

## Appendix 1. Focus themes in Test Farms 2025

### i. Achieving carbon positive farming & regenerative agriculture

- a. Soil measurements
- b. Biodiversity
- c. Biofertilizers
- d. Reduction of nitrate leaching, NPK Management.
- e. Pesticides (biobased solutions, organic pesticides)
- f. Water gels
- g. Seeds
- h. Alternative inputs
- i. Water gels
- j. Genomics on seeds
- k. Carbon farming schemes
- l. Bioestimulants
- m. Animal Health (feed and monitoring)
- n. Precision livestock farming (data applications, big data & AI)
- o. Animal disease prevention + detection
- p. Sustainable ingredients for feed
- q. Crop resiliency (drought and pest)
- r. No tillage sowing

### ii. Accelerating the tech revolution in agriculture

- a. New revenue streams for farmers
- b. Automation & Robotics
- c. Smart farming
- d. Satellite/AI measurements
- e. Irrigation tech
- f. Remote sensors
- g. Intelligent plant protection
- h. Soil health and carbon monitoring
- i. Pest and disease detection
- j. Weed Control
- k. Efficient use of resources (water, nitrogen)
- l. Digital Farming

### iii. Food industry decarbonisation

- a. Novel CO<sub>2</sub> reduction / decarbonisations technologies and solutions for primary food production

### iv. Circular agrifood systems:

- a. Biomass upcycling
- b. Sidestream valorization
- c. Upcycling of agricultural side-streams into higher value, functional or health food ingredients
- d. CO<sub>2</sub> conversion technologies & solutions

### v. Primary food processing

- a. Solution decreasing crops and food waste & losses
- b. Solutions optimising cost of primary food processing