Session Biosphere: April 13th 09.00 hrs

1s6a A healthy soil as a basic enabling condition for the transition towards circular land management and land use

Soil Mission Support: Co-creating the European Roadmap for Land and Soil Related Research and Innovation

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The EU missions:

In 2019, the European Commission defined five major and challenging missions in the areas of cancer, climate change, healthy oceans, climate neutral cities and healthy soil and food. The delivery of new knowledge that will enable the achievement of the missions is funded under Horizon Europe, the 2021-2027 EU research and innovation programme. The two-year EU project Soil Mission Support (SMS) – that started in November 2020 – helps the Mission on Soil health and food by developing a roadmap for related research and innovation (R&I) needs and related activities to support the Mission's building blocks and objectives. Various actors in the field of soil and land use will engage in the co-creation of this roadmap and will help in trying to integrate these R&I needs in, amongst others, the Horizon Europe Work Programme.

R&I needs of actors dealing with societal challenges related to soil use and land management:

Sustainable soil use and land management are essential to meet societal challenges and needs. In addition, the pressure on land and soil continues to increase due to often competitive functions such as water and food production, energy and biomaterials, infrastructure and urbanization. This involves many different actors and knowledge fields, which do not always have a tradition of collaboration. Informed and knowledge-based choices are required and for this the actors need available, usable and acceptable knowledge. These are actors from different domains, such as spatial and urban planning, soil remediation, agriculture and forestry, climate, etc. Actors also include researchers, practitioners, young professionals, policy makers and citizens.

Main messages of the presentation:

The SMS project aims to improve the coordination of soil and land management related R&I and thus to support the achievement of the Mission on Soil health and food, the European Green Deal, and the UN SDGs. In this presentation, we present the progress of the SMS project and we 1) will emphasize the importance, as well as the potential of and challenges in soil and land management, and 2) will point out some concrete R&I gaps and actions, related to the conference topic.

Keywords: EU missions, soil, SDGs, land management, roadmap R&I