# AI + ENVIRONMENT SUMMIT

# From Space to Farm: Social Perceptions of the Use of Artificial Intelligence and Satellite Technology to Transform Agri-Food Systems in the Community of Madrid

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## AIM & KEY MESSAGE

The goal is to show...

(1) what AI and satellites bring to agriculture; and
(2) how Madrid's agri-food sector perceives them.

**Core takeaway**: strong potential, but adoption requires closing gaps and fair data governance.



**PRECISION AGRICULTURE BEGINS ON THE GROUND BUT IS EMPOWERED FROM SPACE**



## CONTEXT & RELEVANCE

Climate change and resource pressure demand precise, timely decisions.

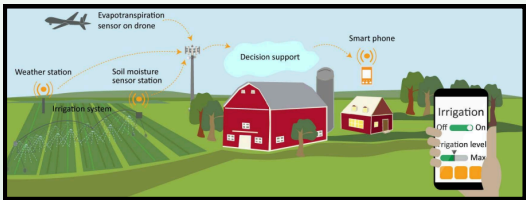Earth observation + AI provides actionable insights at scale and on time.

## POLICY DIRECTIONS FOR INCLUSIVE INNOVATION

- **Level access**: Invest in rural internet, open satellite data platforms, and targeted incentives so small farmers can adopt AI affordably.

- **Build capacity:** Offer hands-on digital training and technical support. Help producers gain confidence and skills.

- **Promote local participation**: Engage farmers and rural communities in co-designing and testing solutions. Combine local knowledge with innovation.

- **Ensure fair data governance**: Treat agricultural and satellite data as public goods when possible. Protect privacy and guarantee affordable access.

## AI + SATELLITE APPLICATIONS

CROP IDENTIFICATION

FIELD BOUNDARY DELINEATION

YIELD ESTIMATION

EARLY PEST AND DISEASE DETECTION

## CONCLUSIONS

- **Technology alone is not enough**. To make AI useful and fair in agriculture, it must come with education, responsible policy, and ethical commitment.

- **AI + satellite tools** can help us produce more efficiently and sustainably — if guided by social justice and inclusiveness.

- The challenge is to **connect technology and territory** harmoniously.

- If we blend innovation with local wisdom and political will, we can grow not only better crops but also a **fairer and greener future**.

## METHODOLOGY

Triangular Groups → Expert interviews → Sectoral Survey

24 sessions
69 stakeholders
Cross-actor dialogue

From academia, finance, innovation hubs, public sector
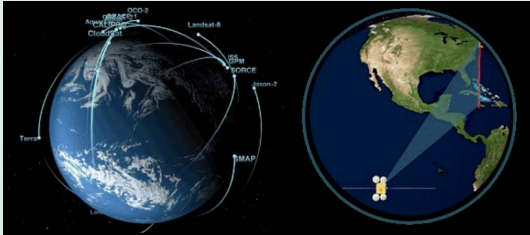
119 responses

## KEY BARRIERS

- **Unequal access and use.**

- **Knowledge and training gap.**

- **Technical and infrastructure limits.**

- **Data governance and politics:** Stakeholders worry about who owns and benefits from data. They call for transparent, fair, and democratic data governance, with clear rules on ownership, privacy, and use. Without supportive policies, digitalization could widen inequalities instead of solving them.

## ACKNOWLEDGEMENTS