LANDSUPPORT: Development of Integrated Web-based Land Decision Support System Aiming Towards the Implementation of Policies for Agriculture and Enviroment

Description

LANDSUPPORT seeks to construct a web-based smart geoSpatial Decision Support System (S-DSS) that will provide a powerful set of tools devoted to

- supporting sustainable agriculture/forestry;
- evaluating the trade-off between land uses (including spatial planning); and
- contributing to the implementation, impact and delivery of about 20 European land policies and also selected 2030 UN Sustainable Development Goals including climate change mitigation goals and the key SDG 15.3 on achieving a land degradation-neutral world.

The project will integrate existing databases (interoperability) at different scales through the development of high performance modelling engines that simulate agriculture & forestry (e.g. crop growth) and land degradation and environmental issues (e.g. fate of pollutants, ecosystem services). All the above, including their validation by remote sensed data will be ensured by a technology at the state of art for the developing environment (i.e. COMPSs), high-performing computing and massive raster data management. LANDSUPPORT will be applied at four geographic scales: EU; 3 Nations (Italy, Hungary, Austria); 3 European Regions in IT, AU and HU; 3 European pilot sites in IT, AU and HU; and 2 pilot sites in Tunisia and Malaysia. By doing so, LANDSUPPORT will reconcile grand agriculture/environmental sustainability policy ambitions with operational reality as required by RUR-03-2017 call such as the evaluation of land use trade-offs and incentivizing real actions/ behaviour/investments ; all requiring activities at detailed spatial scale. LANDSUPPORT fits with the priorities of this work programme, as LANDSUPPORT S-DSS:

- provides scientific and technology innovation as driver for rural development,
- is a framework for innovation and new business models adapted to the rural context,
- supports skills development in rural communities,
- introduces a new approach towards policies and governance (subarea 1).

Environment, resources and sustainability, Common agricultural policy (CAP), Sustainable agriculture & forestry, Multifunctional agriculture, Land planning & management, Land Degradation Neutrality, Decision Support Systems, etc.

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