

Sustainability and Reduced Waste in Agriculture Through AI and New Technologies

April 3, 2025

Fondazione Bruno Kessler hosted the ANSA Roadshow, featuring a vertical in-depth study on the theme “Augmented” Agriculture: when Agritech meets AI.

The [event](#), organized by ANSA and sponsored by Deloitte, took place on April 3, 2025, in Trento and focused on “augmented agriculture”. It explored merging technologies—especially artificial intelligence—that are already playing a role in transforming agriculture and will continue to do so, making it more sustainable, efficient, and innovative.

Agritech, short for “*agricultural technology*,” encompasses a range of tools, practices, and innovations applied to agriculture to improve productivity, minimize waste, and promote environmentally friendly farming methods. In Italy, Agriculture 4.0 solutions, including AI, robotics, and sensor technology, now represent a €2.3 billion industry, up from €100 million in 2017. Agritech is evolving rapidly, with FBK at the forefront of this evolution, deploying IoT sensors for field monitoring, drones for aerial mapping, and advanced automation in greenhouses.

The event, moderated by Alessio Jacona, curator of the Artificial Intelligence Observatory of ANSA.it, and Massimo Sebastiani, ANSA journalist, featured **a distinguished panel of speakers from research, businesses, successful start-ups, and incubators.**

Michela Milano, **Director of the Center for Digital Society** at **Fondazione Bruno Kessler**, delivered a keynote address on the potential of AI in sustainable agriculture. She highlighted how AI can enhance fieldwork, not by replacing jobs, but by addressing labor shortages (such as through self-driving vehicles). Additionally, AI can monitor plant health and harvest times, enabling targeted interventions for irrigation and pesticide use, as well as improving weather forecasting. However, these AI systems must be safe, reliable, and fair.

Fabio Antonelli, Head of OpenIoT at FBK, presented key projects on which the Foundation is working – like Agriclimate – illustrating FBK’s integrated approach that combines data from satellites, IoT sensors deployed in the fields, and autonomous robotics systems to improve the efficiency and

sustainability of agricultural practices. Multidisciplinarity is key to the introduction of AI in new sectors.

*“Artificial intelligence has uge potential to make agriculture more sustainable, efficient and environmentally friendly – **Paolo Traverso, Director of Strategic Planning, FBK, stressed** – The challenge is to transform experimentation into value for the local area, the market and society. At FBK, we build a supply chain that connects research, experimentation and impact on the market and society, creating an ecosystem that involves private companies to transform innovation into economic value and public institutions because market opportunities are often linked to collective needs and the common good. For example, sustainable agriculture is both an economic opportunity and a value to society.”*

[“Fabbrica della Realtà – Roadshow” – ANSA](#)

Since 2019, ANSA has been chronicling the evolution of artificial intelligence technologies and their impact on industry, economy and society with an annual conference. In 2024, ANSA launched a new format, organizing conferences focusing on specific industrial sectors and communities across Italy. The success of the first events in Naples and Rome (November 2024) and Modena (March 2025) confirmed the interest of the public and stakeholders in the new ANSA format, which is more agile and televised and features an informal, in-depth but fast-paced talk show-style storytelling, led by Alessio Jacona, curator of the Artificial Intelligence Observatory of ANSA.it, and Massimo Sebastiani, ANSA journalist. **Today, the “Fabbrica della Realtà – Roadshow” (Factory of Reality – Roadshow, ed.) series of meetings stopped in Trento to explore the transformative impact of artificial intelligence in the agritech sector** and will continue with topics related to aerospace in Bari and robotics in Genoa.

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