

LANDSUPPORT DSS approach for crop adaptation evaluation to the combined effect of climate change and soil spatial variability

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LANDSUPPORT is a Horizon2020 project, funded by the European Commission, stands for “Development of Integrated Web-Based Land Decision Support System Aiming Towards the Implementation of Policies for Agriculture and Environment” (www.landsupport.eu)

The project aims at developing a web-based, open-access GeoSpatial Decision Support System (S-DSS) devoted to reconciling agriculture, environmental sustainability and policy implementation.

Overall, the S-DSS will contribute to the development and implementation of land use policies in Europe, and it will promote an integrated and participatory approach towards rural development and environmental policies allowing, among others, evaluation of trade-offs between different land uses.

A specific tool will be implemented to face the current issue of food security and optimization of land use in agriculture for addressing the Sustainable Development Goal 2 (Zero Hunger) of United Nations. The system will be able to identify, at different spatial scale, the crop adaptation (e.g. yield production) to climate change and therefore answering to different stakeholder requirements.

The implemented method is based on CROPBASE approach, modified in a flexible Hybrid Land Evaluation approach, able to integrate qualitative (e.g. standard Land Evaluation system) and quantitative (simulation modelling) methods under climate change conditions.