Driving Innovation in Agrifood Systems Award

Overview

As outlined in FAO's Strategic Framework 2022-31 and the State of Food and Agriculture Reports, digital technologies are crucial in transforming agrifood systems to address global challenges such as food insecurity, climate change and the need for sustainable agricultural practices. These technologies, which include but are not limited to the Internet of Things (IoT), mobile applications, artificial intelligence (AI), blockchain, automation, drones, robotics, advanced data analytics and low-tech solutions provide critical tools for enhancing resource management, accurate environmental predictions, improving access to information and boosting agricultural productivity particularly for smallholder farmers and rural communities. For example, IoT-enabled sensors provide real-time monitoring of soil, while AI-powered analytics deliver actionable insights, significantly enhancing efficiency and sustainability, especially in resource-limited settings. Additionally, mobile platforms can deliver localized agricultural advisories, while radio-based solutions can provide essential information on weather patterns or market access to farmers and fishermen in remote areas. These digital innovations play a vital role in empowering rural youth and innovators to improve agricultural resilience, enhance livelihoods, and reduce environmental impacts.

The Digital Tech in Agrifood Systems Award celebrates youth-led innovative solutions leveraging digital technologies to strengthen agricultural systems, educate agriculture produces, enhance resilience, reduce environmental impacts and foster sustainable practices, particularly in smallholder and rural contexts. This Award directly contributes to the Sustainable Development Goals (SDGs), notably SDG 2 (Zero Hunger), SDG 9 (Industry, Innovation and Infrastructure), SDG 12 (Responsible Consumption and Production) and SDG 13 (Climate Action).

Targeted solutions

- Precision technologies using IoT and sensor networks to optimize resource use and improve productivity;

- AI and data analytics platforms for improved agricultural decision-making;

- Digital solutions reducing environmental impact and include greenhouse gas emission and energy consumption;

- Blockchain powered solutions that ensure supply chain transparency and traceability;

- Platforms boosting agricultural productivity, market access and financial inclusion;

- Automation and robotics technologies to streamline agricultural processes, reduce labor costs and enhance productivity;

- Platforms connecting informal or remote producers to markets or buyers;

- Financial technologies enabling small-scale or marginalized food actors to access credit, insurance or subsidies;

- Low-tech or locally adapted solutions overcoming education, mobility or infrastructure barriers;

- Digital platforms enhancing transparent, efficient resource management and traceability in agrifood systems; and

- Innovative methods for reuse and recycling of agrifood by-products (e.g., anaerobic digestion, composting).

Objectives

The award aims to:

- Foster adoption of precision agriculture and digital technologies to enhance productivity, resilience and sustainability;

- Support innovations significantly improving resource efficiency, farmer livelihoods and environmental stewardship; and

- Promote scalable digital solutions adaptable across diverse agricultural contexts, particularly within the Global South.

Eligibility criteria

This award is open to youth-led startups (pre-seed and seed stage) demonstrating effective application of digital technologies, including but not limited to IoT, AI, data analytics, blockchain, automation and robotics, in agrifood systems. We are looking for youth-led startups with a founder or C-level executive between 18 and 35 years old at the time of submission of the application. Applicants must provide validated evidence of their solutions' practical impacts and effectiveness on their beneficiaries. Priority consideration will be given to scalable solutions with clear potential for widespread adoption, and substantial impacts on agricultural sustainability.

Important dates & timeline

- Application deadline: 22 May 2025

- Semi-finalist announcement: 2 July 2025

- Finalists announcement: 24 July2025

- Final pitch and award ceremony: 15 October 2025, World Food Forum (WFF) flagship event, FAO headquarters, Rome, Italy.

Prize and Benefits

- Cash prize of up to USD 15,000 for the winner;
- Potential inclusion in a Startup Accelerator Programme offering implementation support to Startup Innovation Awards winners;
- Travel support for two finalists to attend the WFF flagship event in Rome;
- Comprehensive virtual communication and pitch training boot camp;
- Extensive visibility and promotional opportunities via WFF global communication platforms and FAO and United Nations networks; and
- Qualified semi-finalists can compete for the **MassChallenge Switzerland**: **Fighting Malnutrition and Enhancing Food Security Prize** (more information here) on an additional prize of EUR 10 000.