

*“Innovative agricultural techniques to boost  
entrepreneurial skills of future farmers”  
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C3 - Valea lui Mihai Romania  
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Innovation where it takes place, agriculture and animal farming

“Smart farming is a revolution in agriculture. It uses cutting-edge technologies :-GPS systems; -robots;-satellites, sensors; - drones; These innovative technologies ensure that the best decisions are made in agricultural practice, optimizing production costs, increasing profit.





# I. GPS SYSTEMS FOR AGRICULTURE

- ▶ GIS (geographic information System) and GPS (Global positioning System), allows synchronization of the position of agricultural machines (combine, tractors) and helps monitoring drones, so that the operator can know at all times what is required for fertilization, irrigation or herbicides on each square meter;
- ▶ guidance and measurement of agricultural areas



## II. THE AGRICULTURAL ROBOT

Robots can work for long periods of time with no limitations compared to human labor. Being lighter than conventional agricultural machinery (tractors and equipment for herbicidal, fertilizing or harvesting) robots can alleviate problems associated with soil compaction and can act on areas that are inaccessible to large machines (sloping vineyards or wet soils).



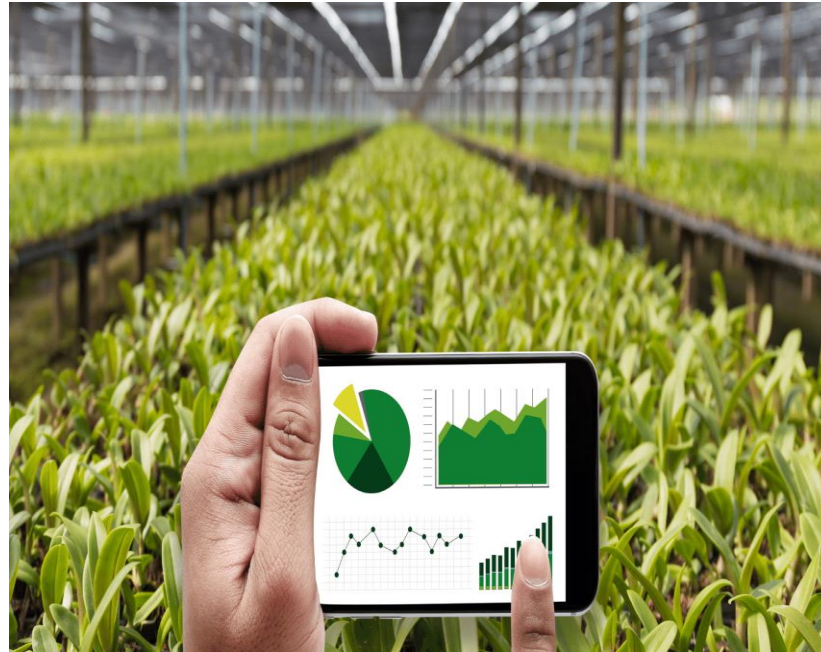


The agricultural robot performs a wide range of tasks: weed removal, disease and pest monitoring, animal milking or harvesting fruit and vegetables. In addition, agricultural robots facilitate sustainable farming practices by precisely managing fertilizers and selectively applying pesticides. Thus, the consumption of inputs is significantly reduced with a positive impact on the quality of production, costs and the environment.



### III. SENSORS IN AGRICULTURE

- Soil sensors give information about soil pH, soil supply status with nutrients and water, irrigation needs, correlated with weather forecasts and the varieties of cultivated plants.





## IV. Drones

- drones make their presence felt in the agricultural field, with a role in the supervision of crops in identifying problem areas. It is not to be neglected their value, having the role of executors, participating in the harvest if necessary.

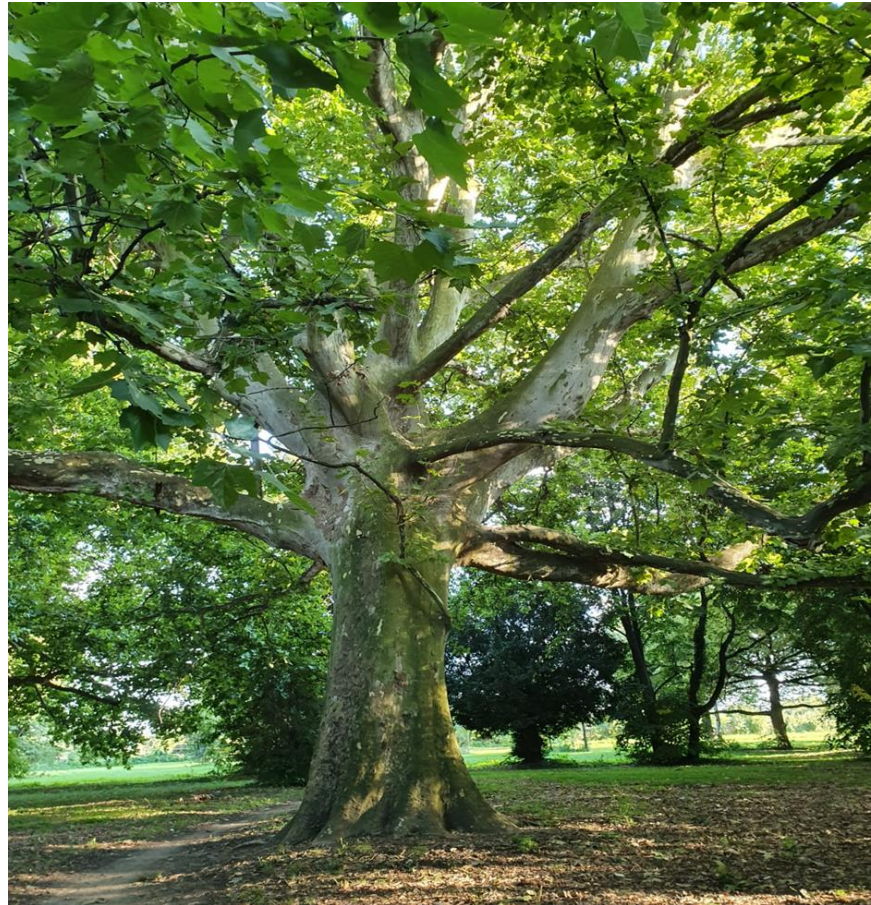


# Intelligent systems used in animal husbandry

- ▶ In animal husbandry, intelligent systems are used to:
- ▶ FEEDING THE ANIMALS
- ▶ MAINTAIN THE HEALTH OF EACH ANIMAL
- ▶ HARVEST PRODUCTION







**Thank you for your attention!**