

# THE FISH INSPECTOR

A Newsletter on Seafood Inspection, Quality Control and Technology



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## GLOBAL

### International Coalition of Fisheries Associations launches website

The International Coalition of Fisheries Associations (ICFA) has launched its first website [fishcoalition.org](http://fishcoalition.org). ICFA is a collective of national fish and seafood industry associations from the world's major fishing nations formed in 1988. The group provides decision makers with a unified voice on global issues. "While ICFA has been around for almost 40 years, it has always been a deliberative industry body with deep ties to the UN and a heavy emphasis on global policy. We didn't really have the need for a public presence on the web," said ICFA Chair Paul Lansbergen and President of the Fisheries Council of Canada. "But with biodiversity negotiations, treaties, and resolutions that require so much stakeholder input these days we decided to make our resources and voice more public." The coalition includes 24 seafood industry associations from Europe, North America, Asia, Australia, New Zealand, Africa and Latin America. ICFA participates in the Convention on Biological Diversity, the Committee on Fisheries, and the Convention on International Trade in Endangered Species of Wild Fauna and Flora, among others. "I encourage the seafood community to visit the site," said Lansbergen. "Our achievements and priorities are spelled out and it's a new platform for us to engage with industry voices who we might not have heard from. Not to put too fine a point on it but, watch this space." ICFA maintains Special Consultative Status with the United Nations Food and Agriculture Organization and meets regularly in Rome for policy discussions and to interface with the UN FAO. Since 1988 the ICFA has been a unified seafood policy voice committed to the sustainable use of marine resources and dedicated to global food security. Read more: [here](#).

### Mercury levels in tuna remain nearly unchanged since 1971

Tuna is one of the most popular seafoods worldwide. But this protein-rich fish can build up high levels of methylmercury from feeding on contaminated prey, like smaller fish or crustaceans. Despite efforts to reduce

mercury emissions into the environment, researchers report that levels in tuna appear to be unchanged since 1971. They warn that more aggressive emission reduction targets are needed to start nudging down tuna mercury levels. Read more information: [here](#).

## ASIA PACIFIC NEWS

### Australia: Short Course on Shellfish Safety

Oysters Australia and Fisheries Research and Development Cooperation have funded the University of Tasmania to develop a series of food safety training for the shellfish industry. The course is designed to provide those working in the industry with a clear understanding of the food safety requirements that apply to bivalve shellfish and actions they should take to produce safe bivalve shellfish. The course is fully online, and self-paced and is estimated to take around 3 learning hours to complete. The course is free for the next 18 months. To learn more and enroll with the virtual course click: [here](#).

### Cambodia: Challenges and opportunities for fish post-harvest value chain management

Fisheries sector is the primary contributors of food security and livelihoods in Cambodia. Global food loss is a serious concern which acts as a barrier to achieve Sustainable Development Goal (SDG) Target 12.3, and to reduce food wastage 50% by 2030 (FAO 2020). Proper handling, maintaining food safety protocol and respect of the cold chain from farm to fork are crucial to preventing quality loss and waste of fish which demands public investment on technological development and creating good infrastructural facilities in the whole value chain. The effective Post-harvest fish loss reduction relies on various factors like supportive policy, legislation, capacity building, services and public investment in infrastructure and technological development. As fish is a perishable food stuff; therefore, Post-harvest management is one of the key tasks to ensure quality. Special care is needed to maintain the proper quality of raw fish and processed fisheries products along the supply chain. However,



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there are many challenges are associated with fish handling and preservation process in developing countries including Cambodia. Therefore, this research aims to investigate the current Post-harvest status, challenges in fish Post-harvest and possible strategies to improve Post-harvest technologies for the sustainable fisheries management in Cambodia. This research follows personal interviewing and survey techniques and various stakeholders such as fish farmers, fishermen, fish whole sellers and retailers, consumers, government officials and processors, will be interviewed in Battambang and Siem Reap provinces, the two most important northwestern regions of the country. The result of this research will be disseminated in national and international workshops and conferences. In addition, a scientific article will be published in a high-ranking peer-reviewed journal.

Find more information: [here](#).

### **Japan: Seeking to boost seafood processing collaboration with Việt Nam**

With a thriving seafood processing industry and many high-quality processing plants, Việt Nam has been chosen by Japanese enterprises for partnership in processing products for export to various markets such as the US and ASEAN countries according to the Ministry of Agriculture, Forestry and Fisheries of Japan (MAFF). At a Japan- Việt Nam seafood business connection event in Việt Nam, which was jointly held by MAFF, the Japanese Consulate General and the Japan External Trade Organisation (JETRO) in Ho Chi Minh City, Yoshimatsu Toru, a representative from MAFF, said Việt Nam boasts strengths in seafood processing, with numerous large-capacity factories meeting export standards for most global markets. Japanese seafood enterprises wish to strengthen cooperation by contracting Vietnamese partners to process products destined for export to other markets, he added. According to Yoshimatsu, in 2023, Japan's total export turnover of agro-forestry-aquatic products and food reached approximately 1.45 trillion JPY (USD 9.77 billion). The Japanese government has set a target to increase the figure to 2 trillion JPY by 2025 and 5 trillion JPY by 2030. The Japanese government is currently implementing activities to promote Japanese aquatic products both domestically and internationally, as well as to diversify export markets, he added. The business matching event is expected to further step up seafood trade exchange, and cooperation in developing supply chains between the two countries.

Find the article: [here](#).

### **The Philippines: BFAR warns public on shellfish consumption**

Shellfishes collected and tested from coastal waters of Milagros in Masbate, coastal waters of Daus and Tagbilaran city in Bohol, San Pedro Bay in Surigao del Sur and coastal waters of San Banito in Surigao del Norte are still positive for *Paralytic Shellfish Poison* (PSP) or toxic red tide that is beyond the regulatory limit. All types of shellfish and *Acetes sp.* gathered from the areas mentioned are Not Safe for human consumption. Fish, squids, shrimps and crabs are safe for human consumption provided that they are fresh and washed thoroughly, and internal organs such as gills and intestines are removed before cooking.

Find the bulletin: [here](#).

### **Kiribati: Strengthening seafood industry**

In continuation of the ongoing capacity building on the island nation of Kiribati, approximately 25 participants completed two micro-qualification trainings on "Micro-Qualification in Establishing and Operating a Small Seafood Business" and "Maintaining Seafood Safety and Quality" on Kiritimati Island from 12-23 February 2024. This was made possible through the European Union and Government of Sweden-funded University of the South Pacific (USP) Pacific European Union Marine Partnership (PEUMP) project. These trainings aimed to upskill learners to improve their seafood businesses and safety and quality practices from 'hook-to-plate.' Tereere Tioti, Director of the Department of Competent Authority at the Kiribati Ministry of Fisheries, Marine Resources Development, stated, "Fish is our main resource, and we need to encourage the establishment of small seafood businesses while ensuring the optimum quality of the fish and/or marine resources to help sustain the business and increase profits". "This training complements our work at the Kiribati Ministry of Fisheries and Marine Resources Development, strengthening business knowledge and seafood handling aspects for our local vendors and fishers, which helps to enhance the quality of fish products while maintaining their freshness." This programme strengthens knowledge, skills, and competencies in ensuring the successful start-up of a small seafood business, along with the guarantee of safety and quality standards post-harvest by demonstrating basic post-harvest seafood handling skills, outlining causes of seafood spoilage and quality control factors, and applying inspection techniques and guidelines to maintain seafood quality.

Read more: [here](#).

## EUROPEAN NEWS

### 46 rapid alert notifications for fishery products

During February 2024, there were 46 rapid alert notifications for fishery products. With 12 rapid alert notifications for bivalve mollusc products, 3 for cephalopod products, 11 for crustacean products and 20 for other fishery products and none for gastropod products. These included 5 consignments of oysters from France, 2 consignments of short-necked clams from Thailand, 3 consignments of shrimp from Ecuador, and 2 consignments of swordfish from Spain.

**Source:** Megapesca Lda Fish Files Lite Newsletter, [www.megapesca.com](http://www.megapesca.com), February 2024.

### EU: Major canned tuna fraud

Spanish and Italian authorities (Civil Guard and Carabinieri) dismantled a criminal organisation taking canned tuna from the Italian market, relabelling them in unsanitary conditions and reintroducing the fraudulent products into the market in Spain and Italy with a new label, health registration and expiration date. In many cases (33/40) oil in canned tuna labelled as olive oil was in reality sunflower oil or pomace oil. The authorities also seized 45 000 litres of olive oil and 120 000 cans of tuna from the operators.

**Source:** Megapesca Lda Fish Files Lite Newsletter, [www.megapesca.com](http://www.megapesca.com), February 2024.

### UK: New study findings on nanopore sequencing facilitates screening of diversity and provenance of seafood

The soaring global demand for seafood has placed unprecedented pressure on fisheries, leading to the exploitation of vulnerable marine resources and data-deficient species. Over the past few decades, a surge of molecular methods has enabled identification of traded marine animal products that may be otherwise unrecognisable through morphological analysis. While universal DNA barcoding remains a powerful authentication and traceability tool, its application still requires lengthy procedures, established facilities, and assay development. A recent study explored some of the uses and advantages of cutting-edge nanopore sequencing, a rapid and portable alternative method. Scientists first tested the method to identify ten opportunistically sampled fishery products obtained in two different contexts: five fish fillets marketed in the UK, four shark specimens traded in Indonesia and one fish collected as part of a scientific survey. They presented a full analytical workflow to produce accurate species identification based on direct, PCR-free long-read sequencing of the DNA extracted from each specimen. After that they used the nanopore sequencing output to mine whole mitogenomes from samples of varying DNA quality. Finally, they used the extensive additional

genomic information produced by the sequencing to pinpoint the geographic origin of two of the identified specimens for which robust baseline data existed. In the face of increasing threats to biodiversity, and the need to control exploitation and supply of fisheries and wildlife globally, this rapid and portable approach is poised to revolutionise the monitoring of seafood supply and the trade in endangered marine wildlife, contributing to the sustainable management of aquatic resources. Read more: [here](#).

## NORTH AMERICAN NEWS

### Researchers create coating solution for safer food storage

Galvanised steel is often used in the food industry due to its durability, strength, and lower cost relative to stainless steel. The findings of a new research reported a coating method for galvanised steel that exhibits superhydrophobicity and antifouling capabilities, effectively inhibiting the attachment of fungi, bacteria, and mud. This coating was fabricated through a two-step process involving the immobilisation of silica nanoparticles and subsequent chemisorption of an organosilane layer with low surface energy. The resultant coating yielded a static water contact angle of  $157 \pm 3.6^\circ$ . Over a period of seven days, this coating achieved log<sub>10</sub> reductions of  $2.6 \pm 0.1$  and  $2.9 \pm 0.1$  in the attachment of the bacterial strains of *Salmonella enterica* and *Listeria innocua*, respectively. Additional testing revealed a marked reduction in adherence of *Aspergillus niger* fungus. Following immersion in mud, coated surfaces showed an evident reduction in mud attachment in comparison to the original steel surfaces. Specifically, when tested with mud with a viscosity of ~90,000 cP, the mud attachment percentage for the untreated steel surfaces and the coated steel surfaces was quantified as  $94.57 \pm 1.64\%$  and  $6.81 \pm 2.43\%$ , respectively. The electrochemical characterisation of the coated steel, conducted in the presence of *Salmonella enterica*, revealed a  $60.4 \pm 10.4\%$  decrease in the corrosion rate compared to the bare steel. The prospect of implementing the developed coating technology on galvanised steel surfaces including but not limited to grain storage silos as well as various food-related storage units and containers presents an opportunity for significant progression within the multidisciplinary fields of food engineering, safety, and processing. Read the full article: [here](#).

## LATIN AMERICAN NEWS

### Brazil: Bans Vietnamese tilapia imports pending health protocol review

The Brazilian Agriculture Ministry has ordered the immediate suspension of tilapia imports from Vietnam pending a review of current health protocols, according to a statement. The ministry cited specific concerns regarding "introduction of the Tilapia Lake Virus (TiLV)," which could harm the national industry. The



measure was published in the Official Gazette, the statement said. The decision was made after meetings with Brazil's Aquaculture and Fisheries Ministry and representatives of the local industry. The ban on Vietnamese tilapia imports will remain in force until the health protocol review is complete, the government said. Vietnam was the only country from which Brazil imported tilapia from in 2023, the agriculture ministry told Reuters in a separate statement. The ministry said Brazil imported 25 tonnes of tilapia from the Asian nation, a trade representing USD 118 000. According to the most recent data available from Peixe BR, a trade group representing local fisheries, Brazil produced 860 355 tonnes of fish in 2022, 64% of its tilapia and the country's tilapia production is relatively small relative to peers like China, where about a third of global supplies come from, but is growing. In 2022, global tilapia supplies were 6.5 million tonnes, as estimated by the Food and Agriculture Organization (FAO). Brazil exported USD 24 million worth of fish products in 2022, with tilapia representing 98% of the trade, according to Peixe BR's website, which also shows the U.S. as Brazil's main customer. An unspecified "disease outbreak," however, reduced Brazilian exports in the months that followed, according to a report from FAO covering sales in the first half of 2023, when Brazilian tilapia exports fell 32% by volume, to 3 319 tonnes. Find more information: [here](#).

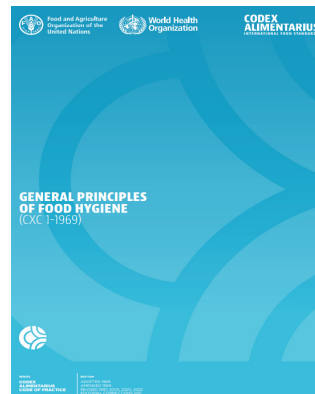
## AFRICAN NEWS

### Benin: Controls system shortcomings remain; exports suspended

The European Commission DG SANTE published a report on a remote assessment of the sanitary control for the export of fishery products to the EU from Benin. The study identified that the country has a legal framework, competent authority (CA) structure and control system, and laboratory capacity with the potential to apply sanitary controls to their fishery products production chain for export to the EU. However, the system is undermined by a series of shortcomings which limit the validity of the guarantees provided in the health certification. Limits for heavy metals, dioxins/PCBs and PAH were set in 2007, and are now out of date, suggesting weaknesses in technical knowledge and capacity of inspection staff. Fish initially frozen in brine was permitted to be directed for purposes other than canning. There were discrepancies in the lists of approved vessels and establishments between those held by the CA and the list in the EU TracesNT System. Although accredited testing laboratory capacity is available, the CA has

not implemented any official sampling programme for fishery products and does not sample fish/fishery products for regular testing and has voluntarily suspended exports. There were discrepancies over the number of certificates issued as registered by the CA and as indicated in the EU TracesNT suggesting lack of reliable control over certification procedures. Six recommendations are made by the Commission to the (CA), the Directorate for Fisheries Production and the Departmental Directorate for Agriculture, Livestock and Fisheries Competent Authority. **Source:** Megapesca Lda Fish Files Lite Newsletter, [www.megapesca.com](http://www.megapesca.com), February 2024.

## PUBLICATIONS



### General principles of food hygiene

FAO & WHO. 2023. General principles of food hygiene. Codex Alimentarius of Practice, No. CXC 1-1969. Codex Alimentarius Commission. Rome. 60p.

This document outlines the general principles that should be understood and followed by food business operators at all stages of the food chain and that provide a basis for competent authorities to oversee food safety and suitability. This edition contains a new annex which introduces tools to determine the critical control points in a hazard analysis and critical control point (HACCP) system. The term "Codex Alimentarius" is Latin and means "food code". Codex standards are international food texts, i.e. standards, codes of practice, codes of hygienic practice, guidelines and other recommendations, established to protect the health of the consumers and to ensure fair practices in the food trade. The collection of food standards and related texts adopted by the Codex Alimentarius Commission is known as the Codex Alimentarius.

The publication can be downloaded complimentary from: [here](#).

The next issue of THE FISH INSPECTOR will be distributed in July 2024. Any information you may wish to have disseminated through this newsletter may be submitted through <http://e-newsletter.infofish.org/>

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