CROP FARMING DATSs ROBOTIC SYSTEMS & SMART MACHINES

quantifarm.eu

FACTSHEET #11

Funded by the European Union

WHAT ARE THE DATSs?

Digital Agricultural Technology Solutions (DATSs) are digital tools, systems, and platforms that collect, analyse, and use data to improve **farm management, productivity, sustainability, and animal welfare.**

They support better decision-making by turning **real-time information** into **targeted actions** on the farm.

WHAT ARE ROBOTIC SYSTEMS & SMART MACHINES (RSSM)?

Robotic Systems & Smart Machines (RSSM) are a category of **Crop Farming DATSs** that **automate and optimise farm operations** by acting directly in the field.
They use **automation, sensors, and artificial intelligence (AI)** to perform tasks such as planting, spraying, weeding, or harvesting with minimal human intervention.

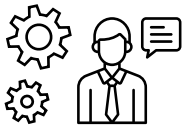
Their purpose is to **carry out farm work autonomously,** reducing labour requirements and improving precision and efficiency in crop production.

WHO IS IT FOR?

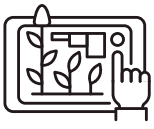
Robotic Systems & Smart Machines are designed for:

Crop Farmers and Farm Managers
seeking to automate field operations

Advisers and Extension Services
supporting advanced digital farming practices



Agricultural Consultants and Digital Innovation Hubs (DIHs)
promoting automation technologies



Researchers and Stakeholders
analysing robotics and AI in agriculture

They are applicable to **different crop types and farming systems**, especially where labour availability and efficiency are key concerns

KEY OBJECTIVES

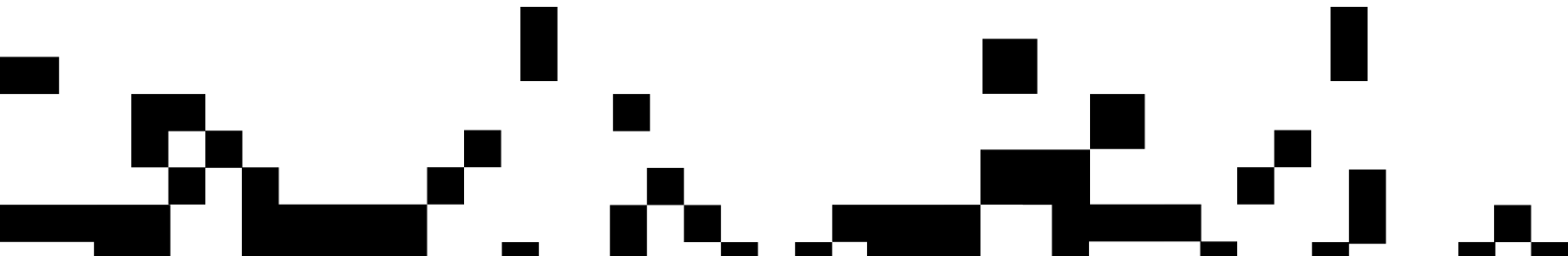
To **automate repetitive and labour-intensive farm operations**

To **increase productivity and operational efficiency**

To **reduce labour costs and operational risks**

To **improve precision in field operations**

To **support sustainable and innovative crop farming practices**



MAIN FEATURES

Robotic Systems & Smart Machines (RSSM) focus on automated field operations:

Field robots

Robots that replace or support human labour in tasks such as **harvesting, weeding, and other farm practices.**

Drones, autonomous tractors, and smart autonomous sprayers

Machines that operate independently, performing field work with high precision and reducing reliance on traditional tractors.

Together, these technologies help farmers **save time and effort, improve precision,** and **optimise crop management** through automation.

Learn More

quantifarm.eu
info@quantifarm.eu

Contact

QuantiFarm

Funded by
the European Union