekode (0480-2815100). Besides, Coast Guard (0484-2218969, 1554 (toll-free); Fisheries Control Room (0484-2502768), 9496007037, and 9496007029; Marine Enforcement (9496007048), and Navy (0484-2872354, 2872353) services will be available. Meanwhile, trawler owners said on Saturday that around 6,500 fishermen employed directly on trawlers and around 25,000 workers engaged in related activities like handling and processing would go jobless during the ban period. At the same time, traditional fishermen have welcomed the government’s decision to allow one carrier boat for fishing expeditions and demanded a comprehensive package for the protection and sustainability of fisheries resources.

Juvenile fishing Fishermen have also called for a total ban on juvenile fishing as part of the conservation measures. In a memorandum forwarded by the Kochi-based Matysa Thozhilali Aikyavedi (fishermen’s unity centre), traditional fishermen said the decision to ban carrier boats had caused anxiety among them. However, it was later decided to allow one carrier boat each with the expeditions. They also highlighted the findings of a recent study by the Central Marine Fisheries Research Institute (CMFRI), which claimed that the catch of juvenile fish, mostly threadfinn breams, last year might have caused losses of up to Rs. 221 crore to the fisheries sector in the State.

Kerala: Fishers call for timely disbursal of aid


As the trawling ban is set to come into effect on June 9, fishers from the district have come up with a demand to allocate on time their free share of ration by the Civil Supplies Department and the financial aid from the State government’s ‘Thanal’ scheme. Fishermen from the Puthiyappa and Vellayil coastal areas complained that the relief measures usually announced to alleviate the difficulties of coastal families during the trawl ban period never reached their hands at the most wanted time. “In the last season, the Fisheries Department had prepared the list of fishermen families well in advance to consider the allocation of free ration, but no families got it on time,” says Abootty, a fisherman from Puthiyappa. He said that the Fisheries Department was yet to compensate for the laxity with any other relief measure for the coastal community.

Though the Fisheries Department has pinned the responsibility for the delayed ration distribution on the Civil Supplies Department, the fishers pointed out that the department could easily tackle such technical issues in consultation with higher government authorities. For several years, the same issue had been affecting the relief measures, they argued. Many of the fisher folk said that
the amount allocated from the ‘Thanal’ scheme was not sufficient even to buy provisions for a week.

Velayudhan, a fisherman from Vellayil harbour, said the welfare fund of Rs. 3,000 credited to his account last year was not even sufficient to meet his daughter’s medical expenses. Also, the amount was released a few days before the lifting of trawl ban, he said. Promises earlier made by the government to create alternative sources of income for the fishers through small scale ventures during the trawl ban period were also non-starters in the district. In the absence of any such venture, the majority were moving to other jobs, including construction work and other manual labours. Though a few ventured into the sea on country boats, the income they got from the job was too meagre to survive the lean period, they said. “The boats from other States will have to clear the coastal areas of the district by June 9.

Along with that, the majority of the migrant labourers will leave the district in search of other jobs. The real sufferers will be the local fishers who used to find their living from mechanised fishing boats,” says V. Rajesh, another fisherman. He said that there were more than 25,000 active fishers in Kozhikode district alone, who face the crisis during the trawl ban period. Figures available with the district administration state that the ban on trawling will keep around 5,000 fishing boats off the sea. This includes over 1,000 mechanised boats and 249 boats fitted with onboard engines. Fisheries department officials said they would initiate all possible measures to extend all the relief benefit for the eligible fishers on time. Measures were also in place to ensure the safety of country boats venturing into the sea during the season, they said.

Kerala: LPG tanker ship hits fishing boat off Kochi, 2 fishermen


Two fishermen were injured when an Indian LPG tanker ship allegedly hit their fishing boat off Kochi coast early today, police said. The incident occurred at around 4 am while the fishermen from Munambam area were engaged in fishing some 18 Nautical Miles off Kochi coast, they said. The injured fishermen have been admitted to a hospital in Paravoor near here, they said adding none of them were serious. There were 10 fishermen on board the boat involved in the accident, police said. All others have been brought to safety, they added. The vessel has been identified as an Indian LPG tanker, which left the scene soon after the incident. However, it was later identified with the help of the Coast Guard, police said. Earlier reports quoting the fishermen said that their boat was hit by a foreign vessel.

Police said the captain and crew of the ship have been charged under various IPC sections including 280 (Rash navigation of vessel), 427 (Mischief causing damage to the amount of fifty rupees) and 337 (Causing hurt by act endangering life or personal safety of others). A Navy
official said they were informed about the incident that occurred some 18 nautical miles off the Kochi coast.

Kerala: 52-day trawling ban to begin in Kerala on Saturday midnight


Ahead of the 52-day monsoon trawling ban, which will begin on Saturday midnight, the district authorities have issued a directive to all other-state mechanised boats to leave Kerala coast before the commencement of the ban period. The duration of the ban has been extended to 52 days as a first step to raise it to 61 days on a par with other southern states. A meeting held at the district collectorate to review the steps taken to regulate the operations of fishing boats in Kerala coast has decided to shut down the diesel bunks operating in the fishing harbours and along the coastal belt during the period. Diesel will be provided to inboard fishing boats through the bunks operated by the Matsyafed and select diesel bunks. Mechanised boats will not be provided diesel for these bunks. The meeting also decided to impose restrictions on catching fish below the minimum legal size. Mechanised boats and traditional boats catching juvenile fish will be seized and a fine of Rs 2.5 lakh will be imposed on them, said Fisheries Deputy Director S Mahesh. The government will provide free ration to fishing boat workers and peeling shed workers. The fishermen should contact Matsya Bhavan to apply for free ration. Though inboard fishing boats are allowed to continue fishing operations, an inboard boat will be allowed to take only one carrier boat along with it.

The registration details of the carrier boats should be submitted at the fisheries offices concerned. Traditional fishermen venturing into the sea during the trawling ban period should carry biometric identity card along with them. The Fisheries Department has deployed three patrolling boats and opened a control room at the Vypeen Fisheries Station to help fishermen in distress. The control room will function round-the-clock. The Coast Guard will deploy a ship and a helicopter for rescue operations and patrolling, said Mahesh. Fishermen should keep safety gadgets ready in the boats and follow the weather warning issued by the Fisheries Department. The representatives of Coast Guard, Marine Enforcement Wing, Police, Revenue Department Civil Supplies Department and Matsyafed and representatives of traditional fishermen and mechanised boat operators participated in the meeting. Deputy Collector M P Jose presided over the meeting. Central region Fisheries Joint Director Ramadevi also participated. Phone numbers: Fisheries control room: 9496007037, 9496007029 - Marine Enforcement: 9496007048.

Kerala: Fishermen now net plastic from seas along with sardines, mackerels

After three days of deep-sea fishing, Justin Fernandez, who comes from a traditional fishers’ family in Kollam’s Neendakara, is back with the catch. Along with glowing sardines and mackerels, he has brought back three bags full of garbage from the sea. With fish, those at sea are increasingly netting plastic, which has threatened the environment and is slowly killing the primary source of livelihood for fishermen. “After (cyclonic storm) Ockhi, we retrieved at least 400kg of ghost nets (abandoned nets). When the cyclone wreaked havoc, hundreds of boats and nets were destroyed. Once destroyed, they (fishermen) abandon them but these nets pose grave danger to marine creatures,” said Robert Panipilla, patron of an NGO, Friends of Marine Life. According to the country’s premier marine research body, Central Marine Fisheries Research Institute (CMFRI), by 2050, all major oceans will have more plastic than fish.

Estimates based on the current figures of garbage dumping indicate 850 million tonne of plastic will be found in oceans by 2050. There will, however, be only 821 million tonne of fish in waters by then. Experts say if microplastic is in water, it will likely be found in items of daily use in kitchens and groceries. “Microplastics are posing a serious threat to marine food chain. In seas around the Indian sub-continent, high levels of plastic were found in many varieties of fish such as tuna, sardine and sea birds,” said Dr V Kripa, principal scientist with the CMFRI. She said recent studies have shown that there are 5.25 trillion pieces of plastic in the oceans, adding that drastic measures were needed to stop the pollution. State fisheries minister J Mercykutty Amma said: “Fishing community, boat operators and people living along coastal areas have realised the importance of a clean sea. We will showcase the project in all major ports of the state soon.”

Kerala: Draft CRZ notification harmful for Keralaâ€™: Experts write to Environment Ministry


The most recent draft notification by the Union Environment and Forests Ministry on the Coastal Regulation Zone (CRZ) where the no-development zone (NDZ) for the new III-A category will be 50 metres instead of 200 metres will be detrimental to Kerala, says experts from the state. The group of experts led by the Kerala State Biodiversity Board's former chairman Oommen V. Oommen has written to the Union Environment Ministry to take a re-look into it. Oommen pointed out that the average density of population in Kerala is 859 per square km while in the coastal regions, its as high as 2,161 per square km and if the 2011 regulation is changed, it will largely harm Kerala's interests. He said that the draft notification proposes to classify the existing CRZ-III into CRZ-III A and III B. "Areas with population density of less than 2,161 per sq km will now be under CRZ-III A. The NDZ for III A will be 50 metres, instead of 200 metres. This dilution will help builders as more development will now be allowed. The government is set to overhaul the coastal zone regulation rules and the proposed changes will promote
commercialisation in the most protected zones, instead of the mandated conservation. This move will be disastrous to the fragile coastal environment," he warned. Another expert K.P. Laladhas, who headed the team that prepared Kerala's objection to the Kasturirangan report in 2016, pointed out that the lastest Draft Notification of 2018 will only help to further derail the stated objectives of CRZ Notification for conservation of the coast and preservation of the coastal ecosystems. "The draft notifies the National Centre for Sustainable Coastal Management (NCSCM) as the sole authority for demarcation of high tide line (HTL). Making a single agency responsible for this vital aspect for the whole country can lead to chaos and corruption as there is no provision for cross checks.

"HTL must be a line demarcated using the shoreline data over a longer period, normally a 20 year period. Again from the legal point, the HTL must be demarcated unambiguously with control points, traceable on the ground and understandable even to the local dwellers," he said. Another expert N.P.Kurien, a former director of the National Centre for Earth Science Studies, pointed out that the need of the hour is to see that there should be detailed discussion by taking the coastal population into confidence. "Permitting construction of dwelling units up to 50 metres from the HTL even for the local population can be construed as another way of exposing them to the fury of coastal hazards," he said.

Kerala: Fisheries sector hurt by juvenile fishing


Kerala's fisheries sector is suffering huge economic loss owing to uncontrolled juvenile fishing, according to a study done by the Central Marine Fisheries Research Institute (CMFRI), which was presented here on Saturday. As part of CMFRI's research project for developing a fisheries management plan for the fisheries sector of Kerala, it found that the most caught juvenile fish during the last year was threadfin breams that caused a loss of Rs 221 crore to the state fisheries sector. For fishes, the stage between birth and adulthood is often referred to as the juvenile period or in other terms the juvenile stage lasts until the fish is fully grown, sexually mature and interacting with other adult fish. The catch in the form of juveniles is harmful as it reduces future yield.

Apart from the loss to the economy, juvenile fishing also badly affects the biological factors of the fish ecosystem. The unscientific practice leads to disruption in recruitment and spawning stock biomass of the fish, states the report. T.M. Najmudeen, Principal Scientist at the CMFRI and the Principal Investigator of the project, presented the report at a stakeholders meeting held at the CMFRI to discuss the studies carried out by the institute during the last year. Present on the occasion were representatives of fishermen associations, trade unions, seafood exporters association, officials from the Wildlife Trust of India and the State Fisheries Department. Principal Scientist at CMFRI E.M.
Abdussamad said unfavourable climatic conditions following the El Nino badly affected the spawning and growth pattern of the oil sardine. During the discussion, fishermen pointed out that the curb on juvenile fishing will be meaningful only if there is uniformity in implementing regulations across the country. They urged the CMFRI to study the migratory pattern of the demersal fishery resources and requested that the Centre should ensure that national policies are formulated strictly on the basis of scientific facts avoiding any kind of political influence.

Kerala: How India’s Fishermen Turn Ocean Plastic Into Roads


Mother Sea—that’s what Xavier Peter calls the Arabian Sea. His own mother gave him life, but Kadalamma gave him purpose, a livelihood. She has provided for him, offering up enough fish to feed his family and sell at the market. And she has protected him, sparing him thrice from cyclones and once from a tsunami. Xavier has been trawling for shrimp and fish off India’s southwestern coast for more than three decades, his whole adult life. But lately, when he casts out his nets, he often comes up with more plastic than fish. “Pulling the nets out of the water is extra effort, with all this plastic tangled in them,” he says. “It’s a bit like trying to draw water from a well—your bucket is somehow being weighed back down.” He and his crew of six then spend hours separating the garbage from their catch.

For Xavier, the whole ordeal is a regular reminder that Kadalamma is sick, and that he and his community have made her so. “This is India’s greatest failure,” he says. He used to just sigh and chuck the plastic back overboard. Not anymore. Since August last year, he and nearly 5,000 other fishermen and boat owners in Kollam—a fishing town of 400,000 in India’s southernmost state, Kerala—have been hauling back to land all the plastic that they find while they’re out at sea. With help from several government agencies, they’ve also set up the first-ever recycling center in the region, to clean, sort, and process all the sea-tossed plastic bags, bottles, straws, flip-flops, and drowned Barbies that they fish out. So far, they’ve collected about 65 metric tons (71 short tons) of plastic waste. (Learn more about the plastic pollution crisis.) It doesn’t take much to persuade coastal communities of the dangers of plastic, says Peter Mathias, who heads a regional union for fishing boat owners and operators.

For years, he says, fishermen have been complaining to him about plastic getting caught in their gear. And that isn’t even the worst of it. A decade back, a small crew like Xavier’s could easily pull in up to four tons of fish over the course of a 10-day expedition. These days, he’s lucky to get a fifth of that. Although many factors, including climate change and overfishing, are affecting fish stock, plastic is the most dramatically visible culprit. Many types of fish easily mistake plastic for prey, and studies show that they can die of either poisoning or malnutrition as a result. Other sea life gets caught in and strangled by abandoned nylon fishing nets. Large
patches of plastic on the sea bed are also blocking some species’ access to their breeding grounds. “It is affecting our work,” Mathias says.

“So in this way it’s our responsibility, and necessary for our survival as fishermen to keep the sea clean.” Upholding that responsibility, however, proved to be a bit more complicated than Mathias initially anticipated. Fishermen were dredging up plastic without even meaning to; asking them to do so on purpose was an obvious next step. The problem was, their region had no system for municipal waste collection, let alone a recycling program. When a nearby village of clam divers in Kerala tried to start a similar program to clean up Kerala’s backwaters, they realized they had no way to dispose of all the garbage they scooped up. They were effectively just transferring litter from lake and riverbeds back to land. Last summer, Mathias approached J. Mercykutty Amma, the state minister of fisheries, and a fellow Kollam native, for help. “I said, if we take it upon ourselves to collect plastic from the sea and bring it back to land, can you help us do something with it?” he says.

She said sure, but she probably couldn’t make it happen on her own. So, about a month later, she roped in five other government agencies, including the department of civil engineers, who agreed to help build a recycling facility, and the department for women’s empowerment. That agency is tasked with improving employment opportunities for women, in an area where many fields, like fishing, had long been dominated by men. So the agency helped hire an all-female crew to work there. For the past several months, a group of 30 women have been working full time to painstakingly wash and sort plastic that the fishermen collect. Most of it is too damaged and eroded to recycle in traditional ways. Instead, it’s shredded into a fine confetti and sold to local construction crews who use it to strengthen asphalt for paving roads. The proceeds—as along with government grant money—cover the women’s salaries, about 350 rupees ($5) per day. The system isn’t completely self-sufficient, but it will be by next year, Mathias hopes.

“We’ve roped in so many groups, so quickly for this effort,” he says. But he’s proudest of the fact that “this comes from us, it comes from the fishermen.” They’ve already helped a couple of nearby fishing communities, including the aforementioned clam collectors, procure funding to start up their own plastic collection and recycling programs. Soon, he says, fishermen “through all of Kerala, all of India, and all of the world will join us.” It’s a strong statement, but his confidence isn’t necessarily misplaced, says Sabine Pahl, a psychologist with the International Marine Litter Research Unit at the University of Plymouth in the U.K. Pahl, who researches how to convince people to take better care of the planet, says involving fishing communities in the fight against ocean pollution makes sense, and has worked in the past. Since 2009, the northern European environmental group KIMO has been recruiting fishermen in parts of the U.K., the Netherlands, Sweden, and the Faroe Islands for a similar program called Fishing for Litter.

The Indian program may have even wider potential, based on “the fact that it’s the fishermen taking the initiative,” Pahl says. In her research, she’s found that the most effective
environmental initiatives are community-led, and “intrinsically motivated”—meaning motivated by altruism and a love for nature and wildlife. “It’s truly powerful, because the fishermen are also in the best position to convince the rest of the community—their families, their neighbors—of the dangers of plastic,” she says. That’s exactly what they’re doing. Many of the fishermen at Kollam harbour say that nine months into the program, the amount of debris that gets caught in their nets has markedly reduced. But ultimately, they’re hoping to altogether stop the flow of plastic into the ocean. To that end, all 5,000 of them have pledged to reduce their personal use of plastic, or at the very least make sure it ends up at the recycling plant rather than in the ocean. Mathias and Xavier say they also aren’t opposed to strategically using guilt to stop people from littering. “I tell them, ‘If you keep polluting the ocean with plastic… as fishermen, our livelihoods will cease to exist,” Mathias says. That, he says, gets through to them almost every time.

ICSF’s National workshop on small-scale fisheries, cyclone ockhi and disaster risk management at Thiruvananthapuram, Kerala from 29th to 30th May 2018

On 29 November 2017, a deep depression detected in the Indian Ocean southwest of Sri Lanka rapidly intensified into an acyclonic storm off the coast of Tamil Nadu and Kerala and the Union Territory of Lakshadweep. Cyclone Ockhi, as it was named, took the life of hundreds of fishers, injured many and destroyed fishing vessels. The Hyogo Framework for Action (HFA) 2005-2015, adopted by the World Conference on Disaster Reduction, just weeks after the Indian Ocean tsunami killed 228,000 people, sought “substantial reduction of disaster losses, in lives and in the social, economic and environmental assets of communities and countries” through an emphasis on disaster risk reduction (DRR) in the pre-disaster stages rather than on reactive emergency relief. The issues and principles discussed in the HFA are particularly relevant to the lives of small-scale fisher communities, in the coastal villages affected by Cyclone Ockhi.

The approach of Disaster Risk Management (DRM) that developed in subsequent years combines mitigation, prevention, preparedness with response and recovery across institutions of government, the private sector and civil society. India’s own Disaster Management Act, 2005 was a response to the unprecedented damage caused by the Indian Ocean tsunami and the gaps it revealed in the country’s preparedness for dealing with natural disasters. Although national and state disaster management authorities and plans were formulated, their success has been mixed in the face of recurring cyclones along the Bay of Bengal coast. The need for assessing disaster impacts, developing effective disaster response in an emergency situation, and to develop new approaches to disaster preparedness is addressed in the FAO Guidelines for the Fisheries and Aquaculture Sector on Damage and Needs Assessments in Emergencies.

The Voluntary Guidelines for Securing Sustainable Small-Scale Fisheries in the Context of Food Security and Poverty Eradication (the SSF Guidelines) discuss applying the relief-development continuum concept to emergency response and disaster preparedness and the concept ‘building
back better’ to relief, rehabilitation, reconstruction and recovery, especially to reduce vulnerabilities to potential future threats. ICSF with support from the Food and Agriculture Organization of the United Nations (FAO), has recently undertaken a study of the Cyclone Ockhi. Itassesses the response to Cyclone Ockhi, both at the institutional and community level, reviews disaster management strategies adopted by concerned actors and examines if the loss of lives could have been minimized by a more coordinated institutional response.

In keeping with the internationally recognized DRM approach, the study reviews the various mitigation and relief plans in place at the central, state and district level and their effectiveness. Considering that so many fatalities occurred at sea, the study looks into fisheries management issues of relevance to cyclone preparedness. The study suggests improvements in disaster preparedness and fisheries management. The Workshop is organized to share the study and communicate the lessons learnt with the community, authorities—both the state and central—and other stakeholders.

Kerala: Open pond culture of seabass can hook big business for small farmers


The Marine Products Export Development Authority has successfully demonstrated open pond culture of Asian Seabass (Lates calcarifer) which can increase the yield of this commercially important fish. This variety is much-in-demand with huge export potential. Small and marginal farmers can adopt this method of culture in a cost-effective manner. The demonstration was made by Rajiv Gandhi Centre of Aquaculture (RGCA), the R&D arm of MPEDA, at its demonstration farm at Karaikal in Puducherry. Seabass, which is reared through cage culture, fetches a price of more than ₹400 a kg in the domestic market. MPEDA Chairman A Jayathilak, who witnessed the first catch of huge sizes of Seabass fish (average weight of 1.5 to 2 kg) totalling 1.10 tonnes being caught in a single haul from the Karaikal demonstration farm, said it would be the best alternate species for shrimp which contributes more than 70 per cent of seafood exports.

In the future the production will be scaled up by keeping in mind the sustainability and eco-friendly culture practices, he said, adding that the technology for commercial production would be made available to farmers very soon by RGCA. Under the open pond culture method, its yield can go up to 9 tonnes per hectare. RGCA is concentrating its research on seed production, nursery rearing and grow-out methods of various species like cobia, artemia, scampi, tilapia, pompano, grouper and red snapper fishes for both brackish and marine waters. While Genetically Improved Farmed tilapia is suited for fresh water aquaculture, mudcrab and artemia are also the best species for diversified aquaculture, which suits women entrepreneurs, especially self-help groups, he said. Marine products export has been projected at 11.35 lakh tonnes worth $ six
billion in 2017-18, which is more from $5.7 billion in the previous year. However, shrimps alone contribute more than 70 per cent. The new open pond culture method will greatly spur the diversification of India’s aquaculture sector, he added.

Kerala: Steps to ensure safety of fishers


Fisheries Minister J. Mercykutty Amma said here on Saturday that the government would take timely measures to ensure the safety of fishermen using the Muthalapozhy fishing harbour which had witnessed a spate of accidents. Addressing a meeting of officials and NGOs to discuss the proposal, she said the immediate efforts would focus on clearing the accumulated sand and construction debris from the harbour. Project bid: “Though the bid for the work was awarded several times, the contractors could not complete the project. It was at that time that the Adani Group, the concessionaire for the Vizhinjam seaport project, offered to take up the work in exchange for the facility to use the harbour for transporting rocks to their project site.” Large dredger: The Minister said the Adani Group had deployed a large dredger for the work at Muthalapozhy. “They have agreed to repair the roads used to transport rocks and hand over the wharf after their use.” Ms. Mercykutty Amma sought the cooperation of the public for the completion of the project.

Kerala: Chinese netsâ€™ restoration picks up pace


The Tourism Department’s project to restore the 11 heritage Chinese fishing nets on the Fort Kochi seafront that has dragged on for sometime now is expected to get momentum soon with the issue of procuring teak poles of the right size and age to rebuild the nets set to be resolved. Right now, the cantilever structure of most of these iconic nets features iron bars, thanks to the non-availability of teak. The ₹1.57-crore project, for which Kiteco is the consultant, envisages replacing the iron bars with teak poles. “Poles with lengths of 9 m, 8 m and 7 m are required to rebuild these nets, but the government only grants licence for pieces that are 6.5-m long. So special permission was given to the Divisional Forest Officers at Chalakudy, Malayattoor and Thrissur for the same, but the right kind of teak necessary for the work couldn’t be identified in these areas.

Finally, we located teaks of the required age under DFO, Kothamangalam, and the process is under way to procure them,” said Derson Antony, coordinator of the Kochi Chinese Net Owners’ Association. “The process is rather slow because juvenile teak is required to rebuild the nets, but the rules only permit felling of aged ones. The file is with the Chief Conservator of Forest,
Kottayam. He is now expected to seek a report from DFO, Kothamangalam, and forward it to the PCCF for grant of permission,” said a source close to the development. Kitco has recommended formation of a committee comprising the District Collector, local MLA, Tourism Department officials and other stakeholders to oversee the restoration work, which is likely to be carried out by the net owners association under Kitco’s supervision. Smaller jetty a boon Concurrently, the plan for the construction of a jetty for Water Metro by Kochi Metro Rail Limited (KMRL) on the beachfront is turning out to be a blessing for the Chinese net owners. “The original plan of the KMRL was to construct a longer jetty capable of simultaneously berthing three boats with lengths of 22 m each.

This needed relocation of three Chinese nets from the fuel station side of the beach. However, following a discussion with the net owners in early May, we have decided to reduce the length of the jetty, which will now be able to berth two boats with minimal or zero relocation of the nets,” said A.P.M. Mohammed Hanish, managing director of KMRL. “We are consulting all stakeholders and will also do beautification of the beachfront heeding to the request of the net owners. Wherever there’s a gap in restoration of the nets and beautification of the area, we will chip in so that it helps tourism,” he said. June 29 is the last date for submission of tenders for the construction of the boats for the Water Metro and KMRL intends to launch the service of the first boat in May next year. Mr. Antony said that with the KMRL getting the area dredged up for the jetty, sand accumulation around the nets would be a thing of the past and there would be better and easier access to the foundation structure of the nets. “With a better promenade and easier access to the nets, tourists would be able to watch the operation of these nets and enthusiasts could get to try their hands as well,” he said.

Kerala: Ockhi: Kerala govt mulls Rs 2,000 crore rehab pack


The state government is mulling a Rs 2,000-crore rehabilitation package for fishermen community, funded by an external agency, after Centre gave a cold shoulder to its rehabilitation package, worth Rs 7,340.45 crore, following cyclone Ockhi. The government had submitted a request for the rehab package in December 2017. A seven-member committee, headed by the principal secretary (fisheries), was also formed to follow up on the package, but till date no response has been received from the Centre. At this juncture, a committee headed by former chief secretary S M Vijayanand is in the process of formulating another package (worth Rs 2000 crore) which, the government hopes to implement by borrowing funds at nominal interests from external agencies. “There has been no response from the Centre towards the rehab package.

At present, we are already undertaking projects worth Rs 1,000 crore using budgetary funds and assistance from Nabard in fisheries sector. With Centre showing no signs of allocating fund, we
are working on a new package. We will be looking at borrowing Rs 2000 crore from agencies with low interest rates to implement the package,” said fisheries minister J Mercy Kutty Amma. The committee is expected to finetune the proposal in three months. Following Ockhi cyclone, the government had requested an additional aid of Rs 431 crore from the national disaster response fund. The Centre, however, acknowledged aid to the tune of Rs 169.63 crore and it was communicated that an amount of Rs 111.70 crore can be legally allocated. An amount of Rs 133 crore was allocated as emergency assistance following Ockhi but it came with a note that the additional amount of Rs 21.3 crore will be deducted from future allocations.

The state government had distributed 20 lakh each to families of 91 missing fishermen and 22 lakh each to families of 51 Ockhi victims. The fisheries department had estimated a loss (187 boats and 446 nets) and administrative sanction was accorded to Rs 9 crore which was planned as compensation towards loss of fishing equipment. Chief minister Pinarayi Vijayan and the fisheries minister have recently forwarded communication to the Centre seeking a response on rehabilitation package.

Kerala: Swell waves damage Kerala coast, seawalls worsen impact

http://indiaclimatedialogue.net/2018/05/16/swell-waves-damage-kerala-coast-seawalls-worsen-impact/

A high-energy swell from the Southern Ocean caused extensive damage to coastal areas in Kerala, with some scientists saying that seawalls and breakwaters worsened the impact. They rolled in relentlessly, hiding packs of energy that they unleashed on sandy seashores of southern India, where they crashed as high waves, carving out parts of it, cracking house walls, and tunnelling roads. A high-energy swell originating from the Southern Ocean hit the coasts of south India since April 21, inundating low-lying coastlines for up to 200 metres in some places. The swell showed the impacts of a storm in the Southern Ocean 9,000 km away. The local fishers are apprehensive of more high wave events in the run up to the monsoon that starts on June 1. Meanwhile, coastal protection measures in vogue, such as sea walls, are possibly amplifying the wave impact.

The rough sea warning was in place till April 24 for the west coast, the Lakshadweep Islands, and southern Tamil Nadu and for another day for the east coast and Andaman and Nicobar Islands. South Indian fishers call this kind of swell kallakkadal, the Malayalam term denoting deceptive sea. “Till the swell reaches the seashore, you won’t know the waves would grow so big and have such an impact,” Aloysius Gomez, a science teacher in Puthukurichy, a fishers’ village 24 km north of Kerala’s state capital Thiruvananthapuram, told indiaclimatedialogue.net. “But they grow in size and crash hard on the shore and take away a lot of sand.” Further north, the crowded fishing village of Anchuthengu, a 17th century British colonial outpost, bore the brunt of the wave attacks, damaging 11 houses. Soosa Melkias, a fisherman who convenes the local
disaster risk reduction committee, told indiaclimatedialogue.net that a row of houses close to the high tide line that includes his own has been badly damaged.

Some of these houses were already damaged in Cyclone Ockhi of November 2017. The villagers said they were now bracing for the onset of monsoon. Closer to the state capital, Valiathura, an old port village, the tourist village of Shanghumukham and several other nearby villages have suffered major damage, requiring evacuation and traffic diversion. Houses and roads have been damaged. Kerala state government has declared a compensation of INR 400,000 (USD 5,870) for houses left uninhabitable, INR 50,000 for major repairs and INR 15,000 to repair huts on the beach. Chief Minister Pinarayi Vijayan said that fishers would be relocated from vulnerable places under a government scheme. He also promised to strengthen sea walls, a protective measure that is increasingly coming under criticism for their long-term impacts. High wave events Swell-related seasonal high wave events have been recorded before, but it is the first time the science behind it was clearly explained in countrywide forecasts.

The Indian National Centre for Ocean Information Services (INCOIS), a Hyderabad-based institution under the Ministry of Earth Sciences, has warned about intermittent high period (15-17 seconds) swell waves with 2 to 2.5 metre height, leading to rough sea near shore and coastal flooding. Ocean waves generated in a wind field that travel away from it — even across ocean basins — are called swell. Swell period denotes the time it takes for successive waves to pass the same point. Long-period swells look flat in deep sea, but they pack in more energy than short-period ones, and create damaging high waves close to shores. INCOIS advised fishers to be on alert during high tide, avoid sailing close to the shore, and anchor boats safely away from one another. For several days, there was an advisory against fishing as well. An INCOIS scientist leading marine forecasts explained to indiaclimatedialogue.net that the high period swell came from the Southern Ocean, the sea around Antarctica, south of 60 degrees south.

“These are generated by storms or even sustained winds in the Southern Ocean,” the scientist said. “These swells take almost six days to reach and hit the Indian southern tip.” They resulted from a low-pressure event lasting three days since April 15 about 9,000 km away from the Indian coast, with extremely high waves and wind, sending its impact far and wide, INCOIS scientists added. The centre used numerical modelling, and observations from its offshore floating and moored buoys to forecast the event, explained T.M. Balakrishnan Nair, who heads the INCOIS Information Services and Ocean Sciences Group. Earlier research has shown the effect of faraway events on the shores of South India. During May 17-21, 2005, several villages on the coasts of Kerala and Tamil Nadu — many of them still recovering from the impact of the 2004 Indian Ocean tsunami — were flooded by high wave events.

In a 2005 study, M. Baba, the erstwhile director of the National Centre for Earth Science Studies in Thiruvananthapuram noted that ocean waves with periods around 15 seconds and 2 metre height were approaching the coast continuously during all these days. There was no local wind
field and the southwest monsoon had not set in yet. A 2016 INCOIS study has confirmed the high swell events in the North Indian Ocean in 2005 caused by the swells propagating from the Southern Ocean. Three to five days prior to these events there was a severe low-pressure system, called the Cut-Off Low (COL) in the Southern Ocean, as INCOIS scientist P.G. Remya and colleagues found. These are closed upper-level weather systems completely cut off from basic westerly currents of air, moving independently. They may remain almost stationary for days, or on occasion may move westward opposite to the prevailing flow.

Strong winds These events can locally generate strong winds of about 25 metres a second that last about three days over a large fetch, generating long?period swells that propagate to North Indian Ocean (of which the Arabian Sea is a part). “Furthermore, these swells cause high wave activity and sometimes Kallakkadal events along the NIO coastal regions, depending on the local topography, angle of incidence, and tidal conditions,” Remya and colleagues noted. The Southern Ocean is notoriously stormy, a nightmare documented by sailors since the 18th century. Further north, strong pressure difference between the sub-Antarctic trough (low-pressure belt) and the sub-tropical high pressure belts have given rise to rough seas described in geography textbooks as “roaring forties” and “furious fifties.” Besides being a significant sink for heat and carbon dioxide, the Southern Ocean influences the global currents with its coldest, densest water.

Strong westerlies over the Southern Ocean drive the world’s largest current system called the Antarctic Circumpolar Current that connects the Atlantic, Pacific, and Indian Oceans, and the deep ocean to the surface with a massive flow of water. Ocean currents act as conveyor belts that transport warm water and precipitation from the equator to the poles and cold water in the opposite direction. They regulate the global climate, in a way compensating for the uneven distribution of solar radiation on the Earth’s surface. As a result, changes in Southern Ocean currents and sea ice can affect global climate. Contentious breakwaters Locally, while the government is proposing more and better stone structures in view of coastal erosion, a section of scientists have questioned the wisdom of such interventions. They tend to increase erosion on their unprotected side, and interfere with the natural beach-building processes, scientists point out.

A 2010 study by the National Centre for Sustainable Coastal Management (NCSCM) under the Ministry of Environment, Forests and Climate Change has found that more than half of Kerala’s 590-km coastline was “artificial” with seawalls, groynes and riprap revetments (sloping structures made of loose material to absorb wave energy). Only less than a quarter of the coast was classified as accretion zone where there is natural beach building. “Over the last 40 years sandy coast has become interspersed at frequent intervals with physical structures such as groynes and breakwaters," Nandakumar D., former professor of geography at University College, Thiruvananthapuram, and senior advisor, climate change and environment at InterCooperation Social Development, told indiaclimatedialogue.net. “While breakwaters are
constructed with the intention to safe land fishing crafts, groynes are to capture the sediment drift and protect the beach where the small scale fishers dwell, keep their small crafts and gear.”

However, most of the breakwaters that were constructed, often at river or estuarine mouths, accelerated erosion on the northern side while accreting sand on the south. “This unintended and unpredicted erosion and accretion caused by these structures has converted what was once a predominantly sandy coastline into one which is lined with granite seawalls,” Nandakumar said. “The granite walls or sea walls became short-term solution but at a very high financial cost.” “These engineering interventions and their solution indicate poor understanding of coastal geomorphology,” he said. “Coastal processes all over the world are dynamic and it is all the more intense in tropical coasts. The south western coast is exceptionally dynamic due to its configuration — short continental shelf and rapid littoral (shore) currents.” In Anchuthengu area, for instance, the seashore north to a couple of harbour breakwaters is facing severe erosion. Every monsoon a part of the shore disappears.

“We need more protective groynes in our village, or the whole shore will go,” Jerome, a local boat owner, told indiachimatedialogue.net. Stone structures lead to cascading replication as it shifts points of erosion. In Valiathura, erosion has worsened after massive breakwaters were built for a port in Vizhinjam about 15 km south of the village. As environmental change and weather events make fishing lifestyles risky, the fishers are looking at their own communication and warning systems to stay safe. Gomez, who runs a shoestring dissemination service of INCOIS marine forecasts in the local language Malayalam over the Internet and free phone calls, counted a record number of calls during the swell event. Meanwhile in Anchuthengu, Melkias and colleagues — fans of Gomez’s Radio Monsoon — are looking for a way to get these bulletins over small portable loudspeakers when they launch their boats; and may be on air one day.

Kerala: Vembanad Lake, Kol wetlands to get critically vulnerable coastal area tag


The draft notification will facilitate the inclusion of Vembanad Lake and Kol wetlands in the list of critically vulnerable coastal areas in the country. An integrated management plan will be prepared to conserve mangroves, protect needs of local communities and keep tabs on impact of rising sea levels. The plan should be prepared by the state and submitted to the Ministry of Environment, Forests and Climate Change (MoEF and CC) for approval, said National Centre for Earth Science Studies (NCESS) principal scientist K K Ramachandran. Another important feature of the draft notification is the provision to curb disposal of plastic waste in the coastal areas.

The new norms will bring curbs on development activities in the coastal areas. All development activities in CRZ I and CRZ IV have to be cleared by the MoEF and CC. Stringent regulations
have been introduced on according sanction to construction activities in CRZ II and CRZ III areas. This makes it mandatory to get prior clearance for construction. It will be permitted only on the landward side of an existing road. Live fencing and barbed wire fencing will be allowed around private properties on condition that it won’t hamper public access to the beach.

Kerala: Fish seed production to be stepped up


The government aims to produce 12.5 crore quality fish seed before it completes its tenure, said Fisheries Minister J. Mercykutty Amma here on Saturday. Inaugurating the State fish hatchery at Thevally, she said the government has already implemented many schemes to maximize the revenue from the sector. “Hatcheries will be started in many districts including Idukki. Productivity will be ensured through training and awareness programmes.” There has been a huge demand for quality fish seed in the State and the Minister said steps have already been taken to meet the target. The hatchery at Thevally will function as a headquarters coordinating the activities of all other hatcheries in the State. The Minister distributed financial aid to farmers at the programme.

Kerala: Kochi sees steep rise in fish prices


The 61-day trawling ban on territorial waters in Tamil Nadu, which began in mid-April, has resulted in a steep increase in fish prices in the city. According to fish vendors the prices are soaring due to falling fish supplies resulting from the ban. A month into the ban and the availability of most of the commonly seen fish varieties including oil sardines, mackerel, pomfret and squids have come down. Similarly, there is scarcity of river fish like yellow catfish, orange chromide fish and mystus. “We depend mainly on Tamil Nadu, Andhra Pradesh and Karnataka for the supply of oil sardines and mackerel. The acute scarcity and spiralling demand have led to steep increase in the prices of most sought-after fish varieties. Oil sardines, which were in the range of Rs 90-100, now cost Rs 180 per kg at Ernakulam market.

Earlier, around 20 to 25 tonnes of sardines and mackerel used to arrive at Ernakulam market from Tamil Nadu daily. But for the past few weeks, we are only getting 3 to 5 tonnes. We are not getting sufficient oil sardines but the demand is high. So, naturally the price will go up,” said P S Hamsa, a wholesale fish dealer at Ernakulam market. Oil sardines, once considered to be poor man’s fish no longer seems to be affordable given the huge rise in the price. The price of mackerel, the second most popular fish after sardines has shot up from Rs 160 to Rs 180 per kg, said Hamsa. As oil sardines and mackerels became too costly to afford, the demand for river
fishes shot up. “The price of major river fishes including yellow catfish, orange chromide and mystus are at an all-time-high. White mullet (poomeen) which was earlier sold for Rs.30/kg is now being sold for Rs180/kg.

The price of yellow catfish has shot up from Rs 50 to Rs 100 per kg, said C B Azeez, fish merchant at Ernakulam market. Pearl spot costs between Rs 600 and Rs 700 per kg while seer fish cost around Rs 750 per kg in the market. Shrimps cost around Rs 500 per kg while prawns cost between Rs 300-400 per kg. Medium-size prawns cost around Rs 250 per kg. “Interestingly, people are ready to buy expensive fishes like pearl spot and seer fish regardless of the price. Hotels and restaurants are their major buyers,” said Azeez. However, fish vendors in Aluva market said that the spiralling price rise has affected their sales.

“The price rise is affecting the common man, fishermen and fish vendors equally, as rates have gone up from the end of April, 2018. Prices of most sought-after fishes like sardines and mackerel have gone up. Pearl spot, seer fish and cobia are now being sold for Rs 550, Rs 750 and Rs 480 respectively. Earlier, around 50 to 100 people used to come to our fish market but these days hardly any people come to buy fish,” said Babu P, a fish vendor at Aluva market. Charles George, president, Matsya Thozhilali Aikya Vedi, said that the prices will cool down in the coming days. “The trawling ban alone is not resulting in the price rise. The scarcity is because fishers have been not able to venture into the sea due to adverse weather,” he said.

Kerala: Fishermenâ€™s union seeks three-month trawl ban


The Kerala Swatantra Matsyathozhilali Federation (KSMF) has demanded a three-month trawling ban during monsoon with strict enforcement of measures to stop juvenile fishing. The federation slammed the State government’s decision to go for a 45-day ban at a press meet here on Thursday. “Though the Centre has imposed a 68-day ban on deep-sea fishing and restricted boats with engines above 10 HP from the coastal waters, the State is not willing to implement it. It has also allowed big mechanised craft using ring seine nets in 22km of the coastal waters during the trawl ban,” said federation district secretary A. Andrews. He said though there were rules, juvenile fishing was rampant, causing damage to marine wealth. Huge quantities of juvenile fish was often caught in the ring seine nets which had a smaller mesh size.

“Mechanised fishing vessels intentionally trap juvenile fish for supplying it to manure factories. They are destroying any possibility of replenishing the stock and if this continues, there will be a decline in marine wealth within 10 years,” Mr. Andrews said, adding the kappal vallams - boats with engines of high horsepower using ring seine nets - were also causing enough damage. “While the trawlers wipe out the fish stock on the sea floor during the season, ring seine boats do the same on the surface. These practices make survival of traditional fishermen difficult,” he
said. The federation also demanded that the fishermen who operated motorised country boats should be allowed up to 34 nautical miles off the coast. He also said the federation would launch Statewide stir if its demands were not met.

Kerala: Trash fish hunt: squad steps up vigil at Beypore, Puthiyappa


The Marine Enforcement Squad has stepped up its coastal patrol following information that fishing boats are being misused to net juvenile fish to be supplied to fertiliser companies in other States. Accordingly, Beypore and Puthiyappa harbours have been put under the squad’s surveillance. Fisheries Department officials said the squad had impounded a boat from Beypore on Wednesday which, they claimed, had been used to catch juvenile fish. Fine imposed As many as 60 boxes of trash fish were found in the boat, and the boat owner was slapped a fine of ?1 lakh, the largest penalty on an errant boat owner in recent times. Two months ago, another boat from Beypore too had been impounded by the squad.

The vessel carried around 650 kg of juvenile fish. Sources in the Fisheries Department said that boat owners were under the impression that enforcement squads were not operational in Kerala following a directive from the government. No such orders were issued by the government, they clarified. Officials said the impounded boats would not be released to their owners if the fine fixed by the Fisheries Department was not remitted to the government. The edible stock will be auctioned at the spot, and the amount will be credited to the government account, they added.

Kerala: No Coastal Regulation Zone fee for aided educational institutions of Kerala


Now all aided educational institutions in the state will get an exemption from remitting the fee for getting clearance of Coastal Regulation Zone (CRZ) norms as the state government issued an order in their favour. The order issued by the Additional Chief Secretary (Revenue) P H Kurian said all such educational institutions are now exempted from paying CRZ clearance fees. The order was issued based on applications of St Xavier’s College, Thumba. The manager of the college had approached the government seeking exemption from remitting the CRZ clearance fee. Since government educational institutions entitles such an exemption, the aided educational institutions are eligible to get fee exemption, said the order.

It said all aided educational institutions are now eligible to get exemption as the state government looked into the matter seriously. Padma Mahanti, the Member Secretary, KCZMA, said this doesn’t mean the government and aided educational institutions are exempted from
Coastal Regulation Zone norms. They will get an exemption from paying the fees to get clearance. But the CRZ clearance will be provided based on the existing laws, she said. Further, all district CRZ committees will be functional soon and the committees set up for monitoring and implementing coastal regulation zone guidelines and protecting coastal environment will expedite the clearance of backlog files, she said. Fr Pious, manager of St Xavier’s College, said he had approached the government seeking exemption from CRZ clearance fee which would come around Rs 2-3 lakh, for constructing an auditorium on the campus a couple of years ago.

It took over a year to get the exemption and in the meantime the cost for construction and other expenses skyrocketed. But it’s a good decision for other institutions which look to undertake construction activities in their limit, he said. KCZMA officers maintained all construction activities beyond 500 m can be undertaken after getting approval from KCZMA. The fee mandated for the scrutiny of the project was aimed at meeting the expense of KCZMA. CRZ classification Coastal stretches of seas, bays, estuaries, brooks, rivers and backwaters influenced by tidal action (in the landward side) up to 500 m from High Tide Line (HTL) and the land between the Low Tide Line (LTL) and HTL are classified under CRZ. Permission is required for construction in coastal stretches within 500 m of HTL on the landward side. No new construction will be permitted in CRZ- I areas, except some projects of national interest.

**Kerala: Government to promote scientific fishing practice in Kerala**


Chief Minister Pinarayi Vijayan has called upon the fishing community to initiate steps that could raise the fish production of the state. To regain the top spot in fish production, the government will initiate steps to promote scientific fish catching practice, Pinarayi said. He said this after inaugurating a programme organised by the Kerala State Co-operative Federation for Fisheries Development Ltd (Matsyafed) at Kanakakkunnu, here on Monday. “The state was once at the top in fish production. But somehow we lost the spot. It is high time the fishing community took up the challenge to boost the fish production and thereby make the state a leading coastal state in fish production. For this the government with the help of various agencies will promote scientific catching practices among fishermen,” said Vijayan.

Earlier, the Chief Minister said the fisheries sector is facing a range of issues and the government is committed to addressing the same. According to him, some of the common problems being faced by the sector were issues in education and health sectors, unemployment, fisherfolks who were landless and homeless and others. The Chief Minister further said such issues would be addressed in a time-bound manner. “This government is eager to address the grievances of the fishing community. It was part of that policy the State Budget set-aside an amount of Rs 2,000
crore for the development of the coastal areas. By 2021 the LDF government will ensure that there are no homeless citizens in our coastal areas,” said Pinarayi.

He also pointed out that considering complaints regarding the absence of an emergency mechanism for fishermen at sea, the Fisheries Department would soon commission three marine ambulances. He also said the paper strip mechanism developed by the Central Institute of Fisheries Technology for detecting chemically contaminated fishes will be promoted on a large scale. During the programme, the Chief Minister presented Ernakulam Kannamaly Yakheen Fishing Group with the Matsyasree Award for its exceptional performance during the 2017-18 financial year. The CM also disbursed the insurance claim to the dependents of eight fishermen who lost their lives during Ockhi Cyclone. The Matsyafed also handed over an amount of Rs 8.58 lakh towards the CM’s Disaster Relief Fund.

Kerala: Rebirth for 12 fishermen adrift in high seas for six days

https://english.manoramaonline.com/districts/kasaragod/2018/05/02/rebirth-for-12-fishermen-adrift-in-high-seas-for-six-days-.html

Twelve fishermen had a miraculous escape after being stranded in the high seas for six days off the coast here. The fishermen, whose boat had developed a snag, were finally saved by the rescue boat of the coastal police and the fisheries department. The fishermen, belonging to Kerala, Karnataka and Assam, reached Azhithala boat jetty by 4 am on Wednesday. They had started their fishing trip on the boat ‘Al Ameen’ from Malpe in Karnataka on 25. The propeller of the boat soon broke and was lost in the waters. With no way to steer the boat, the fishing workers were stranded in the vast sea about 160 nautical miles off the coast. Workers of other fishing boats in the area noticed the boat adrift and realised that an accident had occurred. They informed the coast guard of the incident.

A coast guard boat soon rushed to the scene and attempted to rescue the fishermen. But the fishermen refused to abandon their boat, insisting on tugging it to the shore. Following which, coast guard officers contacted district collector K Jeevan Babu. On the directive of the collector, the rescue boat operated by the coast guard and fisheries department was deployed. The stranded boat was tugged to 45 nautical miles off the coast by ‘Priya’, a boat from Mangaluru, from where the rescue boat took over. The fishermen who landed at Azhithala jetty are, Muthappan (30), Jan Edison (31), Albert (64), Jayapal (21) and Sunil (37) of Kanyakumari; Suresh (21) and Bepson (37), of Vizhinjam; Baby John (37) of Poonthura; Bellarmin belonging to Thiruvananthapuram; Johnson (48) and Joby (32) of Thoppumpady; and Assam native Sijindas (19). The personnel of the rescue boat included Manu, Dhaneesh, Narayanan, K Kannan and CPO Unnirajan. ‘Al Ameen’ belongs to an Ernakulam native.
Kerala: Dolphin sightings decline in Kochi estuaries as sardines disappear


The dwindling stocks of sardines along Kerala's coast have affected not only the livelihood of fishermen but also the Indian Ocean humpback dolphins, a species listed by the International Union for Conservation of Nature as endangered. These dolphins are usually sighted in bays, lagoons and estuaries. The decline of dolphin sightings in the Kochi estuaries has caused concern among green activists. According to them, around 60-80 dolphins could be sighted in the Kochi coastal waters per day three decades ago. But hardly 10 dolphins are seen nowadays. Researcher Divya Panicker, who conducted a study on 'Indian Ocean humpback dolphins estuary use-patterns in Kochi harbour' said excessive human activity and industrial effluents flowing into the sea are threatening the existence of the species. The humpback dolphin lives close to the shore in waters up to about 20 metres deep. One of the reasons for the falling numbers is the lack of food resources in the sea, said CMFRI principal scientist V Kripa.

These mammals mainly feed on sardines, known as forage or prey fish. “The biological status of this species is distinct and it takes around 10 years to sexually mature. Since they are only a few in number, any threat can have a great impact. Therefore, they are considered endangered,” she said. The rather declining mudbank formations due to over-fishing and mechanised trawling are affecting these mammals to a large extent. The temperature variations due to climate change and industrial pollution are some of the factors that hamper their existence. The decreasing trend of the salinity in the water is also a major concern. “Mammals are more affected by sound pollution rather than water pollution, therefore studies must be conducted in those areas,” said Kripa.

Sound pollution can disrupt their path and it leaves them losing their balance and get strangled on the way. The changes in the food chain are moreover affecting organic life beneath the waters. The eutrophication and increase in the amount of metallic or chemical contaminations in the backwaters is having an ill effect on these mammals, said CUSAT School of Marine Sciences head of department S Bijoy Nandan. The destruction of mangroves is also affecting the native species of the regions. Clogging of canals with plastic and other waste are increasing at an alarming rate. The abundance of silt, copper and lead can lead to changes in the tropic structure. Dredging activities may cause navigation difficulties among the dolphin, which makes them drift from their path. There are no quotas fixed for dredging activities. Quotas must be made for dredging in order to reduce its impact on the species underneath.

Marine Protected Areas must be recognised in the Cochin estuaries. The Ramsar Convention of 2002 has recognised the threat that the species undergo in the backwaters, but not much effort was taken by the state in doing the needful, said Nandan. “The National Biodiversity Authority and state biodiversity authorities are becoming more political these days, which leads to all sorts
of negligence from their part," he added. Kerala Matsya Thozhilai Aikya Vedi president Charles George said climatic changes and unregulated trawling practices are the reasons for the depletion of sardine stocks. "From the harbour to Thevara bridge, fishing activities have been restricted to protect dolphins. If there is a fall in dolphin sightings in these particular areas, then it is a red signal," he said.

Kerala: Stakeholders at Munambam harbour say no to juvenile fishing


The combine of boat owners, fishermen, traders, brokers and other workers at the Munambam fishing harbour has said they will end juvenile fishing as well as prevent sale and trade of juvenile fishes from May 10, a decision that has widely been welcomed. However, fisheries sources, who have been fighting a long battle against the destructive practice, said that the decision came after a long spell of juvenile fishing, which would have serious consequences for the future. Juvenile fishing was rampant till recently, they said and claimed that the Fisheries Department had been inactive. The allegation has, however, been denied by the department. An official said that several boats had been fined for engaging in juvenile fishing in recent times.

Munambam Harbour Tharakans’ Association secretary K.B. Rajeev said it had been found that some boats were exclusively engaged in juvenile fishing. The decision to end the practice was taken to ensure a better future. Charles George of Matsya Thozhilali Aikya Vedi, who had been calling for an end to juvenile fishing, welcomed the decision. He said fishermen engaged in juvenile fishing were building their own traps. A decision to stop the destructive practice was a welcome one, he said. Mr. George said that there had been a consensus since July 2016 that fishermen of all categories would desist from juvenile fishing. However, the agreement had not been honoured. “Even at this point, it is not late to end the practice,” he said.

Kerala: Three-tier system for administration of fisheries management planned


Kerala, which set a model in local governance with the introduction of three-tier system for administration of local bodies, is set to emulate the system in fisheries management. The fisheries department has formulated rules as per the Kerala Marine Fishing Regulation Act, 2017 and one of the key components will be the constitution of a three-tier system of fisheries management councils, the first of its kind initiative in the country. Fisheries minister J Mercykutty Amma said introduction of management councils will be a crucial step in regulation of fishing practices and conservation of marine resources. "Such a system is being mooted for the first time in the country. There was no proper regulation regarding fishing practices.
Uncontrolled fishing led to exploitation of resources. Fisheries management councils are set to play a key role in checking fishing practices and in sustaining our available resources," the minister said.

The three-tier system will have a fishing village management council, a district fisheries management council and the state fisheries management council. Each council will have a specified number of members and will be assigned a set of duties and responsibilities. The state fisheries management council shall be responsible for preparation of marine fisheries management plan for the state and to identify suitable locations for mariculture and conservation activities. "It is going to be the first participatory model of management in fisheries in the country. There would be 222 village management councils, nine district councils and one state council," said K Sunilkumar Mohamed, head, molluscan fisheries division, CMFRI. The fishing village management council will prepare village-level marine fisheries management plan considering the local needs and it will create awareness among fisherfolk about responsible fishing and fish resource conservation. The village council will also be responsible for resolving issues and social conflicts among fisherfolk and coastal inhabitants at village level. The rules have been submitted to law department.

Kerala: Dredging to begin at Muthalappozhi harbour today


Dredging will begin at Muthalappozhi on Monday for deepening the harbour mouth and finding a solution to the problems caused by the unscientific construction of the breakwater. The Adani Group has undertaken the work on a request by the state government. “The dredger is in place. The plan is to deepen the harbour channel by three to four metres,” an official of the group said. Further, the Adani Group has plans to use the Muthalappozhi harbour as one of the loading points for rocks for the construction of the breakwater for the Vizhinjam port, sources said. According to the fishermen here, scores of their colleagues had lost their lives in this location after the construction of the breakwater which has transformed the water flow in a big way. The incidents had kicked up a major controversy forcing the government to take a re-look at the breakwater construction and suggest remedies.

Work will begin at 9.30 am on Monday. The biggest challenge in dredging the area is removing the rocks that lie scattered on the bed after getting dislodged from the breakwater. The aim is to complete the dredging before the Southwest monsoon sets in over Kerala in June. In 2016, with the latest fishing boat accident in Muthalappozhi leaving hundreds of fishermen families in dread, government agencies had approached the Adani Group, the concessionaire for the Rs 7525 crore Vizhinjam seaport project, for assistance to clear the harbour mouth. Muthalappozhi
lies to the north, near Chirayinkeezhu, and the fishermen there have been complaining for long about the unscientific construction of breakwaters for the fisheries harbour.

At Thazhampalli, to the north of the breakwaters, coastal erosion has carved away the beach in its entirety. In the middle of summer, huge waves lash the houses at Thazhampalli while the sea is extraordinarily calm at Perumathura to the south where the beach has been left intact. The families in Thazhampalli live in fear during the monsoons, when the waves lash over the low sea wall and over their houses. But even during the summer, the difference in the character of the sea to the north of the breakwater and to its south is amply evident. The construction of the breakwater began in 2004, and ever since, fishermen have been demanding a review of the project. The changes in water flow were noticed after the construction of the breakwaters, according to the local people.

Kerala: Coast Guard help sought to trace boat


The Fisheries Department has sought the support of the Coast Guard to trace a Beypore fishing boat with five workers that went missing on its return from Lakshadweep on April 22. Department sources said there were unconfirmed reports of sighting a boat nearly 33 nautical miles off the Kochi coast by other fishers. Only the Coast Guard would be able to confirm the details. It was on April 18 that the boat Krishnapriya left for Lakshadweep to bring a cargo of fish from another boat. There were five fishermen hailing from the Lakshadweep islands on the boat.

Fishing Boat Owners’ Association leaders from Beypore said they had not received any distress signal from the boat that might have suffered an engine snag. “The boat is loaded with all essential items and we believe that the five fishers will be able to survive even in case of unexpected mechanical error,” said Karichal Preman, vice president of the Kerala Fishing Boat Operators’ Association. Also, we have almost confirmed from the information received from other fishers that the floating boat sighted 33 nautical miles off the Kochi coast was Krishnapirya, he said.

Kerala: INCOISâ€™ real-time market information for fisherfolk


Fisheries Minister J Mercykutty Amma on Wednesday said the Indian National Centre for Ocean Information Services (INCOIS) will provide real-time information on the market price of fishes and allied news through the GPS-enabled GEO Augmented Navigation (GAGAN). After talks
with the INCOIS chief in Hyderabad, the minister said the INCOIS will incorporate the technical features in NAVIC - designed by the ISRO and manufactured by Keltron - to provide advisories on the fishing zone to help fishermen locate shoals and offer advance market information along with safety warning.

Mercykutty Amma said the communication distance in the sea will be enhanced to 1,500 km from the present 20 km following the launch of ‘NAVIC’ (Navigation with Indian Constellation) and the fishing vessels will be equipped with it by May second week as stated by ISRO chairman K Sivan. The new system will disseminate information in the local language through the device. Meanwhile, the state-run Keltron has signed an MoU with the ISRO to incorporate a Distress Alert Transmitter into the NAVIC device. Ten navigation devices developed by Keltron successfully cleared the ISRO’s quality test. Keltron will enhance its facility to manufacture DAT-equipped NAVIC devices in the next phase.

Kerala: NAVIC to keep tabs on fishermen from May


Fishing vessels putting out to sea from the Kerala coast will be equipped with satellite-based navigation devices from next month to ensure safety at sea. Fisheries Minister J. Mercykutty Amma said here on Tuesday that NAVIC, India's own regional satellite navigation system, sets designed by the Indian Space Research Organisation (ISRO) and manufactured by Keltron would be ready for distribution to fishermen by the second week of May. A press note quoting her said ISRO chairman K. Sivan had communicated the information to the government. The Minister, who held discussions with scientists at the Indian National Centre for Ocean Information Services, Hyderabad, said the NAVIC sets would incorporate a potential fishing zone advisory to help fishermen locate shoals and provide advance market information. The NAVIC device uses India’s own regional satellite navigation system to warn fishermen about weather events.

A master control room and six regional control rooms located in the coastal areas would disseminate information to fishermen in Malayalam through the NAVIC sets up to a distance of 1,500 km from the coast. The system was devised following the death of more than 100 fishermen in Cyclone Ockhi late last year. Meanwhile, the Kerala State Electronics Development Corporation (Keltron) has entered into a pact with the ISRO to incorporate a Distress Alert Transmitter into the NAVIC device. The agreement for transfer of technology was signed by Keltron Managing Director T.R. Hemalatha and Group Director, Space Applications Centre, ISRO, S.N. Sathashia at the SAC headquarters, Ahmedabad. SAC Director Tapan Misra was present. DAT is a low cost, floating device with an inbuilt satellite receiver that transmits emergency messages at intervals to alert search and rescue agencies.
A press note issued by Keltron said 10 NAVIC devices manufactured by Keltron had cleared the quality tests by the ISRO. It said Keltron was preparing a new assembly line for the manufacture of NAVIC sets equipped with the DAT system.

Kerala: State to seek more aid for coastal protection


The government will seek more assistance from the Centre to compensate the damage caused by coastal erosion and relocate fishermen to safer places, Chief Minister Pinarayi Vijayan has said. Talking to reporters after a meeting of the State Cabinet here on Tuesday, he said the coastal communities affected by the swell waves over the last few days would be given assistance to repair their dwellings. The Cabinet decided on a compensation of Rs. 4 lakh for houses left uninhabitable due to the flooding caused by the waves. An amount of Rs. 50,000 would be given for major repairs to damaged dwellings and Rs. 15,000 for repairs to kutcha houses. Mr. Vijayan said the frequent erosion along the State’s coastline necessitated the relocation of fisherfolk from the vulnerable stretches. An amount of Rs. 10 lakh would be given for each family to shift to safer places.

Simultaneously, efforts would be launched to protect the coast by constructing sea walls. District Collectors would be asked to invoke the Disaster Management Act to procure big granite blocks from quarries and construction of tetrapods would be taken up to buttress sea walls. NAVIC for fishermen Fishing vessels putting out to sea from the Kerala coast will be equipped with satellite-based navigation devices from next month to ensure safety at sea. Fisheries Minister J. Mercykutty Amma said here on Tuesday that NAVIC, India’s own regional satellite navigation system, sets designed by the Indian Space Research Organisation (ISRO) and manufactured by Keltron would be ready for distribution to fishermen by the second week of May. A press note quoting her said ISRO chairman K. Sivan had communicated the information to the government.

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Kerala: Plea to rehabilitate sea erosion victims


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The State government and the District Administration should take the initiative to bring immediate aid to the people of the coastal areas, who are suffering due to sea erosion, Latin diocese Archbishop M.Soosa Pakiam has said. In a press release, he said that around 90 houses have been completely destroyed, while 145 houses were partially destroyed, in the district. Fishing boats and household items have been destroyed. The people are living in fear. Those who lost their houses and livelihood should be provided with compensation and free ration immediately. They should be rehabilitated without delay, he said.

Sea wall should be built in Valiyathura, Poonthura and Beempally, in view of the severe sea erosion in the areas this year, V.S.Sivakumar, MLA, has said. In a press release, he said that the construction of ‘Pulimuttu’ (groins) in the Cheriyathura area, which had begun during the UDF Government’s tenure, has not progressed under the current government. Funds were also released for the construction of sea wall at Valiyathura and Cheriyathura. But the work has not started yet. There are signs of the sea erosion worsening in the coming months. The government should immediately take steps in this regard, said Mr.Sivakumar.

**Telangana and Kerala: Barter notes on inland fishing, road safety**


Just as the Telangana government is planning to come out with a Kerala model road safety legislation, the Kerala government is readying to pay back the compliment by taking a leaf from Telangana’s success with inland fish harvest. While the exchange of development tips were inadvertent, in a happy coincidence, the initiatives from the two states have come about at the same time. “Kerala has been eyeing the technical and commercial expertise of Telangana in inland fish production, cage fish yield and fingerling production for some time,” Kerala fisheries minister J Mercykutty Amma told FE. Telangana enjoys four times the area of fishing reservoirs in Kerala and the latter is yet to tap the resources optimally. In tune with the fast-escalating demand, Telangana has been able to double the fingerlings production to 40 million in just two years.

“Telangana fisheries minister Talasani Srinivas Yadav has promised to share the expertise with Kerala at a meeting in Hyderabad”, said Mercikutty Amma. This teaming up would come about at a time when Kerala is launching Rs 69.9-crore inland fisheries project, with a target of generating 14.4 lakh mandays. The co-operation with Telangana farmers is expected to help increase inland fish production in Kerala to 25,000 million tonne and harvest Rs 1,270-crore revenues from the sector. Meanwhile, it was Telangana ministers who first came up with the idea of synergy with Kerala on road safety. Telengana, worried by the State’s road accident dead toll of 7,000, has been considering enforcement of initiatives as in Kerala. Kerala has a Road Safety
Vision in place which targets to reduce road accidents and fatalities by 50% within 2020, said Rajiv Puthaleth, secretary, Road Safety Authority, Kerala.

Compared to the last year, there has been nominal progress towards this goal in Kerala since the fatalities are down 6.5% and road accidents by 2.5%. In a meeting of high-level committee, comprising road and transport ministers, the Telengana government has decided to have a similar goal of reducing road accidents and fatalities by 50% within 2020.

Kerala: Fishers uneasy over arrival of vessels from other States


The disquiet among local fishermen over the increasing arrival of fishing boats from other States at harbours in Kochi is an indication of the crisis-like situation gripping the maritime fisheries sector, according to fishermen’s union. “There is virtually a fish drought. Effective steps are needed to overcome the crisis,” said Charles George of Matysa Thozhilali Aikya Vedi. The Ernakulam District Matsya Thozhilali Union had recently expressed concern at the rise in the number of fishing boats arriving from other States at harbours like Munambam. The situation has resulted in a condition wherein local fishermen are losing out on their catch, the union had said. It also wanted the authorities to act against the said fishing boats which were also allegedly engaged in juvenile fishing.

Mr. George said fishing boats, particularly those from Tamil Nadu, had traditionally been utilising harbours around Kochi for the last more than 50 years. Distant-water fishing boats from places like Tutur and trawl net boat operators from Kolachal have also been coming to Kochi. More recently, there was an agreement that such fishing boats could land at the harbours by paying an annual user fee of ₹25,000 each. The concern expressed by fishermen indicated the dwindling sea resources, and it is time the government stepped in to address the issue, he said, adding that there was also a need for strict regulation on juvenile fishing. “What is needed is a comprehensive approach to the maritime fisheries crisis, with more fishing boats and fishermen trying to tap the limited resources in the seas,” he said.

Kerala: Curbs on destructive fishing methods soon


Light fishing in territorial waters (within 12 nautical miles from the coast) using lights with power above 12 watts will soon be a punishable offence in the state. The department of fisheries has formulated a new set of rules to strictly control destructive fishing practices, including regulations on light fishing, a widely followed method for fishing in the state. The rules have
been formulated based on Kerala Marine Fishing Regulation Act (KMFRA) 2017. The Act has included new clauses dealing with use of dynamite, other explosive substance, poison or noxious chemicals, light or other destructive materials to catch or destroy the fish in the specified area. An official said that specific rules making destructive fishing practices a culpable offence were being mooted for the first time in the state.

Mechanised vessels equipped with fixed type LED lights and even submersible lights employ light fishing method which leads to phototaxis, in which fishes get attracted to sources of light. “Usually smaller fishes which are preys to larger ones get attracted to light first and larger fishes follow smaller fishes and the fishermen catch the entire stock,” an official said. Use of dynamite and fish toxins like copper sulphate for fishing would also invite legal action. The officials said regulations have been mooted to check fish aggregate devices in which fishes are trapped and caught using natural substances and sometimes plastic bottles. T Peter, president of the Kerala Swatantra Malsyathozhilali Federation, while welcoming new rules, said that success of such measures depend on enforcement.

**Kerala: To end exploitation, Kerala government plans minimum support price for fishersâ€™ catch**


The state government is planning to introduce minimum support price (MSP) to traditional fishermen's catch with an aim to end the continuing exploitation by major export houses and money lenders in the sector. As an initial step, the government will set up eight deep-freezing units in selected harbours in the state. Fisheries Minister J Mercykutty Amma told Express, "Large-scale exploitation prevails in the sector. The money lenders and big export houses are controlling the price. As a step to introduce MSP, the government is planning to give interest-free loan to fishermen. We've approached the NABARD for Rs100-crore loan. The introduction of MSP in rubber, paddy and coconut fetched minimum livelihood to workers in those sectors. The government hopes fishers too will benefit from the MSP.

"We plan to introduce the system by August this year, but more time will be taken to free the fishers from the clutches of the traditional money-lending system prevailing in the harbours," said the minister. Matsyafed chairman P P Chitharanjan said the state government proposes the freezing units along the coast at Vizhinjam, Neendakara, Thottapally, Arthunkal, Kochi, Kozhikode, Kannur and Chettuva. "A Rs 100-crore project has been mooted. The state government and National Cooperative Development Corporation will allot Rs 50 crore each for it," said Chitharanjan. "The freezing units with a capacity to keep 1,000 metric tonne fishes will help the fishermen to keep their catch and bargain for more price. The lack of facility to keep
surplus catch is now forcing the fishermen to sell them at a low price fixed by the auctioneers or money lenders," said Chitharanjan.

"Most fishermen are facing financial shortage and they're forced to depend on money lenders. To avoid this situation, the fishermen societies under the Matsyafed are planning to allot them money on a very low interest and through easy process," said Chitharanjan. "The auctioneers and big business houses' representatives are managing the harbours. The latter give money as interest-free loan to fishers who venture into the sea. And when they come back with their catches, the agents decide the price of the catches, often ending up cheating them. The move of government would be a relief to the fisher folk," said Reghuvaran, a fisherman from Thottapally.

Kerala: Post Ockhi, fishing boats must be better prepared to battle sea fury: Coast Guard officers


Top Coast Guard officers on Tuesday underlined the need for adopting safety measures to avoid further tragedies at sea in the wake of the Ockhi cyclone disaster and the upcoming southwest monsoon. Addressing a special seminar on Search and Rescue organised by the Coast Guard DIG Sanatan Jena, Commander ICG (Kerala and Mahe), said adoption of such safety measures has assumed importance in the wake of the recent Ockhi cyclone disaster and the forthcoming southwest monsoons. He also sought the cooperation of fishermen to keep the maritime areas safe and provide a safe environment for fishermen. Jena also assured fishermen of all support in tackling contingencies at sea. Subrata Biswas, Additional Chief Secretary (Home and Vigilance), who inaugurated the workshop urged fishermen to include safety equipment in their boats.

Unlike the western coast, eastern border states like Tamil Nadu, Andhra Pradesh and Orissa are better prepared for tackling weather-related crisis in the Bay of Bengal due to the frequency of such incidents, he said. The workshop highlighted the preventive measures need to be taken by fishermen when venturing out to sea. The aim of the seminar was to educate the common fishermen on safety requirements and safety procedures at sea, a defence spokesperson said. An exhibition of safety equipment such as life rafts, search and rescue transponders (SART), beacons, emergency position indicating radio beacons (EPIRB) and distress alert transmitters (DAT) also was held alongside the seminar. About 175 personnel, including fishermen and personnel from Coastal Police, Marine Enforcement and Fire and Rescue and Fisheries Department attended the seminar. Coast Guard (Vizhinjam station) Commandant V K Varghese, Deputy Commandant George Baby and other officers from ICG Thiruvananthapuram and Kochi units were present.
Believers Eastern Church announced the launch of a state-wide rehabilitation program for the victims of Cyclone “Ockhi”. The church will distribute 100 boats, 1500 educational kits and scholarship to the victims’ families and children over the next two years in the affected areas of Thiruvananthapuram, Alappuzha and Kollam. The program will benefit more than 1000 families of this region. The launch was announced in presence of Pinarayi Vijayan, Chief Minister, Kerala, P. J. Kurien, Deputy Chairman of Rajya Sabha, Thiruvananthapuram along with Rev Dr. K. P. Yohannan, Metropolitan, Believers Eastern Church. Other eminent dignitaries like Mathew T Thomas, the Minister for Water Resource’s, Govt. of Kerala; Mayor of Trivandrum, MLA of Thiruvananthapuram East were present.

“Whereas the government is always doing its bit to help victims of such natural catastrophes, it is important that the civil society participants also contribute towards relief and rehabilitation measures. Our government appreciates and welcomes such initiatives and will extend all possible support for the successful roll-out and implementation of this project,” said Chief Minister Vijayan. Cyclone Ockhi had ravaged a large part of coastal Kerala late last year killing a large number of people besides leading to loss of property and means of livelihood for locals. Most of the affected families were of fishermen who not only lost their property and belongings to the cyclone, but also lost their only means of livelihood – their fishing boats. Through this programme Believers Eastern Church aims to reach out to and rehabilitate fishermen community and their families.

“When I visited the site sometime back I realised that merely by giving clothes or food we would not be able to address the problem. Livelihood and education are the two most critical pillars of any social order. Over the next two years we will address these aspects and reach out to more such victims who need a little helping hand,” said Yohannan. Church’s numerous other programmes have benefitted thousands of children, women, leprosy patients and victims of natural catastrophes by providing them education, counselling, health camps, medicines, hospitals, shelter, rehabilitation and clean drinking water.

Fishermen not taken into confidence while drafting Kerala Coastal Zone Management plan

After environmentalists, the fisher folk are now up in arms against the proposed Coastal Zone Management Plan (CZMP) prepared by the Kerala Coastal Zone Management Authority for Thiruvananthapuram, Kollam and Kottayam districts. While lambasting the said plan, the fishermen are demanding the authorities concerned immediately convene a meeting to hear their complaints. They are of the opinion the draft CZMP has not only ignored the interests of the fishing community but is also riddled with mistakes. “Fishermen were not taken into confidence while drafting the management plan,” said D Christudas, coordinator, Theeram Charcha Vedi. “While preparing a plan meant to protect the livelihood of fishermen and to conserve the sea and the coastline, the authorities concerned should have consulted the fishing community. But this has not happened.”

Christudas said the fishing community had unanimously rejected the draft CZMP. They will soon submit a revised draft plan on behalf of the community to the government, he said. “It is condemnable that, though the fishermen as well as the coastline is facing a range of issues including mishaps like cyclone Ockhi, the CZMP has not tried to pitch any scientific programme to address the same,” Christudas said. National Fishworkers Forum general secretary T Peter is of the view the CZMP is dubious in matters like areas to be protected, fishing habitats and coral reefs. “The authorities concerned seem to have hastily prepared the CZMP. The Green Tribunal directive to submit a report before April 30 might have instigated them to come out with a one-sided management plan,” said Peter.

According to him, though there was a plan to conduct hearings in Thiruvananthapuram, Kollam and Kottayam districts, the authorities were only able to successfully conduct the same in Kottayam. He said the fishermen’s protest had led to the hearing being postponed in Thiruvananthapuram and Kollam. “Take the case of Thiruvananthapuram. The map prepared as part of the management plan had omitted Varkala Municipality and had mentioned Kazhakoottam Municipality, which is still in the pipeline. Also, it is condemnable that the expertise of the Kerala Biodiversity Board was never used while preparing the CZMP,” Peter said. Earlier, environmentalists had alleged that, though the management plan was supposed to be submitted in 2013, the state has come out with a draft only in 2018.

They said the suggestion to include the map by the Survey of India, which maps places vulnerable to sea-level rise, has also been ignored in the draft CZMP. The charges of fishers * Though there was a plan to conduct hearings in Thiruvananthapuram, Kollam and Kottayam districts, the authorities were only able to conduct the same in Kottayam. * In the case of Thiruvananthapuram, the map prepared as part of the management plan had omitted Varkala municipality and had mentioned Kazhakoottam municipality. * The expertise of the Kerala Biodiversity Board was never used while preparing the CZMP
Kerala: Ockhi victims' kin get compensation


Chief Minister Pinarayi Vijayan on Tuesday disbursed compensation to the families of fishermen who had gone missing in the sea during Cyclone Ockhi. In all, an amount of ₹18.40 crore was sanctioned by the government for the families of 92 fishermen. Compensation of ₹20 lakh was distributed to the aggrieved families on Tuesday. Inaugurating the function on the premises of the Madre-de-Deus Church at Vettucaud on Tuesday evening, Mr. Vijayan said while 92 fishermen had been named missing, the body of one of them was recovered recently. As many as 49 fishermen were found dead earlier. With this, the total number of people who had died or gone missing has been pegged at 141, according to the information compiled by the State Disaster Management Authority. “Certain quarters have raised claims that there are many more who remain unaccounted.

The government is willing to make additions to the official figures, besides ensuring equivalent compensation to the respective families,” Mr. Vijayan said. Pointing out that the government had implemented relief measures at an unprecedented scale, Mr. Vijayan said three marine ambulances would be procured from the Cochin Shipyard. Besides, the government would ensure that 1.4 lakh fishermen are provided mobile alerts regarding weather forecast, fish availability and other information. For this, deep sea fishing vessels would be equipped with satellite-based navigational equipment that will utilise NAVIC, the regional satellite navigation system of Indian Space Research Organisation (ISRO). Life jackets will also be distributed to all fishermen, he said. In addition, a committee led by former Chief Secretary S.M. Vijayanand will formulate a special package of ₹2,000 crore for coastal protection. Revenue Minister E. Chandrasekharan presided over the function. Tourism Minister Kadakampally Surendran, Deputy Speaker V. Sasi, Shashi Tharoor, MP, V. S. Sivakumar, K. Ansalan and M. Vincent, MLA, were also present at the function.

Kerala: Solar-dried fish products now available in Kochi


A new business model for solar dried fish products has been launched in Kochi by a start-up firm ‘Aabbaa Fish Products’ with the support of the Central Institute of Fisheries Technology (CIFT). P.T Thomas MLA opened the dry fish store at Chambakara on Tuesday which is an ideal choice for dry fish lovers. The design of the store, the products and the display settings suits the new age retailing business, and the store is the first of its kind in the state. All the products are scientifically processed using energy efficient and eco-friendly solar dryers developed by CIFT.
The quality of the solar dried fish is extremely good in terms of hygiene, retention of nutrients, aroma and taste, as it eliminates all the disadvantages of conventional open sun drying, and is also free from dust, dirt, rain, insects and micro-organisms. Lower and uniform levels of moisture can also be achieved for products from the solar dryer when compared to conventionally dried products. CIFT has provided technical support and guidance to the start-up firm through the Agri-Business Incubation (ABI) Centre of the Institute. Corporation councillor V.P. Chandran, CIFT director Dr. Ravishankar C.N, Dr. Manoj P. Samuel, head of Engineering Division, CIFT and Dr. George Ninan, principal investigator, ABI Centre also attended.

**Kerala: Rs 69.90 crore project to boost inland fisheries of Kerala**


The inland fishing sector is set to receive a fillip in the state as the Fisheries Department is planning to launch an umbrella project named ‘Development of Inland Fisheries’ with an outlay of Rs 69.90 crore. The project to be launched on a state-wide basis will be implemented by Fish Farmers Development Agency and Agency for Aquaculture Development in Kerala. According to the Fisheries Department, other than that of conserving and managing the inland natural fish resources, the project also aims at generation of 14.4 lakh man-days of labour and generating a revenue of Rs 270 crore from the sector. “The project mainly involves seven components - conservation and management of inland fisheries, additional infrastructure facilities for fish seed farms, development and operation of existing farms and hatcheries, development of aquaculture and support services for aquaculture.

The project is expected to be completed within one year,” said an officer with the Fisheries Department. It is learned as part of the project, there will be programmes like one paddy, one fish; fish farming in reservoirs, tiger shrimp farming, Indian white shrimp farming, Vannamei shrimp farming, integrated fish farming and others. “Through this project, we are planning to appoint 400 aquaculture promoters. They will be appointed on a contract basis and will be provided with a salary of Rs 5,000. These promoters will be asked to initiate programmes that could enhance the production to 25,000 tonnes and to double the aquaculture productivity of the state,” said the officer. At the same time, the department also has plans to attain self-sufficiency in seed production by creating additional infrastructure facilities and by producing good quality seeds for better yield.

The other major initiatives being planned under the project includes establishing nine demonstration units and setting up 10 aquatic animal health care centres. Earlier, the Fisheries Department had embarked on a programme to develop the aquaculture farming practices in the state, by introducing new species in the existing aquaculture scenario of the state. Considering the immense scope of fisheries and aquaculture, the Central Government had launched a Central
Sector Scheme on Blue Revolution: Integrated Development and Management of Fisheries for focused development and management of the fisheries sector and to increase both fish production and productivity from aquaculture and fisheries resources of the inland and marine fisheries sector, including deep-sea fishing.

Kerala: Corporation to redo Kazhakuttam market

http://www.thehindu.com/todays-paper/tp-national/tp-kerala/corporation-to-redo-kazhakuttam-market/article23470166.ece

The city Corporation has been forced to remodel the Kazhakuttam market building, after it was found unsuitable for the vendors. A majority of them had refused to move into the existing building, as it was constructed without considering the needs of those who are supposed to use it. The case is similar with the fish market at the Connemara market in Palayam, where the new vending zone remains unused, even as the fish vendors continues to occupy the old one. According to city Corporation Mayor V.K. Prasanth, the building at the Kazhakuttam market was constructed keeping in mind only the fish vendors. No facilities were provided for the vegetable vendors and others. But even the fish vendors refused to use the vending zones, due to the unscientific designing of the platform for vendors.

Most of the fish vendors had occupied the road sides near the Kazhakuttam junction. This often caused difficulties to pedestrians, and led to frequent tiffs with police personnel. The sales had also plummeted. The Corporation held several meeting with the vendors here, in which they suggested the changes in designs. COSTFORD had also conducted a study on the existing design. Following this, it was decided to change the design of the slabs, provide proper seating for the vendors, and add facilities for vegetable vendors. The market redesigning project is being taken up at a cost of Rs. 1.20 crore. The Corporation has similar plans for the fish-vending zone in the Connemara market too.

Kerala: Finally, aid to be distributed to the kin of Ockhi victims of Kerala


Compensation for the families of those who went missing in the sea during Cyclone Ockhi will be distributed on Tuesday. The programme being organized at Vettucaud Madre De Deus Church, near Sanghumugham, here will be inaugurated by Chief Minister Pinarayi Vijayan at 6 pm. According to officials, an amount of Rs 20 lakh each will be provided to families of 91 fishermen who went missing in the seas during Ockhi. “About 92 fishermen went missing from the district during Ockhi. Of them, a fisherman’s body was recovered from the sea recently. Thus the missing statistics has now been pegged at 91. These fishermen are now presumed to be dead.
The compensation is now being disbursed after considering it as an extraordinary situation,” said an official with the Revenue Department.

It is learned that of the 91 fishermen who went missing, 57 is from Neyyattinkkara Taluk and 34 is from Thiruvananthapuram Taluk. in total, an amount of Rs 18.40 crore will be disbursed in total as compensation on Tuesday. “In the case of Thiruvananthapuram Taluk, we have identified 127 dependents and from Neyyattinkkara Taluk, it is 225 dependents. They will be presented with documents which certify that the compensation amount has been credited to their bank accounts as fixed deposits,” adds the officer. Earlier, an amount of Rs 22 lakh each was disbursed to the dependents of 49 fishermen who fell victims to Cyclone Ockhi from the district.

The programme at Vettucaud Madre De Deus Church will have the presence of Revenue Minister E Chandrasekharan, Tourism Minister Kadakampally Surendran, Deputy Speaker V Sasi, Shashi Tharoor MP and others.

Kerala: 10 marine fisheries from India identified as targeted fishery


Considering their commercial value in overseas markets, 10 marine fisheries from India have been identified as the targeted fishery for securing the eco-labelling certification of the Marine Stewardship Council (MSC), London. The 10 fisheries were identified by a panel of stakeholders in India’s marine fisheries sector, a statement issued by the Central Marine Fisheries Research Institute said. They included blue swimming crab caught in gillnet from Mandapam, Tamil Nadu; shrimp by trawl from Kollam; red ring shrimp by trawl from Kollam; squid by trawl from Kollam; flower shrimp by trawl from Mandapam; cuttlefish by trawl from Kollam; lobster by trap from Nagercoil and Kanyakumari; skipjack tuna by hook and line from Lakshadweep and Japanese threadfin bream by trawl from the south west coast. The panel of stakeholders includes marine scientists, seafood exporters, retailers and fishermen.

The panel also decided to start fishery improvement projects for these fisheries under regular stakeholder consultations. A slew of strategies was also formulated by the stakeholders for securing the MSC certification, a necessary endorsement for enhanced access in overseas market, the statement said. The panel, which met at the Central Marine Fisheries Research Institute (CMFRI) under the leadership of the MSC, CMFRI and the World Wildlife Fund- India (WWF) to discuss the MSC certification process, agreed that unanimous efforts are required to implement the fishery improvement plans to secure the eco-labelling certification. Speakers at the stakeholders meet highlighted that over exploitation and unregulated fishing were the major issues which should be controlled to maintain the sustainability of marine fisheries in India.

Stressing the need for regular consultation of stakeholders, they called for self-imposed regulations to curb over exploitation and juvenile fishing. “Self-imposed regulations are need of
the hour for maintaining sustainability of fish stocks, reducing environmental impacts and ensuring effective management of the fisheries”, Dr Yemi Oloruntuyi, Head, Developing World Programmes of the MSC said during the panel discussion. She also said that maintaining sustainability of fisheries was crucial to increasing their acceptability among overseas markets. She said the concept behind eco-labelling is to harness consumer power to usher in positive change in the fisheries sector. “The environmental benefits of eco-labelling include improved sustainability of fish stocks, reduced bycatch, improvement of habitat and ecosystem, increased compliance with regulations and ecosystem-based management”, Yemi said adding that currently 28 per cent of fisheries are over exploited.

**Kerala: Fisheries Department takes note of depleting resources**


With the depletion of marine wealth triggering concerns, the Fisheries Department is said to be weighing the possibility of carrying out a species-wise marine catch assessment. Considering the gravity of the situation, the department is also mulling the idea of initiating a study to assess the reasons for the slump in fish catch. The decision, as per sources, follows after the finding the once common fish catch varieties like skate, shark, sardine and squid has become rare, affecting the livelihood of traditional fisherfolk. “Sea surface temperature is rising at an alarming level. Due to the same, fishes are migrating towards deep sea. As common catch varieties like sardine, which were pelagic ones, has started to move to deep seas, the traditional fishermen are finding it difficult to locate them. An idea is there before us to find out the reasons for the same,” said a Fisheries Department officer.

The department had earlier come out with the finding that other than that of the influence of climate change, unscrupulous catch of fish, juvenile fishing, the domineering presence of foreign trawlers and water pollution are also contributing factors for depletion of marine wealth. It is said once the Fisheries Department decides to move forward with the idea of carrying out a study on the reasons behind the slump in fish catch, it could become a first of its kind study carried out by the department as currently it is relying on study reports of various universities and agencies like the Central Marine Fisheries Research Institute (CMFRI) for framing policies and decisions. Meanwhile, M Thajudeen, deputy director (Marine) told Express though global warming and related sea surface temperature are having an impact on the fisheries sector, the department is yet to take up a study in this regard.

He said at present the Statistical Cell attached to the Fisheries Directorate is keeping a tab on the marine wealth. Earlier, in 2010 a study titled ‘Climate Change and India: 4 X 4 Assessment-A Sectoral and Regional Analysis for 2030s’ released by the Ministry of Environment, Forest and Climate Change, had highlighted while there could be high concentration of species like oil
sardines, varieties like Indian mackerel which normally occupy surface and sub-surface waters might descend to deeper waters. A report released by CMFRI in May 2017 had mentioned the sharp decline of mackerel and declining trend in the catch of sardine in the state. Fishing stats * Statistics available with the Fisheries Department says, compared to 2015-16, the total fish catch during 2016-17 registered a fall of 51,041 tonnes * The total fish-catch during 2016-17 was 6,76,466 tonnes * During 2017-18 financial year, the total catch was 2,93,723 tonnes (until September) * In the case of inland fishing, a drop of 22,632 tonnes was recorded in 2016-17 compared to 2015-16

Kerala and Tamil Nadu: Over 240 fishermen still missing after Cyclone Ockhi hit five months ago: Parliament panel


More than 240 fishermen are still missing after cyclone Ockhi hit India’s southern coast more than five months ago and the chances of their return may be very dim, according to a parliamentary panel. The parliamentary standing committee on home affairs, headed by senior Congress leader P Chidambaram, has expressed concern over the fate of the missing fishermen and the reports that there was a delay in the launch of ‘search and rescue’ operations. The committee, in its report submitted to Parliament on Wednesday, took note of the submission of the home ministry that the government, despite the unprecedented circumstances, launched search and rescue operations in a timely manner. “While the central government has made efforts to rescue the fishermen stranded at sea, the committee observes that nearly 244 fishermen were still missing as on January 4, 2018.

With the search and rescue operation being called off by the government, the committee painfully notes that the chances of return of the remaining missing fishermen may now be very dim,” the panel said. The committee said it wants the ministry to collect the final number of missing fishermen and submit a report to it. “The committee recommends that the government must make adequate arrangements for providing a viable means of livelihood to the families of missing fishermen and they should be provided livelihood assistance, as an interim measure, without any delay,” the report said. Cyclone Ockhi, which formed as a depression over southwest Bay of Bengal on November 29, 2017, intensified into a cyclone off the Kanyakumari coast in Tamil Nadu on November 30 and travelled up to the Gujarat coast before it dissipated on December 6 after weakening into a low pressure area.

Ockhi is the first severe cyclonic storm in almost 40 years to have travelled about 2,400 kilometres from the Bay of Bengal to as far as the Gujarat coast, a senior Met Department official had said. The parliament standing committee report, "The Cyclone Ockhi- Its impact on fishermen and damage caused by it" is available at:
The state government has issued an order for immediate release of relief grant for the family of the 91 missing fishermen in the Ockhi cyclone. This comes five months after Ockhi cyclone hit Kerala coast on Nov 30 last year. The fisher folk had raised concerns that Kerala is yet to release the announced relief for the affected families. Social activists also wrote to the Prime Minister indicating that the Ockhi affected fishermen community in Kerala continue to live in dilapidated houses with no proper rehabilitation. The state government order, dated March 27 released now through the state disaster management department (DMD) endorsed by department undersecretary, indicates that the state had constituted an expert committee with disaster management, revenue, home and fisheries department additional chief secretaries as its members.

The committee had verified the inquiry report on the missing fishermen submitted by the district collectors, district police chiefs and fisheries department director. Among the FIRs filed for 102 cases of missing fishermen in Kerala, the committee had examined and approved 91 cases for relief grant. “The legal heir from the family of the 91 missing fishermen will be identified and the relief grant of Rs 20 lakh each will be offered as announced by the state,” an official at DMD told TOI. Citing the government order, he said, the state will also take measures for the release of Rs 2 lakh each as relief from the Centre in addition to the state grant, he said. A day before social activists had told TOI that though Kerala stood ahead initially in releasing the relief fund of Rs 20 lakh each for the families of the 49 deceased fishermen, it has gone behind Tamil Nadu in completing the rehabilitation support announced for all the affected families.

In a letter to Prime Minister Narendra Modi, social activist Govinden Namboothiry points out that Kerala is yet to provide support to the family of missing fishermen. “After initial relief grant for the family of the deceased, no precautionary measures, basic infrastructure facilities to the family of the victims including compensation relief and livelihood support was offered after making the announcement by the state. Even the rehabilitation process has not started in full swing and many affected families continue to live in dilapidated houses,” he said. Despite intimating it to the Kerala State Human Rights Commission, state government has not taken effective action, he said. “Though Kerala offered relief grant of Rs 20 lakh to the families of the deceased fishermen in addition to the Rs 2 lakh each announced by the Prime Minister’s Office, families of the missing and affected were not offered any compensation.

State had announced that it would rehabilitate the affected families providing support for education, employment and livelihood, it is yet to be implemented. Initially, Kerala had
promised, but now Tamil Nadu has taken the lead,” National Fishworkers Forum general secretary T Peter told TOI. A social activist maintaining anonymity said, “Tamil Nadu released relief fund to the families of 26 deceased and 177 persons missing, while Kerala is yet to offer the relief support for all affected. The state could not trace 94 fishermen from Kerala, yet 10 persons from other states are also missing”.

Tamil Nadu coordinated things efficiently with the support of local fishermen, Christian churches and others. Kerala though formed a committee, it couldn't provide result so far as most of them are government officials, the activist said. Kerala government had urged the Centre for Ockhi relief package of Rs 7340 crore, but it is yet to receive a response. The state government has also constituted an expert committee to examine the terms for supporting the Ockhi affected, but it is yet to complete the process. When contacted, officials of the state government told TOI that the state constituted expert committee led by former chief secretary SM Vijayanand is formulating the conceptual framework for a comprehensive special package for overall development of Ockhi affected fish folk in Kerala. “The committee is examining the terms of reference for finalising the framework for the ockhi special package which covers the rehabilitation of the fishermen community,” the official said.

Kerala: Relief-linked registration mooted for fishers


The Assembly Committee on Environment has mooted a registration system for fishermen and limit Ockhi-like disaster relief assistance to registered persons. The committee asked to examine whether the software developed by the National Informatics Centre titled ‘real craft’ can be used for the registration. Linking benefits with the registration system is to ensure that all fishermen venturing into the sea are registered with the system, says the committee report tabled in the Assembly on Tuesday. Ockhi victims who lost boat and nets will be given replacement. Those who suffer from physical or mental illness owing to the disaster will be given alternative livelihood assistance. The committee has suggested to form regional fisheries councils under Fisheries and Ports departments to prepare a database on fishermen going to the sea everyday.

Accurate data will help in effective rescue operations in case of an emergency. Mobile phone-based weather alert system is another recommendation. Only boats that have stability fitness certificates and those which will not submerge in water should be used for fishing. Every boat must have an emergency tool kit. Fishing boats should be built in centres recognised by the Fisheries Department to ensure that they adhere to international standards. A gear marking system should be introduced for fishing nets to avoid dumping of old nets in the sea. Use of inboard motor should be encouraged. Equipment for emergency communication like satellite
phone and identification system should be made compulsory in boats. Short-term training programmes should be organised for the fishermen to use the safety gear.

**Kerala: CIFT proposes safety steps for fishing boats**


The Central Institute of Fisheries Technology (CIFT), which studied the safety of small fishing craft in the wake of the devastation left behind by Cyclone Ockhi, has recommended certification of boats for safety and stability. A statement issued by CIFT said the institute had held a technical survey of the losses and damage in the wake of the cyclone and a report, along with recommendations for safer boats, had been submitted to the State government. It recommends that there should be a sufficient number of life jackets and buoys as well as sufficient fuel reserve and a fire extinguisher on board the vessels. It says a longitudinal rod must be fitted just below the chine line so that in the capsized condition, fishermen could hold on to the boat. A sufficient number of life jackets (number of crew plus 1) with illumination and whistle must be carried on board vessels.

Fishermen are advised to wear life jackets while fishing. Two life buoys are to be fixed in the forward part of the boat and two at the aft area under the seat so that they could be released during an emergency. The forward compartment and space below the working deck and other spaces should be made watertight so that the boat would have sufficient buoyancy and float even in the capsized condition. Reflective tapes The report also recommends that reflective tapes be provided for easy identification during rescue operations. The colour of the portion of the boat under the water line should follow the colour code (preferably orange) specified by the Department of Fisheries for easy identification from afar. The inclusion of radar reflector must be made mandatory for facilitating detection from afar and the gears must be registered and marked for facilitating identification during retrieval, CIFT said.

**Kerala: Church slams Kerala government for poor Ockhi relief operations**


The Thiruvanathapuram Latin Diocese on Saturday slammed the the state's Pinarayi Vijayan government for not doing a proper rehabilitation programme in wake of Cyclone Ockhi, while complimenting the Tamil Nadu government for rising to the occasion. Addressing reporters here, Archbishop M.Susaipakiam said they were told that the political leadership is busy with their party Congress and other things. "While the total dead in Kerala on account of Ockhi was 146, the compensation has been handed over to just 49. But in Tamil Nadu, the compensation has been given to 146 dead," he said. The Church leadership also demanded that a social audit
should be conducted in the way the funds for Ockhi relief and rehabilitation have been spent. Even as the Church says that the total dead is 146, according to the Kerala government figures, 52 people were killed and 91 remain missing.

Cyclone Ockhi struck Kerala's southern districts on November 30 last year and the worst affected were two fishing villages in the state capital and a huge majority of the affected belonged to the Latin archdiocese. The Church leadership also pointed out that they have so far spend Rs 14 lakh for medical relief to the affected, besides they have held numerous counselling sessions in the coastal hamlets and that also has cost them a good sum of money. The Kerala government had informed the ongoing assembly session that the process of giving compensation to the families of the missing was underway and it would be done once the formalities are over. It had, in January, announced that while the compensation to the families of the dead would be given Rs 2 million each and the same amount would be given to the families of the fishermen who have gone missing, but only after verification. It had then started giving a monthly allowance of Rs 10,000 each to the families of the missing fishermen.

Kerala: Draft coastal plan under fire


Some major exclusions and irregularities figure in the draft Coastal Zone Management Plan (CZMP) prepared by the Department of Environment and Climate Change and the National Centre for Earth Science Studies, allege environmentalists. “The draft plan is not in accordance with the guidelines set out in the Coastal Regulation Zone (CRZ) notification. Instead of preserving and protecting ecologically sensitive coastal stretches, the plan may lead to unrestricted development in vulnerable areas. It is not easy to revise the CZMP once it is approved,” says V.K. Madhusoodan, a member on the environment committee of the Kerala Sastra Sahitya Parishad. In view of the unique coastal systems of Kerala, the State receives some extra leeway and the draft has no mention of it.

“According to Section 5 of the Coastal Regulation Zone (CRZ) norms, all islands in the backwaters of the State are covered under CRZ notifications. In Kerala, the width from High Tide Line (HTL) on the landward side of backwater islands is 50 m whereas it is 100 m in other places. In Kerala, within 50 m from the HTL of these islands no new constriction is permitted. But existing dwellings of local community can be repaired or reconstructed,” said Mr. Madhusoodan, adding that the proposals to solve the problems of the fishing community and coastal population were also missing from the draft. Omissions in mangrove mapping Major omissions in mangrove mapping is another drawback of the draft prepared for Thiruvananthapuram, Kollam, and Kottayam districts. “While every single mangrove plant
comes under CRZ 1(A), the draft has only provisions to protect mangrove stretches spread in an area above 25 cents.

Moreover, some main mangrove stretches at Veli, Asramam, and Kumarakom are missing from the draft. The mangrove area in Thiruvananathapuram is over 30 hectares and in Kottayam it is around 100 hectares. But in the draft it is just one hectare in both the places. Instead of the 122 hectares in Kollam, the draft features 88 hectares only. While Kollam has over 15 mangrove varieties that draft finds only three,” he points out. He also adds that the draft has divided Ashtamudi Lake into Ashtamudi, Kanjorodu, Kumbalam, Kandachira and Kureepuzha which is not in accordance with the Ramsar Site norms.