EU CAP Network seminar 'Robotics and artificial intelligence in farming and forestry'

Flash report

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Innovation and Knowledge exchange | EIP-AGRI

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The **EU CAP Network seminar on robotics and artificial intelligence (AI) in farming and forestry** brought together **183 participants** from **24 countries**. These included **farmers, foresters, researchers, advisors, and representatives from Managing Authorities, National CAP Networks, farmers' and foresters' organisations, as well as EU-funded projects aligned with the seminar's theme and innovation brokers.**

The seminar showcased European cutting-edge AI and robotic technologies, highlighting their role in enhancing productivity, profitability, and sustainability, while fostering collaboration among stakeholders to accelerate innovation and technology adoption.

Field visits and poster sessions

Participants joined four field visits across different regions of the Netherlands: Flevoland, Foodvalley, Betuwe, and South Holland, exploring real-world applications of AI and robotics in farming and forestry. These visits demonstrated the potential of AI and robotics to drive efficiency, sustainability and profitability.

The poster session featured 26 projects, displaying innovative solutions and practical applications developed in these projects. A key takeaway was the strong collaboration between farmers, researchers, and industry stakeholders, with an emphasis on the entrepreneurial mindset driving new business models that integrate advanced technologies into farm operations.

Interactive discussions

During the interactive sessions, participants discussed key challenges and opportunities, addressing farmers' needs and knowledge gaps, identifying priority areas for improvement, such as:

- **technology accessibility & adaptation** – AI and robotics must be affordable, easy to use, and adaptable to achieve wider adoption
- **data ownership & interoperability** – farmers should own their data, with 5G and open standards enabling reuse across platforms
- **bridging the innovation gap** – overcoming the technology transfer 'death valley', by further supporting research projects with relevant results
- **agroecology & technology balance** – ensuring technology works with nature, rather than forcing landscapes to fit machines.

Key messages and takeaways

The seminar reinforced that AI and robotics are essential for the future of European agriculture and forestry. Their success depends on:

- **farmer-driven innovation -** ensuring solutions are developed with and for farmers
- **accessible, adaptable technology** - making AI and robotics affordable, interoperable, and scalable
- **supportive policies and funding** - bridging the innovation gap, facilitating adoption, and ensuring profitability for farmers and foresters.