

THE FISH INSPECTOR

A Newsletter on Seafood Inspection, Quality Control and Technology



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GLOBAL

Food fraud remains a significant challenge in global fisheries and aquaculture value chains

Fraudulent practices, including species substitution, mislabelling, adulteration and counterfeit products, can compromise food safety, reduce consumer confidence, distort market integrity and hinder sustainable resource management. The [FAO](#) report on 'Food fraud in the fisheries and aquaculture sector' provides a comprehensive overview of the main forms of fraud affecting aquatic products, their drivers and impacts, and the tools available to combat them. As aquatic food value chains continue to expand globally, ensuring authenticity, transparency and accountability is essential for safeguarding consumers and supporting sustainable fisheries and aquaculture. Read this story to know more about these practices: [here](#) or download the report for a more in-depth look: [here](#).

Invisible toxins in shellfish: new FAO guidance helps protect consumers

We cannot see them, smell them or taste them. And cooking cannot destroy them. Yet, invisible toxins can be present in shellfish and pose risks to human health. This is why effective monitoring is essential to protect consumers. Shellfish such as clams, mussels, oysters and scallops are a significant food source and a widely traded commodity, with production rising 49 percent and trade increasing by approximately 41 percent on a global level between 2011 and 2023. As demand grows, ensuring the safety of these products is important. These highly nutritious bivalves are filter feeders, meaning they can accumulate substances from their surrounding environment. While toxins do not usually harm the shellfish, some of them can pose serious risks to consumers if they are not properly monitored and managed. Read the full report: [here](#).

FAO GLOBEFISH launches species-specific Harmonised System (HS) code

FAO GLOBEFISH has developed a new user-friendly

tool supporting clearer identification and analysis of international aquatic product trade flows. The new species-specific Harmonised System (HS) code tables facilitate a clearer understanding and effective use of the Harmonised System (HS) code across countries and product categories. More information is available: [here](#).

Global Seafood Alliance publishes 2025 Annual Report

Global Seafood Alliance (GSA) has released its [2025 Annual Report](#), showcasing a year of measurable progress in advancing responsible seafood practices worldwide. The report highlights key initiatives that would not be possible without the support of GSA's global community of producers, members, partners and stakeholders who are helping build trust in seafood. The full 2025 Annual Report is available: [here](#).

DNAzyme hydrogel shows promise for *E. coli* detection

Researchers have developed a low-cost, equipment-free sensor that uses responsive colourimetric DNAzyme-crosslinked hydrogel to detect *E. coli* in food products, with the sensor showing compatibility with a wide range of food matrices, including milk, produce and ready-to-eat foods, and it allows for naked-eye detection of *E. coli* at concentrations as low as 105 CFU mL⁻¹. Read the full article published in the Nature Journal: [here](#).

Biosensor to check fish freshness in real time

Traditionally, assessing fish quality has relied on laboratory tests that are slow, expensive and require skilled personnel. Researchers at Monash University are challenging this traditional approach with an innovative microneedle biosensor to test fish freshness in real time. Under the supervision of Professor Nicolas Voelcker and Dr Azadeh Nilghaz, Masoud Khazaei, a third-year PhD candidate in pharmacy and pharmaceutical sciences at Monash University, leading the project. He had a question about the traditional approach: "Why are we still relying on a slow lab-based method to assess food freshness



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when technologies like microneedles have revolutionised health diagnostics so far?”. This question prompted an interdisciplinary team to explore fish spoilage detection. With a background in biomedical engineering, biosensor development and micrometre platforms, Khazaei's work bridges the gap between technology and practical applications in food technology, focusing on translating innovations commonly used in health diagnostics into tools for the food industry. The electrochemical 'microneedle array' (MNA) biosensor monitors hypoxanthine (HX) levels in fish tissue. HX levels in fish are used as an indicator of freshness, rising as spoilage occurs. By integrating new materials and fabrication methods, the team developed the first microneedle-based biosensor specifically designed to assess fish freshness. Read the full report published in the FBIN: [here](#).

ASIA PACIFIC NEWS

Australia: Mandatory seafood origin labelling for hospitality businesses from July 2026

The country now requires hospitality businesses to provide country-of-origin information for seafood dishes from 1 July 2026 under new Australian Consumer Law requirements. The regulations apply to restaurants, cafés, pubs, clubs, takeaway outlets and other businesses serving seafood for immediate consumption. Under the Australian–Imported–Mixed (AIM) labelling system, seafood dishes must be identified as Australian (A), Imported (I) or Mixed origin (M). Origin information must be clearly displayed on menus, menu boards, online ordering platforms or other points of sale before customers place their orders. The new requirements aim to improve transparency and enable consumers to make informed purchasing decisions. Hospitality businesses are encouraged to review seafood sourcing information and menu labelling to ensure compliance before the regulations take effect. Read more: [here](#).

Fiji: Illegal seafood traders face seizures in nationwide crackdown

The Ministry of Fisheries has intensified its crackdown on illegal seafood traders, warning that enforcement action will continue against companies operating without proper licences. Acting Permanent Secretary for Fisheries Saimone Tauvoli is urging exporters and buyers to comply with licensing requirements, stressing that authorities have already confiscated seafood from companies found trading without approval. Tauvoli says the move is aimed at protecting legitimate operators and local fishers from unfair practices. Read more: [here](#).

Kiribati: Seafood laboratory database successfully fields tested

The Seafood Toxicology Laboratory officers successfully conducted a one-day database field testing with stakeholders from Ministry of Fisheries and Ocean Resources (MFOR), Central Pacific Producers Limited (CPPL), and Kiribati Fish Limited (KIFL) on 19 June

2026 at the KIFL boardroom, Ambo. The exercise introduced participants to the laboratory workflow and demonstrated the database system that will support efficient communication and management of water and seafood testing services once the laboratory becomes operational. The field testing provided valuable feedback to ensure the system is practical, user-friendly, and responsive to stakeholder needs. This initiative marks an important step towards strengthening laboratory service delivery, improving client engagement, and supporting the laboratory's readiness for future operations. The Ministry sincerely acknowledges the Digital Transformation Office (DTO) under Ministry of Tourism, Commerce, Industry and Cooperatives (MTCIC) for its technical support in developing the system and extends its appreciation to the World Bank through Pacific Regional Oceanscape Program (PROP) for its continued support towards the establishment of the Seafood Toxicology Laboratory database. The Ministry also acknowledges stakeholders for their active participation and valuable feedback, which will contribute to enhancing the effectiveness and usability of the system. Read more: [here](#).

Philippines: BFAR expands fish processing support to reduce post-harvest losses

The Bureau of Fisheries and Aquatic Resources (BFAR) is strengthening post-harvest interventions to address fish oversupply, minimise losses and improve the value of fishery products. The initiative includes providing fish processing facilities, cold storage support and training programmes for fisherfolk and fish processors. By converting excess catch into value-added products, BFAR aims to help stabilise market prices, improve incomes and reduce waste during peak fishing seasons. The programme also seeks to enhance food security and increase the competitiveness of the fisheries sector by promoting more efficient handling, preservation and marketing of fishery products. These efforts form part of the government's broader strategy to support sustainable fisheries development and strengthen the resilience of coastal communities. Read more: [here](#).

Thailand: Authorities issue food safety warning during hot weather

Thailand's Department of Health has urged the public to exercise caution when handling and consuming food during the hot season, warning that high temperatures increase the risk of foodborne illnesses caused by rapid bacterial growth. Consumers are advised to choose freshly prepared food, ensure it is thoroughly cooked, and avoid food that has been left at room temperature for extended periods. The department also recommended maintaining good personal hygiene, using clean water and raw materials, and storing perishable food at appropriate temperatures. The advisory aims to reduce the incidence of food poisoning and protect public health during periods of extreme heat. Read more: [here](#).

EUROPEAN NEWS

EU: Tightened inorganic pollutant rules reshape EU seafood safety requirements

SGS, a testing, inspection and certification company, has published a new expert feature article examining seafood safety risk linked to inorganic arsenic (I-As) and other heavy metals, and outlined the EU's latest regulatory response. Concentrations of I-As associated with industrial activity have increased in recent years, the article says, contributing to pollution in estuaries and coastal waters and adding to existing background levels of naturally occurring heavy metals. As a result, contamination of fish and seafood has become an increasingly important issue for both environmental protection and consumer safety. Read the full article: [here](#).

EU: Updates to lists of countries in compliance with EU antimicrobial and residue monitoring requirements

The European Commission has published an update to the list of countries that are compliant with EU restrictions on antimicrobial use in food-producing animals, including those used in aquaculture. Aquaculture product from countries not on the list will be barred from entry into the EU from 3 September 2026. Whereas the previous list did not include certain countries such as India and Indonesia, the new list in Implementing Regulation (EU) 2026/1189 includes India and Indonesia, as well as most of the countries that were missing from the previous list. You can access Implementing Regulation (EU) 2026/1189: [here](#). In addition, the European Union has notified the World Trade Organization (WTO) of its intention to include Egypt as a country listed under Regulation (EU) 2021/405. This list includes countries that have an approved residue monitoring plan and thereby named categories of farmed products from these countries are authorised for the entry into the EU. Egypt has been approved for aquaculture product. A European Regulation formalising this is expected to be published in the third quarter of 2026 and will apply 20 days after its publication. It is worth noting that Egypt is not on the list of countries in Regulation 2026/1189. For aquaculture product from Egypt to be allowed entry into the EU, it will have to appear also on this list. The notification submitted to the WTO is available: [here](#).

UK-Maldives: Seafood association welcomes tariff cuts as breakthrough

The United Kingdom's removal of tariffs on Maldivian tuna signifies a major advancement for the nation's fishing industry, the Maldives Seafood Processors and Exporters Association (MSPEA) announced in a recent statement. The association expressed profound gratitude to the UK government for including Maldivian tuna products among globally imported goods currently benefiting from newly enacted tariff elimination measures. The broader policy change by the United Kingdom was deliberately implemented to benefit consumers by reducing import costs across multiple categories of goods, actively

supporting global supply chains, and facilitating easier public access to more affordable imported products, the association highlighted. Within this economic framework, the specific inclusion of Maldivian tuna products was recognised as a substantial developmental milestone for the domestic fisheries sector. The UK government has mandated this tariff suspension for a temporary period of two years. Read more: [here](#).

NORTH AMERICAN NEWS

USA: Latest shrimp testing reveals gains and setbacks in seafood transparency

Genetic testing of shrimp served in restaurants across Louisiana, Mississippi and Georgia found improvements in seafood transparency in some areas, while cases of shrimp mislabelling continue to be identified. The testing, conducted by SeaD Consulting for the Southern Shrimp Alliance, compared shrimp sold as domestic wild-caught products with their actual origin. Mississippi showed the greatest improvement, with more restaurants accurately labelling domestic shrimp. However, imported shrimp continued to be sold as domestic wild-caught shrimp in several restaurants in Baton Rouge and Savannah. The findings reinforce the need for continued monitoring, traceability and accurate seafood labelling to protect consumers and support fair competition. Read more: [here](#).

LATIN AMERICAN NEWS

Brazil: New book strengthens Seafood Inspection and Quality Control



The launch of the book 'Inspection and Quality Control in the Seafood Industry' organised by Dr. Alex Augusto Gonçalves (Professor and researcher at Ministry of Agriculture and Livestock, Brazil), marks an important milestone for Brazil's seafood production chain. Developed to address a long-standing gap in specialised national literature, the publication brings together knowledge on sanitary inspection, quality control, biosafety, legislation, traceability, self-control programs, certifications, and technological innovation. This new book serves as a complement to the award-winning Seafood Technology: Science, Technology, Innovation and Legislation, recipient of the 54th Jabuti Prize, one of Brazil's most prestigious literary and scientific awards.

The new volume was developed through a collaborative effort involving researchers, professors, seafood industry professionals, specialists in quality control, sanitary inspection, regulatory enforcement, and self-control programs. More information is available: [here](#).

Mexico: Expanding digital traceability in artisanal shrimp fisheries

A digital traceability pilot implemented in artisanal shrimp fisheries in Sinaloa, Mexico, continued expanding during the 2025–2026 fishing season through collaboration between fishing cooperatives, seafood industry actors and technical partners. The initiative focuses on strengthening first-mile traceability processes in small-scale fisheries by linking landing information, production lots and commercial records through digital tools aligned with international frameworks such as GDST. During the recent season, approximately 15930 kg of shrimp products and 97 production lots were digitally traced. The initiative also aims to contribute to broader discussions around transparency, market access and strengthening traceability in Latin American small-scale fisheries. Read more information: [here](#).

AFRICAN NEWS

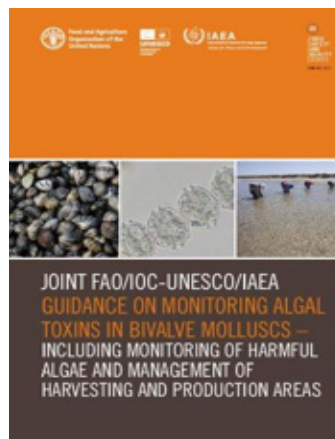
Kenya: Senate orders fresh testing of Lake Nakuru fish

The country's Senate Committee on Security, Defence and Foreign Relations has ordered fresh laboratory testing of fish from Lake Nakuru following concerns over possible contamination and conflicting test results. The committee directed that new samples be collected and analysed in the presence of all relevant stakeholders to ensure transparency and restore public confidence in the findings. The outcome of the testing is expected to guide any further action to safeguard public health and ensure the safety of fish entering the market. Watch the full video: [here](#).

PUBLICATION

Guidance on monitoring algal toxins in bivalve molluscs - including monitoring of harmful algae and management of harvesting and production areas

FAO, IOC-UNESCO and IAEA. 2026. *Joint FAO/IOC-UNESCO/IAEA guidance on monitoring of algal toxins in bivalve molluscs – Including monitoring of harmful algae and management of harvesting and production areas*. Food Safety and Quality Series, No. 34. Rome.



Harmful algal blooms (HABs) are naturally occurring phenomena, potentially exacerbated by global warming, that can severely impact aquatic ecosystems and aquaculture operations. Certain algal species produce potent toxins that can pose serious risks to human health through the consumption of contaminated seafood, especially bivalve molluscs. A variety of gastrointestinal and neurological illnesses associated with these seafood products have been reported over the years, and the Food and Agriculture Organization of the United Nations (FAO), the International Atomic Energy Agency (IAEA) and the Intergovernmental Oceanographic Commission of UNESCO (IOC) called for a Joint Expert Meeting on Marine Biotoxins and Harmful Algal Blooms Monitoring to develop joint FAO/IOC UNESCO/IAEA guidance on monitoring algal toxins in bivalve molluscs. This guidance is intended to support the development of sampling, analysis and management approaches for harvesting and production areas to determine the level of toxins in bivalve molluscs and the occurrence of toxic microalgae, and to comply with market requirements. The guidance can be used as a roadmap by regional and national authorities and institutions to establish and implement monitoring and management programmes for marine toxins and HABs, or to expand or enhance existing programmes. The guidance also covers aspects related to pre harvest monitoring and to post harvest batch testing. Additionally, it includes monitoring of microalgae, which can help in managing the risk of toxins contaminating bivalve molluscs intended for human consumption. This publication can be downloaded complimentary: [here](#).

The next issue of THE FISH INSPECTOR will be distributed in October 2026. Any information you may wish to have disseminated through this newsletter may be submitted to info@infofish.org or sujit@infofish.org

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