

SESSION N°28

Digitalisation & AI in Agrifood: tools for efficiency and market access

What it takes to turn digital and AI tools into real efficiency and market-access gains

Tuesday 20 October 2026 - 12:00-14:00 UTC

Online (Zoom)

English-French-Portuguese interpretation available

1. Context

Across Africa, farmers, agrifood small and medium enterprises (SMEs) and entrepreneurs face a familiar set of challenges: low productivity, high losses, limited access to timely information, and the difficulty of running an efficient business while also reaching the right markets and buyers. These challenges are not new, but the tools available to address them are changing fast. Digitalisation and artificial intelligence (AI) are opening new ways to address some of these gaps.

Digital solutions are increasingly being applied across the agrifood value chain, from digital advisory services (weather and production information, and AI-supported pest and disease identification etc.), to inventory and logistics tools, digital marketplaces and platforms connecting producers with buyers. The potential is significant, the African Development Bank estimates that AI could add up to $1 trillion to Africa's economy by 2035, with agriculture as the sector expected to gain the most.[1] At the same time, the digital agriculture ecosystem is expanding rapidly, with nearly 1,400 digital agriculture solutions identified across low- and middle-income countries and an estimated 50 million active users across the focus regions.[2] Yet reach and potential are not the same as proven impact: many of the solutions counted here remain small-scale or donor-funded pilots, and rigorous evidence of sustained, farm-level economic benefit is still limited.

As the range of digital and AI solutions continues to expand, another important dimension is how these tools are reaching and being used by agrifood businesses, and under what conditions they can create meaningful value in practice.

[1] African Development Bank, 2025, Africa's AI Productivity Gain: Pathways to Labour Efficiency, Economic Growth and Inclusive Transformation

[2] Beanstalk AgTech, 2023, State of the Digital Agriculture Sector: Harnessing the Potential of Digital for Impact Across Agricultural Value Chains in Low- and Middle-Income Countries

Funded by the European Union

This session focuses on two areas where digitalisation and AI can create practical value: improving the efficiency and performance of agrifood businesses and strengthening their access to markets and buyers.

2. Digitalisation and AI for more efficient and competitive agrifood businesses

For many agrifood businesses, the first opportunity is simply doing things better, faster or at lower cost. Across the production cycle, digital tools can provide timely information and advice that support decisions on inputs, planting, irrigation, harvesting and crop protection.. Mobile applications can help farmers identify pests and diseases, while weather, satellite and yield data can support planning and forecasting. These applications can help farmers respond earlier to risks, use resources more efficiently and reduce avoidable losses.

AI can further support these processes by analysing data and generating predictions, recommendations or automated processes. A 2024 review of AI applications in Kenya, Nigeria and South Africa found that agriculture is already the leading use case.[3]

The opportunities extend beyond production. Digital systems can support post-harvest handling, quality management, inventory, logistics, record-keeping and business planning. Digital platforms can help businesses monitor operations, coordinate activities and reduce transaction costs. In Côte d'Ivoire, for example, a World Bank-supported digital marketplace helped more than 400,000 people working in selected agricultural value chains improve access to markets, while digital platforms in Benin have supported access to information, farm machinery and decision-making.[4]

The value of these technologies does not come from using digitalisation or AI for its own sake. It comes when a solution addresses a concrete business need, reducing costs, saving time, improving quality, reducing losses or enabling better-informed decisions.

3. Digitalisation and AI for stronger market access

A more efficient business is only half the story if it cannot find the right buyer or does not know what a buyer wants. Digital tools can help reduce some of the information and transaction barriers that limit the ability of farmers and agrifood SMEs to participate in markets.

Market information platforms and price alerts help producers know what to grow, when to sell and at what price. Digital marketplaces and e-commerce platforms are connecting producers and SMEs with buyers, while allowing businesses to manage orders, payments and customer relationships more efficiently.[5]

Digital tools can also help businesses manage customer relationships and respond to market opportunities. Customer and order management systems, digital product information and demand forecasting can help businesses organise their sales activities, anticipate demand and respond more effectively to buyers. Digitalisation is also opening new pathways to financial services for farmers and agrifood businesses. Digital payments can reduce the costs and risks associated with cash transactions while creating transaction records that can

[3]GSMA, 2024, AI for Africa: Use Cases Delivering Impact

[4] World Bank (2025). From Fields to Markets: The Role of Digital Platforms in West Africa's Agricultural Success.

[5] World Bank (2025). From Fields to Markets: The Role of Digital Platforms in West Africa's Agricultural Success.

Funded by the European Union

support greater financial inclusion. The World Bank identifies the digitisation of agricultural payments as a pathway through which farmers can gain access to other financial products, including credit and insurance[6].

But access to a market does not end with finding a buyer. To build lasting commercial relationships, businesses also need to understand and meet the requirements of the markets they target. Digital records and traceability tools can help producers and exporters demonstrate where a product came from and how it was handled, which can be particularly important for higher-value and export markets. For example, Kenya's new digital tracking system for fruit and vegetables illustrates the point. It's built for a sector worth $1.56 billion in exports in 2024 and was designed specifically to reduce the paperwork, pest and pesticide-related problems that get shipments turned away.[7]

4. Way forward

For digitalisation and AI to translate into practical business benefits, several conditions matter.

Access and affordability: reliable connectivity and tools that are accessible and designed for smaller businesses, not only larger ones.

Skills and capacity: the knowledge and confidence needed to use digital and AI tools effectively.

Data and trust: access to reliable data and confidence in how data and AI are collected, managed and used.

Business relevance: solutions that respond to a genuine business need, fit existing ways of working and offer clear value to the user.

Support and partnerships: training, technical assistance, partnerships and enabling policies that can facilitate effective use and wider uptake.

Inclusion: deliberate attention to reaching the smallest producers, who often face the largest gaps in access to devices, connectivity and digital skills.

Sustainability and ownership: financing and business models that keep tools running, and value flowing back to producers, once pilot or donor funding ends.

This session will explore:

- Where are digitalisation and AI already creating practical value for African agrifood businesses, and what does this look like in practice?
- How can digital tools help farmers and agrifood SMEs better understand, reach and respond to markets?
- What factors influence whether smaller agrifood businesses can access, use and benefit from digital and AI solutions?
- What support, partnerships and enabling conditions are needed to move from promising innovations to wider adoption and scale?

[6] World Bank (2020). Digitization of Agribusiness Payments in Africa: Building a Ramp for Farmers' Financial Inclusion and Participation in a Digital Economy

[7] Kenya Agriculture and Food Authority, reported in African Sustainability Matters, June 2026, Kenya launches digital traceability platform to safeguard $1.56 billion horticulture export industry

Funded by the European Union

PAFO-COLEAD INNOVATIONS SERIES:
Innovations and successes of African farmer-led businesses and SMEs

SESSION N°28
Digitalisation & AI in Agrifood: Tools for Efficiency and Market Access

Tuesday 20 October 2026 - 12:00-14:00 UTC

Online (Zoom)

English-French-Portuguese interpretation available

Agenda

- Moderator: *Ahoefa Soklou, Project officer, Networks and Alliances, COLEAD*

12:00-12:10 Introduction
- *Inês Bastos, Senior Expert Business Development, COLEAD*
- *Babafemi Oyewole, CEO, PAFO*
- *Keynote speaker, Dr Racine Ly, National Country Representative Senegal, Akademya 2063*

12:10-12:40 Panel 1: Voices from the field - digitalisation and AI in action for efficiency and market access" (practical experience)
- *Muhammad Marong, Founder, Baykart LTD; Gambia*
- *Jool International, Côte d'ivoire*

12:40-13:15 Panel 2: The bigger picture - what it takes to scale digital and AI solutions in agrifood
- *Digital solution provider, Boostpro, Senegal*
- *Ken Lohento, Digital Agriculture Specialist; FAO*

13:15-13:30 Debate
13:30-13:40 Key takeaways and conclusion

This event and this publication have been developed by COLEAD within the framework of the FFM Africa 2030 programme ("FFM Africa"), funded by the European Union under the NDICI–Global Europe instrument. Its content is the sole responsibility of COLEAD and does not necessarily reflect the views of the European Union.

FFM AFRICA

Funded by the European Union