

Media Release

Five Key Trends in Artificial Intelligence that will revolutionize agriculture in 2025

22 January 2025, Basel, Switzerland

At the World Economic Forum (WEF), Jeff Rowe, CEO of Syngenta Group, presented the five key trends in AI that will define agriculture in 2025. During a panel discussion at Bloomberg House on the topic “From Soil to Silicon: How Advanced Technologies are Cultivating the Future of Sustainable Ag”, he outlined how 2025 will mark the first year AI truly revolutionizes agriculture – from lab to field.

The five key trends in AI identified by Syngenta are:

1. **AI in R&D:** Today at Syngenta, all research projects utilize machine learning models to identify novel active ingredients – for synthetic and biological products.
2. **AI in the Field:** The introduction of AI-driven systems for reliably monitoring and predicting soil health, enabling high-resolution soil nutrient, texture, and carbon maps for growers.
3. **AI in Farmers' Hands:** GenAI-enabled digital tools acting as agronomic advisors to help farmers determine optimal crop management practices.
4. **AI in Pest Management:** Precision agriculture and data-driven decision-making solutions supporting farmers by targeting crop protection products only to infested areas.
5. **AI in Supply Chain Management:** Demand forecasting, market prediction, and the reduction of overproduction and waste to optimize logistics and improve efficiency.

Jeff Rowe, CEO of Syngenta Group, stated: “AI and digital tools are revolutionizing farming and sustainable practices. Advanced monitoring systems integrate satellite imagery, drones, and soil maps to enable precise crop management. Predictive analytics, powered by AI and machine learning, provide farmers with actionable insights, transforming reactive practices into proactive strategies.”

The global AgriTech market, valued at \$24.19 billion in 2023, is expected to reach \$54.17 billion by 2029 according to a recent report by [AgriTech Market analysis](#). The global market for AI in agriculture is projected to grow from \$1.7 billion in 2023 to \$4.7 billion by 2028 as estimated in a [recent market analysis](#), underscoring the significant economic potential of these technologies. A WEF report estimates that digital agriculture could boost the agricultural GDP of low- and middle-income countries by \$450 billion annually.

During the panel discussion with Suzanne DiBianca, Executive Vice President & Chief Impact Officer at Salesforce, both panelists emphasized the critical need for collaboration among policymakers, businesses, and other stakeholders to reduce financial and technical barriers for farmers adopting technology.

The synergy between digital technologies and sustainable farming empowers farmers to tackle climate change while improving productivity. By integrating regenerative practices with cutting-edge technology, the agricultural sector is paving the way for a resilient food system that benefits both people and the planet, the speakers concluded.

***Please visit [Bloomberg Live](#) to view a recording of the session.**

About Syngenta Group

Syngenta Group is one of the world's biggest agricultural innovation companies, employing 60,000 people in more than 100 countries. Syngenta Group is focused on developing technologies and farming practices that empower farmers, so they can make the transformation required to feed the world's population while preserving our planet. Syngenta Group's bold scientific discoveries deliver better benefits for farmers and society on a bigger scale than ever before. Guided by its Sustainability Priorities, Syngenta Group supports farmers to grow healthier plants in healthier soil with a higher yield.

Syngenta Group, which is registered in Shanghai, China, and has its management headquarters in Switzerland, draws strength from its four business units: Syngenta Crop Protection, headquartered in Switzerland; Syngenta Seeds, headquartered in the United States; ADAMA®, headquartered in Israel; and Syngenta Group China.

To find out more about how our innovation is empowering farmers around the world, read our articles on the Stories section of our Syngenta Group website.

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