

UNLOCKING THE STRATEGY FOR DIGITAL AND PRECISION AGRICULTURE

Digital and Precision Agriculture (DPA) tools — such as smart sprayers, sensors, drones, artificial intelligence, GPS, satellite imagery and Decision Support Systems (DSS) — can help farmers optimise inputs, including pesticides, with greater precision.

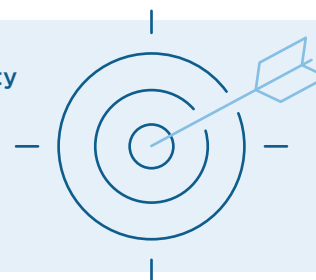
These technologies support sustainable agriculture by enabling Integrated Pest Management (IPM) principles across all pest management stages: prevention, observation, intervention and can facilitate record keeping. To encourage wider adoption in the EU, policymakers should establish an enabling framework and address infrastructure gaps.



A CROSS CUTTING EU STRATEGY FOR DPA: DRIVING UPTAKE

An EU DPA Strategy, as announced in the "EC's Vision for Agriculture and Food" is welcome.¹ Such a Strategy would drive the digitisation of agriculture and increase the uptake of digital and precision tools. A comprehensive EU Strategy would:

- ➔ **Promote DPA tools at EU as well as MS level and enhance their visibility**
- ➔ **Improve rural connectivity and digital literacy as well as training opportunities in rural areas²**
- ➔ **Leverage financial mechanisms beyond the CAP, such as a Just Transition Fund to support successful implementation and uptake**



Furthermore, enabling precision applications within the existing legal framework — including for drones — would facilitate market access. Better integration of precision application and digital tools in plant protection product risk assessments³ would strengthen regulatory confidence in DPA tools. Independent certification schemes for DSS will guide farmers on the appropriate use of pesticides, including the rate of application and location.

Creating a "collect once, use multiple times" approach for EU and national regulatory requirements as proposed by the Vision, would streamline administrative burden. Digital tools such as AgriGuide⁴ can enhance digital record-keeping, supporting regulatory compliance and efficiency. Monitoring DPA uptake could also inform policy targets, while incorporating DPA into training and educational programmes would boost knowledge on the use of these tools as well as digital literacy.

KEY FOCUS AREAS IN A DPA STRATEGY

PRECISION APPLICATIONS: REMOVING THE HURDLES

Risk assessments for precision applications, including ground and drone-based applications, are advancing. In the short term, the EU should support member states in authorising drone applications beyond derogations. Recognition of drones as application equipment under EU legislations (eg: Regulation 1107/2009) is also crucial.

1. https://agriculture.ec.europa.eu/vision-agriculture-food_en

2. As set out in the EU's Broadband Strategy to have all populated areas in the EU covered by 5G by 2030, as per <https://digital-strategy.ec.europa.eu/en/policies/broadband-support>

3. As indicated in the EC's Compendium of Conditions of Use to Reduce Exposure to and Risk from Plant Protection Products as per https://food.ec.europa.eu/document/download/cdd9b6c4-29dc-4077-a118-3e51c0abeb80_en?filename=pesticides_ppp_app-proc_guide_horiz_comp-cond.pdf

4. As explained in AgriGuide - a project supporting EU-wide machine-readable digital labels and related functionalities to support sustainable agriculture <https://www.agriguide.eu/>

In the medium and longer term, actions should include:

- Establishing an adapted, harmonised guidance for drone applications within the scope of Regulation 1107/2009, including a framework for derogations.
- Providing an EU-wide guidance document for data generation, leveraging input from existing forums.⁵
- Address regulatory barriers to enable drone use for scouting and imagery.



INCREASING VISIBILITY OF DPA TOOLS AND UPSKILLING EU FARMERS

By 2030, our sector aims to train 1 million farmers, advisors and multipliers on best practices for IPM, operator safety, as well as for water and environmental protection. Integrating DPA into existing training and educational programmes will:

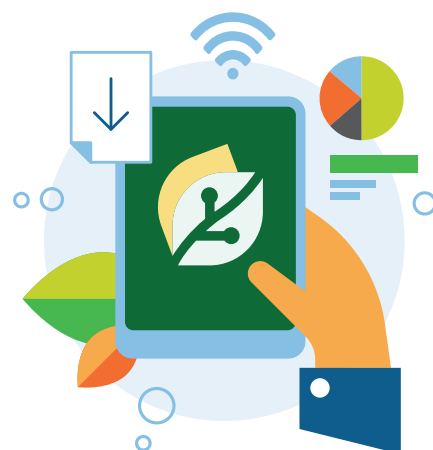
- increase visibility and adoption of new technologies;
- Improve digital literacy and upskill farmers in data collection, management and sharing (eg. Data Act);
- Provide tailored training for farmers, advisors, educators and policymakers.



DPA TOOLS CAN HELP REDUCE ADMIN BURDEN

Tools such as AgriGuide can simplify the implementation of digital record keeping requirements (in line with Art. 67 of Reg 1107/2009) and support IPM implementation as required by the Sustainable Use Directive. To maximise benefits, the EU should:

- Foster the development of a clear framework on farmers' data ownership in line with the Code of Conduct on Agri Data Sharing.
- Ensure interoperability between public databases, DSS, Farm Management Systems and digital label infrastructures to minimise administrative burden for farmers whilst complying with regulatory requirements and providing justification for treatment.⁶
- Encourage the uptake of digital tools to reduce administrative burden and increase transparency, including for the application of CAP subsidies.



BY INCORPORATING THESE ELEMENTS, THE EU STRATEGY FOR DIGITAL AND PRECISION AGRICULTURE CAN SUPPORT FARMERS IN THEIR SUSTAINABLE TRANSITION, WHILE ENSURING OUR FOOD SECURITY AND SOVEREIGNTY.

5. Unmanned Aerial Pesticide Application System Task Force (UAPASTF) and European Precision Application Task Force.
6. e.g. exceedance of a threshold, monitoring, external notifications as well as advisor or phytosanitary alerts