

SOLUTION4FARMING



CHALLENGE

Solution4Farming (S4F) project aim to provide solutions for GHGs emissions mitigation for the mixed farming systems across different European climate while increasing circularity. To reach this aim the Project will address objectives to:

- Systemic identify synergy and complementarity with other sectors for mixed crop-livestock production
- To identify the most suitable solutions for each climate area to increase circularity in mixed farm
- To develop ICT tools to mitigate GHG emissions
- To test and validate the project solutions
- To assess the effectiveness of the project solutions based on an LCA approach
- To provide the dissemination, communication, and channel to results exploitation.

APPROACH

Solution4Farming project include growth modules to get better control and on data measurements. The project also focuses on ICT solutions, LCA, and cost benefits. The core of Solution4Farming is a system approach involving the Solution4Farming experts in collaboration with selected stakeholders to perform a mapping of inputs and outputs at different stages of mixed farms that is based on a declared strong interaction among stakeholders. The path outlined for the identification of stakeholders is well designed, and also the gender dimension is adequately pruned. The equipment to be used within the project's scope has been previously developed and tested in different projects.

The project solutions will be demonstrated in three pilots Pilot 1 explore the management options to mitigate GHG emissions in a mixed crop-livestock production, Pilot 2 evaluate regional synergies between livestock and crop production for enhancing agro-systems circularity in southeastern Spain, while Pilot 3 test new solutions to increase circularity and mitigate GHG emissions The solutions will be tested in a pilot plant in Poland.

FIRST RESULTS

- Mixed farms systemic approach – challenges mapping and sustainability indicator
- Preliminary testing of the anaerobic digestion of local agricultural waste in laboratory scale
- Plan and preliminary design of the Controlled Growth module
- User requirements and architecture design for the Decision support platform and deployment of IoT devices for measurements for the Pilot#1
- LCA strengths and limitations in representing mixed crops and livestock farming system
- Stakeholder consultations

Consortium

Coordinator



- Mihaela Balanescu, Beia Consult International, Romania

Partners

- POLAND: Wroclaw University of Science and Technology
- SPAIN: Universidad Politécnica de Cartagena
- FINLAND: Kajaani University of Applied Sciences
- ROMANIA: University of Agricultural Sciences and Veterinary Medicine of Bucharest

Duration

01/12/2021 - 30/11/2024

 <https://agile.ro/solution4farming/>
 <https://twitter.com/solution4farm>