THE FRUIT AND VEGETABLE INDUSTRY SERIES

Session n°14
Digital traceability and supply chain transparency:
policies for food safety and market access

Thursday 15 October 2026

HIGHLIGHTS

About the Fruit and Vegetable (F&V) Industry Series

In the context of the United Nations (UN) 2021 International Year of Fruits and Vegetables, the OECD Fruit and Vegetables Scheme and COLEAD launched an online series highlighting the importance of the F&V sector. The series aims to share knowledge on markets and operators, promote sustainable production and healthy diets, and showcase innovations from both European and Southern countries.

This 14th session explored how regulations, standards, and buyer expectations are shaping digital traceability and supply-chain transparency in the fruit and vegetable sector. It examined how businesses can navigate these requirements to access international markets, and how digital solutions, interoperability and coordination can help exporters meet food safety requirements and build buyer confidence, without burdening producers with added complexity.

The session attracted strong interest, with 379 registrants seeking insights, resources, and opportunities to engage with key actors in the sector.

All information about the session is available on Agrinnovators entrepreneur's platform.
Recording of the session: Link

Key points discussed

Traceability is increasingly essential for market access. Exporters must meet evolving regulatory requirements and buyer expectations on information along the value chain, including product origin, production practices, plant health and environmental standards. Understanding these requirements and monitoring regulatory changes is critical to maintaining access to international markets.

Digital tools can improve data collection and compliance. Digital platforms, mobile applications, QR and barcodes, sensors, and electronic documentation can help businesses collect and centralize reliable information throughout the supply chain, while making it readily available for inspection. Online resources for monitoring and understanding regulatory changes can also support exporters to stay informed and prepare for new requirements.

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Efficient digital traceability calls for common standards and interoperability. Traceability requires accurate information connecting products to their origins and along their movements, following EU's "one step back, one step forward" principle. Improved common data standards and interoperable systems are necessary to enable efficient information sharing along the product journey, reduce duplication, and support more efficient risk management and border procedures.

Practical implementation requires affordable and applicable solutions. Traceability begins at the farm level and needs to reflect the realities faced by producers, cooperatives, exporters, and SMEs. Some of the challenges they are facing include high costs, unreliable connectivity, limited digital skills, and inconsistent data quality. Training, collective approaches, and integration with existing record-keeping practices can help reduce these barriers without adding an extra layer of complexity.

Digital traceability needs coordinated efforts for tangible benefits. Governments, regulators, businesses, buyers, technology providers, and producers need closer coordination, common data standards, and stronger capacities. Traceability systems should deliver tangible benefits for everyone involved, including improved food safety, more efficient operations, stronger buyer confidence, easier compliance, better market access, and opportunities for farmers to improve profits and financial access.

Meet our speakers



Silvia SORESCU
Head of Trade Facilitation
OECD



Axelle RUPERT
EU Policy and Regulations Expert
COLEAD



Fenohery ANDRIA-MANAMPISOA
University FJKM Ravelojaona



Lucy MATTHEWSON
Agribusiness & Export Development Expert
FAO



Alioune NDAO
CEO,
La Casa Fruits



Ganiu Ademola OKEOWO
CEO
AgricTrail

Silvia Sorescu, Head of Trade Facilitation, OECD

Silvia presented key findings from the OECD's recent report, *Better Borders for Trade, Traceability and Enforcement*, highlighting the growing complexity of supply chain requirements and their implications for businesses and border authorities. She noted that requirements have increased significantly over the past decade, while implementation remains uneven across regions. To address these challenges, she called for greater digitalisation across all border agencies (not just customs) to reduce duplicative requirements; more strategic use of traceability data to support targeted, risk-based controls; and stronger domestic and international cooperation to improve information sharing and simplify procedures.

Axelle Rupert, EU Policy and Regulations Expert, COLEAD

Axelle shed light on the continuously evolving EU regulations and market requirements. To help businesses navigate these changes, COLEAD developed AGRINFO, an open access online platform that monitors updates to EU legislation affecting agri-food and fishery

exports from low- and middle-income countries. The platform provides accessible reports, guidance documents, newsletters, and webinars to help producers and exporters understand new requirements and take appropriate action. She also emphasized the importance of accurate, accessible traceability information for fruit and vegetables, whose short shelf life makes avoiding delays particularly important. Digital documentation can improve handling efficiency, reduce errors, and prevent border delays, helping exporters remain competitive in the EU market.

Fenohery Andriamanampisoa, Head of Computer Science, University FJKM Ravelojaona, Madagascar

Fenohery emphasized the importance of the digital infrastructure needed for effective application of digital traceability tools. He noted how digital traceability enables the collection, sharing, and verification of reliable data at every stage of the supply chain, from crop to plate including production, inputs, phytosanitary treatments, processing, packaging, transportation, and distribution. Several technological solutions are already available, including agricultural enterprise resource planning (ERP) systems, cloud-based platforms, and blockchain technology, as well as QR codes, barcodes, mobile applications, SMS messaging, GPS, and sensors to facilitate data collection and product identification. However, effective implementation requires interoperability, enabling different systems to exchange information reliably, avoid duplication, and follow common standards.

Lucy Matthewson, Agribusiness & Export Development Expert, FAO

Lucy presented a buyer's perspective on traceability and transparency, emphasising that traceability is essentially about building buyer confidence through evidence. She explained that buyers need to trust suppliers to deliver safe, compliant products of consistent quality and to demonstrate that they can do so reliably. Traceability is therefore becoming increasingly important for market access as buyer expectations, regulatory requirements, and the demand for digital information grow. Digitalisation should make information faster and easier to access without adding unnecessary complexity for exporters. This starts with understanding supply chains, identifying and verifying relevant information, and considering what evidence makes buyers feel confident. She concluded that the objective should be better information, not more information.

Alioune Ndao, CEO, La Casa Fruit, Senegal

Alioune offered a practical example of how digital tools can simplify traceability and facilitate exports. Building on his experience of exporting fresh and dried mangoes, he realized the need for more reliable traceability measures and developed AgriYoon, a digital application that records information throughout the supply chain, from harvesting and orchard identification to processing, packaging, and container information. The app also supports business administration, including staff management, payments, reporting, and audit preparation. Alioune recognized existing challenges such as staff adoption, data discipline, and connectivity, but is overcoming them through training and offline functions. He also highlighted the potential and interest in adapting the app to other agricultural products and value chains.

Ganiu Ademola Okeowo, CEO, AgricTrail, Nigeria

Ganiu emphasised the importance of building practical digital infrastructure for African agriculture, drawing on his experience supporting farmers and developing AgricTrail, a digital platform connecting farm data, traceability, market access, and financial services. He

stressed that effective traceability must begin at the farm, where reliable data is first collected. He also highlighted the practical challenges farmers face in adopting digital systems, particularly around engagement, data quality, connectivity, interoperability, and the cost of devices and training. Drawing on AgricTrail's approach, he explained how these barriers can be addressed by organising farm data through cooperatives, integrating traceability into routine record-keeping, and prioritising accurate, verified data over estimates or fabricated records. Finally, he stressed that traceability must deliver tangible benefits to farmers, such as better prices and access to credit, for there to be an incentive to adopt these practices.

Resources

1. Report and studies

OECD, 2026, Better Borders for Trade, Traceability and Enforcement

OECD, 2026, Progress in Implementing the European Union Coordinated Plan on Artificial Intelligence (Volume 2)

World Bank, 2025, Digital Agriculture Roadmap Playbook

FAO, 2025, Agrifood Systems Technologies and Innovations Outlook (ATIO): Driving Technologies and Innovations Towards Equitable Agrifood Systems Transformation

World Economic Forum, 2025, Shaping the Deep-Tech Revolution in Agriculture

OECD, 2024, The Impact of Artificial Intelligence on Productivity, Distribution and Growth

African Union, 2024, Digital Agriculture Strategy and Implementation Plan 2024–2030

UNECE, 2023, Code of Good Practice: Reducing Food Loss and Ensuring Optimum Handling of Fresh Fruit and Vegetables Along the Value Chain

FAO, ITU, 2022, Status of Digital Agriculture in 47 Sub-Saharan African Countries

2. Trainings and other opportunities

World Bank Academy E-Learning on Digital Agriculture

World Bank Academy AgTech: Harnessing Technologies for Sustainable Food & Agriculture Systems

FAO eLearning Academy

ITU AI for Good / FAO: AI for Agriculture: Shaping Standards for Smart Food Systems

OECD.AI Policy Observatory: AI Principles and Responsible AI Policy Resources

UN Women – COLEAD South-South Series, Session 8 : Artificial intelligence for women entepreneurs

COLEAD E-learning platform

COLEAD programmes

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Coordination team for these series:
OECD: Jose Brambila-Macias, Programme Manager, Aurelia NICAULT, Programme Officer, Trade and Agriculture Directorate, Agricultural Codes and Schemes, OECD

COLEAD: Ines Bastos Head of Department, Ahoefa Soklou, Project Officer and Marie Thylen, Project Officer, Networks and Alliances Department.

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