

# Fishing Technology Digest

A Newsletter on Fishing Technology, Gear and Methods, Vessels and Equipment



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**INFOFISH**, based in Malaysia, and set up with the assistance of FAO, provides Advisory Services related to Fishing Technology for the Asia-Pacific. It strives to facilitate dissemination of information on fishing technology and equipment for the industry besides research and training. It also promotes links among research institutions, administration and industry. Since 1992, INFOFISH, issued a quarterly newsletter collating global fisheries news and advancements related to fishing technology.

Information on various aspects

of fisheries and aquaculture industry also appears in INFOFISH International. A supplementary section on 'Industry Notes' provides information on the latest developments in the global fisheries scene. New equipment and innovations are also featured. Comments and contributions are welcome. Please feel free to share the latest news on fishing technology and innovations that you want to see in the next issue. Suggest new equipment and supplies and mention name of the relevant industry experts for inclusion in the INFOFISH mailing list.



For more information regarding registration, exhibition and program details kindly visit:  
[www.ptf.infofish.org](http://www.ptf.infofish.org)

## Appetite for sustainable seafood resilient despite tough economic times

Support for sustainable fishing and seafood from retailers and consumers remains resilient despite ongoing cost of living crises globally according to the MSC's latest Annual Report, [Celebrating Leadership in Sustainable Fishing](#). The number of fisheries engaged with the MSC program rose to 716 in 2023-24 from 674 in 2022-23. Together they caught 15.48 million tonnes, 19.3% of the total marine wild catch in 2023-24. 75% of the global, commercial whitefish catch, 91% of the commercial salmon catch and over half the commercial tuna catch are now engaged in the MSC program. 1.2 million tonnes of MSC labelled seafood was sold in the year to March 2024, amounting to a total retail value of USD 13.4 billion. Notably, there was strong market growth in the USA (5.2%), France (5.8%) and Italy (10.3%) as well as Poland (15.7%) and central Europe (9.7%), while in Asia, sales grew by 35% in South Korea and 20% in China. An important factor driving this growth is consumers' attitudes to environmental sustainability. Details of independent consumer insights research commissioned by the MSC in 2024 are highlighted in the report. It shows that consumers care more than ever about the health of the oceans. Of the 20 000

seafood consumers surveyed, almost half (48%) said they were concerned about overfishing, and two-thirds said they wanted to protect the ocean. Increasingly they are making changes to their diets for environmental reasons, and a quarter (27%) said they would eat more seafood in the future if they knew it wasn't causing harm to the ocean. The MSC's new report outlines the organisation's impact over the past year and includes data about fisheries and some of the improvements they make to safeguard the marine environment. The total number of documented improvements made by MSC fisheries since the program began had reached 2 362 by 31 March 2024. It includes efforts like modifying fishing gear and improving knowledge to reduce fishing impact on ecosystems and non-target species. In addition, the MSC's Ocean Stewardship Fund (OSF) will be awarded over USD 1.67 million in grants in 2023. The OSF helps to support fisheries on their pathway to sustainability, and to fund and drive research and innovation to improve performance and reduce impact. To date, it has been awarded over USD 6.43 million. Fisheries that have been certified to the MSC Standard contribute to the delivery of the UN's Sustainable Development Goals, particularly SDG14, and address the mounting pressure on our ocean.

Download the complete [MSC Annual Report 2023-24](#).

## 'Fisheries and Aquaculture', the pillars of India's nutrition security said FAO ADG

Fisheries and aquaculture play a crucial role in ensuring food security, nutrition, and livelihoods in India, directly supporting over 20 million fishers and farmers, with an additional 40 million people engaged across the value chain. As the fastest-growing sector in the country, it offers significant opportunities for economic and nutritional advancement, stated Professor Manuel Barange, Assistant Director-General and Director of the Fisheries and Aquaculture Division at the Food and Agriculture Organization of

the United Nations (FAO). Professor Barange delivered these remarks during his visit to New Delhi for the World Fisheries Day celebrations on 21 November 2024. Hosted by India's Department of Fisheries, the event followed an FAO-led session on 20 November 2024, titled "*Opportunities and Challenges for India's Fisheries and Aquaculture with Global Trends in the Context of Climate Change and Food and Nutrition Security*." The session sought to highlight India's unique challenges and opportunities in the sector while fostering dialogue among stakeholders to unlock its full potential.

Read the full article: [here](#).

## 'Need for global action on destructive bottom trawling', highlighted in the OceanCare report

As the European Parliament prepares to vote on a new EU Commission, OceanCare has published a comprehensive report calling on EU Member States to honour their commitments to ban bottom trawling in Marine Protected Areas (MPAs) by 2030. With the world falling behind on achieving the Agenda 2030 and particularly the Sustainable Development Goal SDG14 related to marine conservation, the urgency to act is greater than ever. Failure to ban bottom trawling in MPAs not only threatens the health of marine ecosystems, but also jeopardises global efforts to tackle climate change and biodiversity loss.

- Bottom trawling is one of the most destructive fishing practices, causing significant ecological damage to marine habitats and biodiversity.
- The global scale of destruction caused by bottom trawling is enormous, contributing to biodiversity loss, ecosystem collapse and climate disruption.
- There is an urgent need to impose measures within EU Member States to meet the objectives of the EU Fisheries Action Plan on phasing out bottom trawling in Marine Protected Areas (MPAs) by 2030, as well as taking action at global level.

Read the full report: [here](#).

## FAO developed unsinkable boat

An unsinkable fishing boat able to resist capsizing in heavy seas has been developed by the Food and Agriculture Organization of the United Nations (FAO) to safeguard the lives of small-scale fishers in Sri Lanka and help them confront climate extremes causing tens

of thousands of fatalities at sea worldwide every year.”

Find the video: [here](#) and read the relevant news: [here](#).  
Find more info on this topic:

[The FAO boat design drawings](#)  
[Safer Stronger, better fishing boats](#)

## Revolutionising parasite detection in fish fillets: a major breakthrough in hyperspectral imaging technology



Workflow for the identification and labeling of nematodes. Source: Syed et al., (2024); *Scientific Reports*, 14(1), 1-14.

Parasites in fish are a major problem for fish producers worldwide, as they present both quality and health issues. In the case of Atlantic cod, there are two main species of nematodes that infest the fish: *Pseudoterranova decipiens* and *Anisakis simplex*. These parasitic nematodes not only compromise the quality of fish products, but they can also cause health issues in humans if consumed raw or undercooked, including intestinal anisakiasis and potentially life-threatening allergic reactions. The traditional method of manual examination using a lighted table,

or candling table, is time-consuming and resource-intensive, often representing up to 50% of production costs. Furthermore, this method is subjective and only detects about 50% of nematodes. This limitation not only affects the quality of seafood products but also has implications for public health. [Hyperspectral imaging](#) has long been investigated as a potential method for detecting nematodes in seafood. This technology measures numerous wavelengths of light in each pixel, providing highly detailed information in both spectral and spatial dimensions. Benefits of the new technology: 1) Improved Detection Rates: The AI-powered system significantly outperforms traditional manual inspection, achieving detection rates of up to 73% compared to 50%, 2) Fast and Non-Invasive: The technology can be integrated directly into existing industrial processing lines, enabling rapid and continuous monitoring of seafood products without the need for destructive testing, and 3) Enhanced Food Safety: By effectively detecting and removing contaminated fish, this technology helps ensure the safety and quality of seafood products. The development of AI-driven parasite detection represents a significant advancement in the field of food safety. By automating the detection process, this technology has the potential to revolutionize the seafood industry, protecting consumers and improving the overall quality of seafood products.

Find more information: [here](#).

## Researchers developed rapid method for detection of Lactococcosis in aquaculture

A team of researchers from Karadeniz Technical University, Turkey, in collaboration with research centres in Italy, Greece, and Spain, has developed a rapid technique for detecting *Lactococcosis*, a bacterial disease caused by *Lactococcus*, which affects both freshwater species such as rainbow trout, as well as marine fish like gilthead sea bream and European sea bass. This is a multiplex PCR assay, a technique that allows the simultaneous amplification and detection of multiple DNA sequences specific to the pathogens involved. Specifically, this technique allows researchers to simultaneously identify and differentiate between *Lactococcus garvieae* and *Lactococcus petauri*. The method is fast, specific, and accurate, as it provides results in less than two hours. Moreover, it is highly sensitive, with detection limits of 5 CFU (colony-forming units, which measure the number of

viable bacteria present) for *Lactococcus garvieae* and 4 CFU for *Lactococcus petauri* in pure cultures, making it suitable for routine diagnostic laboratories. In addition to rapid detection of disease outbreaks, the technique can also be used as a preventative monitoring tool, allowing early detection of bacteria in asymptomatic fish before visible symptoms occur. This allows control measures to be implemented more quickly and significant economic losses to be avoided. The use of this technique can also be useful for epidemiological research, contributing to a better understanding of how the disease spreads and the environmental factors that facilitate its occurrence. Since *Lactococcosis* affects both freshwater and marine species, the multiplex PCR assay can be applied to rainbow trout, gilthead sea bream, and European sea bass, making it a versatile tool for aquaculture health management.

Read more: [here](#).



### Stand-alone fish skinner



Stand-alone fish skinner, designed for efficient and fast skinning of a wide range of fishes. The technology is based on the company's 50 years' experience and appreciated for its ease of use, reliability and long-life span. The machine is robust and equipped with a safe 24-volt foot switch or a fixed foot pedal on the frame.

The differences to older and proven 460VH model:

- The F460M is more hygienic and easier to clean
- The skin/waste of the fish now falls into a bin at the front rather than at the back. Easy to handle in other words

- Bolted skinning shoe instead of levers for optimum knife clamping.
- The heart of the machine-like toothed roller, cleaning system and skinning shoe are in a self-aligning assembly
- The foot pedal is sturdier/more robust than the previous one. Also features a fixed foot pedal on the frame, which was also the case with the previous model

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### Opportunities and challenges in economic and post-harvest issues related to market access for fisheries and aquaculture products

A workshop on sustainable growth and market access for fisheries and aquaculture products was held in Bali, Indonesia, from 1–3 October 2024. It was organised by the Food and Agriculture Organization of the United Nations (FAO), in collaboration with the Ministry of Marine Affairs and Fisheries, Indonesia; and with technical support from INFOFISH. The workshop aimed to foster a shared comprehension and constructive discussion regarding the difficulties and advantages encountered by the countries in the region in post-harvest activities while producing and exporting their fisheries and aquaculture products. In particular, the workshop provided an opportunity to: 1) Present a comprehensive analysis of the global and regional production, trade, and market trends for fisheries and aquaculture products, 2) Examine the issues and consequences related to key post-harvest

activities that impact the competitiveness of fisheries and aquaculture products, 3) Examine the obstacles affecting the access of fisheries and aquaculture products from the region to the primary importing markets, 4) Establish a platform for deliberating on strategies to improve the ability of small-scale fisheries to access markets, 5) Provide information on emerging trends in trade agreements that include non-traditional clauses, particularly focusing on sustainability and 6) Examine the obstacles in the implementation process and identify the specific requirements for enhancing the capabilities of countries in the region to implement the World Trade Organisation (WTO) Fisheries Subsidies Agreement effectively. The training was delivered to 22 participants from 12 countries in the Asia-Pacific, and the facilitators were from FAO and WTO. The opening remarks were delivered by Lotharia Latif, Director General of Capture Fisheries, Ministry of Marine Affairs and Fisheries of Indonesia, and Rajendra Aryal, FAO Representative for Indonesia.

### Leading scientists redefine the notion of 'sustainability' to save the ocean

A week before Brussels' Ocean Week and a few months before the UN Ocean Conference in Nice, a group of researchers published the results of an unprecedented scientific effort: they redefine the concept of 'sustainable fishing' and propose eleven 'golden rules' that radically challenge the [flawed notion](#) that currently prevails in fisheries management. These eleven '[golden rules](#)' have been devised to end the ongoing destruction of the oceans caused by fishing, and ensure the renewal of abundant fish populations to feed future generations. They come at a time when scientists have drastically

downgraded their assessment of the ocean's health status, [1] and two-thirds of the world's [coral reefs](#) are exposed to potentially lethal temperatures. [2] These eleven breakthrough actions are intended to be implemented by companies, governments, and legislators. [3] In fifty years, global fish populations' health has declined by a third. [4] The authors of the paper decided to work together over the course of years based on a shared consensus: the prevailing definition of 'sustainable fishing' is dangerously flawed and leads to the ongoing depletion of marine species, the destruction of natural habitats, and carbon sinks as well as the disappearance of artisanal fishing communities around the world. [5] Producing

a new framework for marine fisheries had therefore become urgently needed. [6] play a pivotal role in this transition. They can influence fishing practices through their sourcing policies, scrutinize ‘sustainability’ labels, and address consumers’ growing concerns

about the hidden impacts of their food. [7] Industry stakeholders have no more excuses; they must act now”.

Read more: [here](#).

### **Cambodia: Equips fishing vessels with monitoring systems**

The Fisheries Administration (FiA) has announced the successful roll-out of 800 second-generation Vessel Monitoring Systems (VMS). They have been installed on medium and large fishing vessels across the Kingdom’s four coastal provinces. An additional 800 units will be deployed by 2025, raising the total number to 1 600. These VMS units are provided free of charge and are solar powered, so do not require any external power sources. Designed to support fishermen in case of an emergency at sea, they will provide the FiA with reliable location data. Fisheries and the Ministry of Agriculture, Forestry, and Fisheries completed the installations with the support from Food and Agriculture Organization (FAO) of the UN. “The VMS system provides benefits to fishermen. For example, if the vessel encounters problems, their last known location can be used to support any search effort and it is free of charge for installation,” it added.

The rollout covered the coastal provinces of Preah Sihanouk, Koh Kong, Kampot and Kep. This initiative is part of the FAO’s “CAPFISH-Capture” programme, funded by the EU, which supports sustainable growth in the fisheries sector. The programme provided the FiA with new technology to implement the VMS effectively. The rollout includes trawler vessels and other active fishing craft greater than 12m in length. The 2nd generation VMS unit is an improvement from the first phase, where 125 VMS units were deployed to test the VMS system and functionality on vessels greater than 18m. The FAO has also provided FiA officers with training on the operation of the new technology. Seng Bunna, head of the Koh Kong provincial FiA, noted that over 200 fishing boats in the province have already been equipped with VMS. The installation follows a phased, voluntary approach based on vessel size, helping to locate boats and provide timely rescue in case of maritime issues.

Find the article: [here](#).

### **Fiji: Fisheries ministry advised to be wary of Ciguatera Fish Poisoning during festive season**

The Ministry of Fisheries wished to advise the public at large that ciguatera fish poisoning (CFP) is a serious health concern associated with the consumption of certain reef fish that have accumulated toxins produced by microscopic algae. The Ministry has over the years created awareness on CFP among the communities through various mediums, not as a deterrent to selling and eating fish, but as a precautionary measure which may help in saving consumers from fish poisoning. In a Parliament sitting in last October, the Minister for Fisheries and Forestry, Hon. Alitia Bainivalu highlighted the Coalition Government’s efforts in managing CFP or Damu or red snapper in the country. Hon. Bainivalu stated that CFP is prevalent from the consumption of reef fish that have accumulated toxins, especially during warmer months or cyclones seasons, from November to April. The Minister added, to strengthen its efforts to combat CFP, the ministry has established 24 fisheries service centres across the country. “These centres supply ice to fishers to preserve fish, maintain freshness, and prevent the release of enzymes from fish, which speeds up the fish’s spoilage rate and causes fish poisoning.” Additionally, the Minister stressed that the Ministry’s Advisory Divisions, serving in the four divisions continue to provide post-harvest training to licensed fishers on how to maintain seafood freshness and quality. “The training includes the proper use of ice

and adequate hygiene during harvesting, processing, distribution, and marketing of the fish product.” Ciguatera is a toxin produced by marine micro-algae specifically a dinoflagellate, called *Gambierdiscus toxicus*. Tropical marine fish accumulate this toxin through their diet by eating algae or smaller fish and when humans eat contaminated fish, they develop a condition called ciguatera fish poisoning. CFP commonly occurs in tropical and subtropical areas, particularly in the Pacific Ocean, the Indian Ocean, and the Caribbean Sea. Members of the public when buying fish need to be wary of certain fish that could contain these poisonous toxins like Ogo, Donu Saloa, Dokonivudi, Kake Sailoa, Bati, Regurawa, Daniva, Sumusumu, Dabea, Delabulewa and Utouto to name a few. CFP mostly occurs in areas which have rapid increase of algae in the water system, nutrient enrichment through land run-off and high oil spills especially near jetties. It usually starts 2-24 hours after eating fish with this toxin and the most common signs are: numbness in fingers, toes, lips, mouth and throat, burning sensation on contact with cold water, joint and muscle pain as well as nausea, vomiting, diarrhoea and severe headache. Members of the public are advised to seek medical attention at the on-set of the symptoms and also refrain from eating reef fish for at least six months after treatment.

Find the awareness leaflet on CFP: [here](#).

**Source:** Ministry of Fisheries, Fiji.

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## India: CMFRI releases three million short neck clam seeds into Kerala Lake for stock enhancement

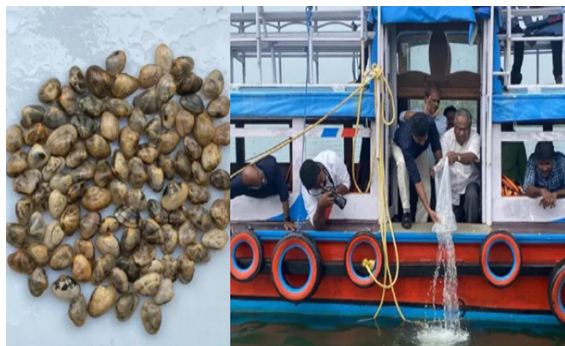


Photo: Short neck clam (left) and releasing short neck clam seeds in Ashtamudi Lake (Right)

As part of the Pradhan Mantri Matsya Smpada Yojana (PMMSY) Blue Growth Project and to address the alarming decline in the short neck clam (*Paphia malabarica*) population, the ICAR-Central Marine Fisheries Research Institute (CMFRI) launched a stock enhancement programme by releasing three lakh short clam seeds into Kerala's Ashtamudi Lake. According to CMFRI estimates, recent annual catches have fallen below 1 000 tonnes as against 10 000 tones during the early 1990s. This clam species has substantial export potential, as international demand for clams continues to rise, offering significant economic opportunities for local communities. These seeds, produced in the hatchery of Vizhinjam Regional Centre of the CMFRI, were released into the

Ashtamudi Lake in Kollam district, where depletion of this species has been reported. The ranching is a sustainable solution by replenishing the clam stocks and ensuring the continuity of this critical resource in the backwaters. It is aimed at restoring the clam stocks, ensuring sustainability, supporting local fishermen and providing leverage for boosting export revenues. The stock enhancement programme was made possible after CMFRI's year-long research efforts led to the successful development of captive breeding technology for this clam species, enabling the production of seeds for the release. M.K. Anil, Principal Scientist at the CMFRI's Vizhinjam Regional Centre, said the short neck clam is a treasured resource in Ashtamudi Lake with significant economic and ecological importance. "However, in recent years, the fishery of this clam has witnessed a drastic decline, threatening the livelihoods of thousands of fishermen who rely on this resource," he said. CMFRI scientists pointed out that key issues such as environmental pollution, invasion of non-native species like the Charru mussel, and the impacts of climate change, including altered salinity and water temperature, have significantly reduced the clam population. The event also witnessed the launch of hatchery facilities to produce bivalves for enhancing sustainable aquaculture practices and meeting the growing demand for high-quality seeds. Mussel seeds were distributed to local farmers, providing them with resources to strengthen their aquaculture operations and improve their livelihoods.

Find more information: [here](#).

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## Indonesia-China strengthen cooperation in fisheries sector

Minister for Marine Affairs and Fisheries (KKP) Sakti Wahyu Trenggono said, the country strengthened cooperation in the fisheries sector with China while accompanying President Prabowo Subianto's state visit to the country. Trenggono signed the Technical Cooperation Guidelines (TCG) with Chinese Minister of Agriculture and Rural Affairs, Han Jun in Beijing on November 9th. The signing was witnessed by President Prabowo and Chinese President Xi Jinping at a state meeting. The TCG signing is part of the Implementation of Arrangement the two parties signed in early September last year. This signing also strengthened the cooperation between the two

countries on sustainable fisheries. "China is our strategic cooperation partner and is included in our top five fisheries markets. This TCG signing can strengthen our cooperation in the fisheries sector," Trenggono remarked in a statement received from his office. According to him, the TCG covers 12 parts of Indonesia-China cooperation arrangements, including joint ventures, vessels, and fishing quotas. Meanwhile, the scope of cooperation includes fish captures and fisheries products procession in accordance with the legal basis in Indonesia. It also includes agreements related to the construction of onshore fisheries facilities, including fishing ports, and exchange of skills, training, and relevant data related to the fisheries sector, he said.

Read more information: [here](#).

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## Kiribati: MFMRD staffs participated mariculture training in China

Two staff members from the Ministry of Fisheries and Marine Resources Development (MFMRD) in Kiribati had the valuable opportunity to participate in the International Training Workshop on Mariculture Technologies under 2024 "Belt and Road" initiative.

The training workshop, held in Qingdao, China, from October 22 to November 5, was an intensive training program aimed at enhancing participants' knowledge and skills in mariculture. The event was organised by the prestigious Yellow Sea Fisheries Research Institute in collaboration with key partners from the Chinese aquaculture sector. The workshop brought together experts and participants from around the



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world, offering a unique platform for knowledge exchange, networking, and collaboration on the latest advancements in mariculture technologies. Over the two-week program, the Kiribati representatives, along with other international attendees, participated in a comprehensive curriculum that included a blend of lectures, hands-on training, and field visits to leading mariculture facilities. These sessions covered a wide range of aquaculture topics, including seaweed farming, fish breeding, sustainable aquaculture practices, and marine biodiversity conservation. The field visits allowed participants to see firsthand how these technologies and practices are implemented in real-world settings, providing valuable insights that they can apply back in their home countries. Mariculture has become increasingly important for Kiribati, as it offers significant opportunities to diversify the country's economy, enhance food security, and provide sustainable livelihoods for coastal communities. The MFMRD expressed its

gratitude for the generous funding and organizational support provided by the Yellow Sea Fisheries Research Institute and its partners, including ZHEJIANG OCEAN FAMILY CO., LTD. Their sponsorship made it possible for the Ministry's staff to benefit from this high-level international training. This opportunity not only allowed the Kiribati representatives to enhance their technical expertise but also to establish valuable connections with international experts and institutions in the field of mariculture. The Ministry looks forward to leveraging the knowledge and skills gained from the workshop to further develop the aquaculture sector in Kiribati. The expertise acquired will help the Ministry implement more effective and sustainable mariculture practices, contributing to the long-term conservation of marine resources and the development of resilient coastal communities in Kiribati.

**Source:** Ministry of Fisheries and Marine Resources Development, Kiribati.

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### Malaysia: Exploring new markets for ornamental fish

The Department of Fisheries (DoF) will explore new markets for ornamental fish in Europe, the Middle East and China to increase its exports because the aquarium industry has great potential for the national economy in terms of exports. Its director-general Datuk Adnan Hussain said the DoF remains committed to supporting the industry and helping Malaysian ornamental fish breeders achieve success in the global market as the industry has great potential to continue to grow. He said that currently, ornamental fish in Malaysia such as tropical fish Arowana and guppy are exported to Singapore as well as Hong Kong and Taiwan. "The new markets will allow ornamental fish from this country to penetrate the overseas market more widely compared to the existing traditional markets at the moment. "Ornamental fish from this country are in demand from fans abroad because of their entrancing colours, but in small volume, so we must find a new way to expand the marketing of our country's ornamental fish," he said. He was speaking at the ceremony to launch the new face of Tunku Abdul Rahman Aquarium (AkuaTAR) at the Fisheries Research Institute (IPP) in Batu Maung, Penang. He also added that the launching of AkuaTAR's new look

is an important effort in raising public awareness about the conservation of the country's aquatic ecosystem, which is in line with AkuaTAR's main objective as a centre for maritime research and education. "AkuaTAR currently houses nearly 123 species of fish in 19 freshwater tanks, six import restricted fish tanks, 26 marine fish tanks, eight aquatic plant tanks and various specimens and four touch pools," he said. In addition, according to him, AkuaTAR's main auditorium featuring a giant tank with a capacity of 120 tonnes and a 40-foot-long Bryde's Whale skeleton is one of the main attractions for visitors. He said AkuaTAR's main goal in 2025 is to obtain the recognition of "Malaysian Quality Assurance" from the Ministry of Tourism, Arts and Culture (MOTAC) and to prepare AkuaTAR as one of the main destinations for Visit Malaysia in the year 2026. "AkuaTAR will also continue to commit to the research and breeding of aquatic species with great success in the breeding of Sea Horses (*Hippocampus barbouri*) which has reached the fifth generation and also succeeded in training lnggu fish breeders (*Amphiprion ocellaris*, clown anemone fish) as well as establishing a research collaboration with Underwater World Langkawi on Jan 28 for the Sea Horse breeding project and the production of adult artemia (brine shrimp)," he said.

Read more information: [here](#).



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## **Maldives: Will host 30th IOTC meeting in 2026**

Minister Ahmed Shiyam met with Dr Paul de Bruyn, Secretariat of the Indian Ocean Tuna Commission (IOTC), and Howard Whalley, Administrative Officer of the IOTC, to discuss arrangements for hosting the 30th annual IOTC Commission meeting in the Maldives in 2026. The country will host this prestigious international meeting for the first time, marking a

historic milestone for the nation. The IOTC serves as the regional authority responsible for managing shared tuna stocks across the Indian Ocean. At present, 30 member countries convene annually to enact resolutions aimed at the sustainable management of these resources.

**Source:** Ministry of Fisheries and Ocean Resources, the Maldives.

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## **The Philippines: DA-BFAR allocates P 1.06 billion for seaweed industry**

The Department of Agriculture-Bureau of Fisheries and Aquatic Resources (DA-BFAR) has allocated a total of P1.06 billion (USD 17 million) for next year expenditures for a program aimed at further developing the seaweed industry. Agriculture Secretary Francisco P. Tiu Laurel Jr. said the Enhanced Philippine Seaweed Development Program (EPSDP) is part of the Department's broader goal of boosting the aquaculture sector, particularly focusing on seaweed, which is one of the country's major agricultural exports. "BFAR data reveals significant growth potential for seaweed farming, with identified expansion of 64 000 hectares that could increase annual output by more or less 50%. This represents a low-hanging fruit that could create thousands of jobs and substantially boost the country's foreign exchange earnings," Secretary Tiu Laurel explained. Isidro Velayo Jr., Officer-in-Charge of BFAR, said around half of the budget for the program will be allocated for the distribution of seaweed farm implements, establishment of 109 new nurseries, and maintenance of 24 existing seaweed culture areas. "We

will also construct eight warehouses, 34 mechanical dryers, and 80 seaweed food carts to be distributed across the country," he said. Velayo further mentioned that BFAR has set aside P10 million (USD 0.17 million) for the purchase of two bioreactors, which are expected to produce 4 100 tonnes of propagules, or seaweed planting materials, next year. These propagules would be sufficient to cultivate seaweed across 410 hectares and yield an estimated 102.5 million kilograms of fresh seaweed, valued at approximately P850 million (USD 14.4 million) at P58.00/kg (dry weight), he added. According to the Philippine Statistics Authority, the industry produced around 1.6 million tonnes of fresh seaweed in 2023, which resulted in the production of about 228 570 tonnes of seaweed products having a total value of P12.7 billion pesos (USD 2.15 billion). BFAR also notes that the Province of Tawi-tawi has 20 000 hectares of potential seaweed farming areas, in addition to the existing 62 000 hectares seaweed farms. Furthermore, potential farming areas of Southwestern Luzon and the Zamboanga Peninsula cover 12 736 hectares and 16 845 hectares, respectively.

Read the article: [here](#).

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## **Papua New Guinea: Implementation of National Tuna Domestication Strategy is vital to become a regional tuna processing hub**

Fisheries and Marine Resources Minister Hon. Jelta Wong announced that the National Tuna Domestication Strategy (NTDS) will be launched in the first quarter of 2025. Over the coming months, the NTDS will be presented to stakeholders before it is finalised and officially endorsed for implementation. Minister Wong said: "The NTDS reflects the Marape-Rosso led Government's commitment to developing a robust tuna industry. This strategy provides an overarching framework of actions that the National Fisheries Authority (NFA) together with other line government departments and agencies will take to enhance policy and investment environment together with addressing inefficiencies of the tuna fishing and processing industry. The end goal is to boost the value retention of tuna catches within PNG's Exclusive Economic Zone (EEZ) and Archipelagic Waters (AW)." "The NTDS is developed under the Fisheries Strategic Plan 2021-2030 (FSP) to support the National

Government's aim of making PNG a major regional tuna hub in the Asia-Pacific region. This initiative seeks to boost PNG's role in regional tuna fishing and processing industries, aligning with the East New Britain Initiative (ENBi) which was endorsed by the Forum Fisheries Agency (FFA) and Pacific Islands Forum Leaders." Wong emphasised. "This strategy recognises the pivotal role of PNG's tuna industry and acknowledges the current challenges they face and outlines a comprehensive approach to improving the competitiveness of PNG's tuna industry. The goal is to position PNG as a leading hub for tuna fishing and processing and harnessing our comparative advantages to realise our industry's full potential," said Minister Wong. "As part of the transitional arrangements towards implementing the NTDS, all tuna processors and their associated fishing fleets are operating under Memoranda of Agreements (MoA) signed with the NFA in July this year, highlighted Minister Wong.

Find the press release on NTDS by NFA: [here](#).



## Singapore: Launched the Singapore Aquaculture Plan

The country imports more than 90% of its food, which makes them vulnerable to food supply disruptions that may arise due to factors like climate change, geopolitics, and disease outbreaks. Local production enhances a country's food security by mitigating the impact of overseas supply disruptions. Seafood, being a nutritious source of protein that can be produced locally, presents a viable solution for food security. However, Singapore's aquaculture industry faces several challenges including limited sea space, suboptimal water quality, demands to mitigate its impact on the environment, and a limited domestic market with strong import competition. To uplift the local aquaculture sector, the Singapore Aquaculture Plan (SAP) was launched in November 2024. The SAP is a collaborative effort of Singapore Food Agency (SFA) and key stakeholders to establish a comprehensive

blueprint for the future of aquaculture in Singapore. It provides guidance to stakeholders including industry players, researchers, Government agencies, nature groups, and consumers. The SAP will be revised regularly to align with industry advancements and to facilitate ongoing coordination among stakeholders. The SAP will help to transform the aquaculture industry into a more productive and sustainable sector, underpinned by several guiding principles. This includes the careful consideration of competing sea space uses and ecological sensitivities when selecting sites, based on outcome and science-based sustainable production methods. The industry will also be supported by the development of essential infrastructure, progressive regulations, and science and technology. Throughout this process, there will be collaboration across the ecosystem to foster innovative solutions.

The SAP can be accessed: [here](#).

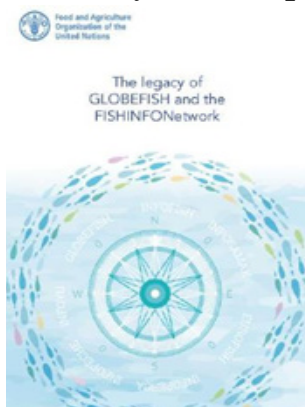
## Thailand: DOF launched fish 'clean-up' campaign

The country has launched an integrated effort to tackle the invasion of blackchin tilapia, targeting the removal of three million kilograms of the invasive species from the ecosystem under an urgent "Big Cleaning" campaign. Deputy government spokesman Anukool Pruksanusak said that the Department of Fisheries (DOF) has signed a memorandum of cooperation (MoC) with several agencies, including the Rubber Authority of Thailand, the Department of Land Development, the Department of Agricultural Extension, the Cooperative Promotion Department and the Department of Agriculture to carry out the task. The campaign involves removing blackchin tilapia from natural water bodies and aquaculture farms using environmentally appropriate methods. The captured fish will be utilised according to all applicable laws and regulations, and information will be shared with stakeholders to enhance the

effectiveness of eradication efforts, he said. "The government has allocated a budget of 60 million baht from the Farmer Aid Fund to support the programme," Mr Anukool said. Measures include biological control, such as releasing predatory species, and innovative approaches, like inducing sterility in the invasive fish by modifying their 4n chromosomes. Apart from eradication, the initiative aims to rehabilitate ecosystems by restoring habitats and releasing native aquatic species to promote biodiversity. "The government believes these efforts will help alleviate the ecological crisis caused by the invasive fish and ensure the long-term health of our water ecosystems," he said. "This guideline and collaboration between all parties will mitigate the blackchin tilapia crisis and prompt continuous efforts to achieve the set objectives of restoring the richness and sustainability of Thailand's natural aquatic ecosystems," Mr Anukool said.

Find the article: [here](#).

## The legacy of GLOBEFISH and the FISHINFONetwork by Eric Hempel.



The legacy of GLOBEFISH and the FISH INFONetwork provides a detailed account of the inception, growth, and accomplishments of GLOBEFISH and the FISH INFONetwork. The publication is a comprehensive narrative that spans several decades of development assistance projects aimed at improving the post-harvest handling and marketing of fish products in developing countries. It covers the establishment of regional units such as INFOPECSA, INFOFISH, INFOPÊCHE, INFOSAMAK, EUROFISH, and INFOYU, and their evolution into independent organizations. The document delves into the collaborative efforts between these units, FAO, and various international donors, showcasing the successful outcomes of these partnerships. It emphasises the continuity,

regional expertise, and multilingual capacity of the FISH INFONetwork, while also addressing the challenges faced in maintaining financial sustainability and adapting to modern communication technologies. Through this publication, readers gain insight into the strategic importance of market information services in fostering sustainable

fisheries and the pivotal role of GLOBEFISH and the FISH INFONetwork in the global seafood.

Hempel, E. 2024. The legacy of GLOBEFISH and the FISHINFONetwork. Rome, FAO.

This publication can be accessed: [here](#).

### **JANUARY**

27-28

3rd International Conference on Aquaculture and Fisheries,  
Bangkok, Thailand  
<https://aquaculture.insightconferences.com/>

### **FEBRUARY**

3-5

Saudi International Marine Exhibition (SIMEC AquaFish),  
Riyadh, Saudi Arabia  
<https://en.simec-expo.com/>

12-15

14th Asian Fisheries & Aquaculture Forum (14AFAP),  
New Delhi, India  
<https://14afaf.in/>

### **MARCH**

26-28

Vietshrimp Aquaculture International Fair (VietShrimp 2025),

Can Tho City, Vietnam

<https://vietshrimp.net/>

### **APRIL**

24-27

World Aquaculture 2025,  
Qingdao, China

<https://www.was.org/meeting/code/WA2025>

### **MAY**

6-8

Seafood Export Global,  
Barcelona, Spain

<https://www.seafoodexpo.com/global/>

### **JUNE**

24-27

World Aquaculture Safari 2025,  
Entebbe, Uganda

<https://was.org/meeting/code/AFRAQ25>

## The Fishing Technology Digest for Asia-Pacific Region



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**Editor: Mr Sujit Krishna Das, INFOFISH, Malaysia.**