



Thursday , 30 January 2020
at 10:30-17:30
Bureau Europe Grand Est,
15 Rue du Luxembourg, 1000 Bruxelles

European Workshop LANDSUPPORT H2020 project

RECONCILING AGRICULTURE, LAND-USE, ENVIRONMENT AND SUSTAINABILITY IN THE 21ST CENTURY: WHICH CHALLENGES AND REQUIREMENTS FOR DECISION-SUPPORT SYSTEMS?

The context

Reconciling economic development and nature protection is the focus of many policies and initiatives of the European Union (EU). The continuous increase of anthropic pressures over natural re-sources in the last decades, and the resulting degradation of natural resources and biodiversity, stresses however that the current policy framework is far from being effective in making reconciliation a reality. For example: several European policies aim at reconciling agriculture and the environment, preserving natural resources and adapting to climate change. However, full implementation of these policies is still challenging¹. Similar difficulties are met when translating the aims of strategic policy documents at the European and international scales into operational reality (see e.g. the implementation of the 7th Environmental Action Programme of the EU² or the achievement of the 2030 Sustainable Development Goals (SDGs)³ or FAO Agenda 2030 for food and agriculture⁴).

The absence of truly integrated approaches to many agricultural and environmental problems is considered as part of the problem. Indeed, models and tools designed to support the development of policies and strategies (short-named Decision Support Systems or DSS here) address often part of the system only, not considering e.g. all relevant causal relationships between economic activities, land use and nature. This results in policies and strategies that do not fully account for reality in terms of the likely effectiveness of proposed measures or unexpected social, environmental and economic impacts.

Many factors can explain the gap between existing DSS and DSS that would effectively provide the right factual support to choices and decisions – including in terms of land use practices and management that farmers (land-owners), forest managers or local planners would need to adopt to ensure sustainable use of land and other resources. These results, for example, from challenges in: accounting for all (relevant?) biophysical and decision-making processes; making multidisciplinary to address simultaneously these processes an operational reality; limited computer capacity to run complex models or to establish interoperability between different models; DSS that do not respond to end-users's needs (e.g. as a result of inadequate outputs or impossibility to use DSS in existing end-users working environment).

To address these challenges, the H2020-funded LANDSUPPORT project is developing a Geo-Spatial Decision Support System (S-DSS) interconnecting a large number of operational DSS to support policy makers, farmers, spatial planners and land managers. First prototypes have been developed by the project and are being tested in case studies in Italy, Austria and Hungary.

¹ As recognized, for example, in COM (2015) 120 or COM (2013) 683 of the European Commission

² <https://ec.europa.eu/environment/action-programme/evaluation.htm>

³ <https://unstats.un.org/sdgs/report/2019/>

⁴ <http://www.fao.org/3/a-i6105e.pdf>

An European workshop: what for?

In this context, the European workshop aims at **sharing experiences and results on the development and real-life application of Decision Support Systems (DSS)/Tools that can reconcile agriculture, land use and the environment**. Key challenges addressed in the workshop include:

- How DSS tools are - and should be - **designed to account for (potential) end-users' requirements?** (with specific reference to end-users mobilisation, living labs and co-building)
- **Which biophysical and socio-economic processes** should be “captured” in DSS to enhance their relevance and value? Is there an interest in making **services delivered by ecosystems** – and their social and economic values – part of such DSS platforms?
- **Which social, economic and environmental indicators** are seen as relevant to “support decision” – for whom and for which decision(s)?
- Which **pre-conditions** for DSS to be (a) considered, (b) used and (c) useful in supporting decisions? In particular, which (forward-looking) challenges and (policy/management) options should be accounted for in DSS developed today so they can support future developments of the EU policy framework?

For whom?

The workshop targets representatives from different land use communities, in particular:

- **Operational stakeholders** of territories which activities directly influence land use – e.g. professionals from the agriculture, forest management and urban development sectors; nature protection managers; services from government and local authorities; civil society organizations...
- **Researchers** representing a diversity of disciplines relevant to land-use: natural sciences, agronomy, forestry, geography, urban & landscape design, social sciences and economics...
- Decision makers at different scales (from local to European) in charge of the development and implementation of strategies and policies affecting (directly or indirectly) land-use

When and how?

The European workshop will take place on **January 30th, 2020**, at the premises of the Grand-Est Region Representation in **Brussels** (15, Rue du Luxembourg, B - 1000 Brussels)

This one-day workshop (from 10:00 to 17:00) will have a **strong operational and practical focus**. It will combine plenary sessions, time for individual thinking and interactive group work, and demonstrations of selected decision support tools. It will build on results and experiences from the LANDSUPPORT partners as well as experiences from other research, demonstration and operational projects.

For more information on the workshop, or interest in presenting your own experiences and results:

Visit the LandSupport website: www.landsupport.eu

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