

GOVERNMENT OF INDIA
MINISTRY OF FISHERIES, ANIMAL HUSBANDRY AND DAIRYING
DEPARTMENT OF FISHERIES
RAJYA SABHA
UNSTARRED QUESTION NO - 1976
ANSWERED ON 05/08/2026

TRACEABILITY SYSTEMS IN SEAFOOD EXPORTS

1976. SHRI MASTHAN RAO YADAV BEEDHA:

Will the MINISTER OF FISHERIES, ANIMAL HUSBANDRY AND DAIRYING be pleased to state:

- (a) whether the Ministry is considering a Digital Product Passport-based traceability system to track seafood consignments from farm/harvest to export, and if so, the current stage of this initiative;
- (b) whether use of AI-based tools is being explored to strengthen catch certification, cold-chain monitoring, and quality assurance for seafood exports; and
- (c) the steps proposed to integrate such a system with existing certification frameworks to enhance the global competitiveness and market access of Indian seafood exports?

ANSWER

THE MINISTER OF FISHERIES, ANIMAL HUSBANDRY AND DAIRYING

(SHRI RAJIV RANJAN SINGH ALIAS LALAN SINGH)

(a) to (c) The Department of Fisheries, Ministry of Fisheries, Animal Husbandry and Dairying, Government of India has released the National Framework on Traceability in Fisheries and Aquaculture 2025 on the occasion of World Fisheries Day. The framework aims to establish a national digital traceability system across the fisheries and aquaculture value chains, ensure regulatory compliance for both domestic standards and international requirements for fish and fishery products, promote food safety and quality assurance, bring transparency and accountability, enhance consumer confidence, facilitate market access for fishers and fish farmers in domestic and international trade, ultimately boosting seafood exports. The framework provides for a phased, inclusive, and technology-driven approach to ensure that both small-scale operators and large commercial enterprises can comply with traceability and certification requirements.

The Framework provides for the adoption of advanced digital technologies to strengthen traceability across the fisheries and aquaculture value chain. It envisages the use of AI-based tools for risk-based verification, predictive analytics, and quality monitoring to reinforce catch certification, cold-chain integrity, and quality assurance for exports. It further provides for deployment of digital technologies such as Blockchain, Internet of Things (IoT), Geographic Information System (GIS), Global Positioning System (GPS), Automatic Identification System (AIS), Vessel Monitoring System (VMS), QR codes, Radio Frequency Identification (RFID),

and barcodes to enhance transparency, authenticity, and compliance with domestic and international standards. The Framework is aligned with internationally recognized food-traceability norms, thereby supporting regulatory compliance and strengthening market access for Indian seafood exports.

The Framework provides for interoperability through open standards, APIs, and harmonized data models to enable integration with existing certification and regulatory systems, including those of the Marine Products Export Development Authority (MPEDA), Export Inspection Council (EIC), Food Safety and Standards Authority of India (FSSAI), Bureau of Indian Standards (BIS), the ReALCraft vessel registration database, and the Coastal Aquaculture Authority (CAA), wherever applicable. This integration aims to improve regulatory compliance, enhance market access, and strengthen the global competitiveness of Indian seafood exports.

In addition, the Department of Fisheries is facilitating implementation of the *Nabhmitra* application for digital documentation of fish catches in fishing voyages, capturing details such as vessel registration number, species, quantity, catch location, and vessel entry/exit information, thereby supporting traceability, transparency, and digital record-keeping in the fisheries sector.
