

The series of webinars “A soil deal for Europe – mission possible in the Baltic Sea Region”

Date: 2022, June 15th, 9:30 – 11:30 am CEST

Topic: EU Soil Mission’s state of play and National initiatives

Summary:

Estonian, Latvian, Lithuanian RDI Liaison Offices, and NCBR Poland in Brussels in cooperation with countries National Contacts Points (NCPs) are organizing a series of webinars “**A soil deal for Europe – mission possible in the Baltic Sea Region**”. The first webinar was held on June 15th and focused on the EU Soil Mission’s state of play and National initiatives. Researchers from each country presented their case study from the Baltic Sea region.

EU Missions are part of the Horizon Europe research and innovation programme for 2021-2027 aiming to address some of the greatest challenges facing our society. They have ambitious goals and should deliver concrete results by 2030.

Paola Eulalio, Research Programme Manager, Research and Innovation Unit, Directorate – General for Agriculture and Rural Development (DG AGRI), European Commission

Ambitions of the Soil Deal for Europe Mission

The Missions are a novelty under the Horizon Europe programme to address the societal challenges. They are meant to be bold and inspirational. The main goal of the Mission is to establish 100 Living labs and Lighthouses and connect citizens, researchers, and policy makers.

Currently, 60-70 % of European soils are not in healthy conditions. The main problems are connected to losing carbon, contaminated sites, water retention, desertification etc.

How will the mission be implemented?

Firstly, through the R&I programme to create knowledge. Secondly, the Living Labs and Lighthouses will be implemented which are intended to be a network of live sites. Third, it is important to develop efficient soil monitoring system, because very few member states have a established system for the monitoring. Lastly, there is a strong need to engage citizens for successful implementation.

Currently, there are two ways for implementing the mission goals – a work programme that covers all four building blocks and innovation hotspots. The work programme for the 2022 call is now open and the deadline for the applicants is in September. The new work programme for 2023-2024 is planned to be published at the end of the year.

Living Labs are intended to be live sites. They can be in rural, urban, natural or industrial areas. The mission covers all types of soils, not just agricultural soils. Each Living Lab contains several sites. The number of sites will not be prescribed, but it will depend on the type of the site. For example, there can be 10-20 agricultural farm sites. In some cases, the number can be less. For example, with soils near mining areas.

Lighthouses are sites for exemplary performance. These will be sites where good practices are demonstrated for future uses, policymakers, or broader society.

Now the mission is in the first phase (2021-2024) where preparatory actions are taken. Engagement sessions take place in member states to talk to the applicants.

How can countries and regions be involved?

The countries can create mission mirror groups, mobilize stakeholders, promote calls, contribute to soil monitoring, promotion of soil improving measures in CAP strategic plans, EIP-AGRI network and establish a core network at the national level.

Synergies between soil mission and different partnerships are planned, e.g. with agroecology partnership. Possible ways for cooperation: research calls, common activities with two networks of Living Labs, potentially sharing Living Labs and monitoring activities.

What organisation is most fitting to host a Living Lab?

Research performing organisation, but also real farms where practices are tested. Also, the broader community be involved.

The Mission coordination actions at the national level:

Eike Lepmets, Chief Specialist, Ministry of Rural Affairs, Estonia

- Estonian Ministry of Rural Affairs resented what is Estonia doing to complement the soil mission. A core network is not yet formed for the mission implementation, but it is planned. Soil R&I activities are mostly covered by the University of Tartu and the Estonian University of Life Sciences (EMÜ) and they cover many soil research areas. EE also takes part in different European partnerships. Estonia has also participated in the FAO Global Soil partnership.
- In EE, EMÜ and Agricultural Research Centre have sites that have the potential to become Living Labs and Lighthouses. NGO Soil Innovation Cluster also has many such sites.
- EE has a good national soil monitoring system that ran from 1983 to 1993 and restarted in 2001. The method for soil biodiversity evaluation is under development.

Kristīne Sirmā, Head Of Division, Ministry of Agriculture, Latvia

- Latvia has many actions that can contribute to the mission initiative. Since 2014, LV has digitalized all historical soil maps. Additionally, the country is taking part in many different partnerships, including the FAO Global Soil partnership.
- There is still a need to continue work with sustainable soil management. Since 2021, the main policy-planning documents are Green Deal and Farm to Fork Strategy.
- All the countries in the Baltic Sea region have to work side by side to reach the Green Deal targets.
- Latvia is currently developing a soil information system which will be available for different stakeholders.

Martynas Navickas, Chief Specialist, Ministry of Agriculture, Lithuania

- Lithuania has a programme for national and international research projects and funding for collaborative projects. There is an education programme to provide farmers with knowledge about the latest information available in the agricultural sector.
- Also, Lithuania takes part in national, regional (NordForsk) and international partnerships (e.g. ERA-NETs).
- There are many good examples of soil related research projects funded by the Ministry of Agriculture.

Bartosz Dąbrowski, Deputy Director, Ministry of Agriculture and Rural Development, Grzegorz Siebielec, Professor IUNG, Institute of Soil Science and Plant Cultivation – State Research Institute, Poland.

- Poland sees the need to spread knowledge about healthy soils to citizens. But there is also a need to listen to the farmers about what they need to take up better practices.
- National soil hub has been set up under the EJP Soil initiative. And the R&I component for mission implementation by the country can come from the EJP Soil and CSA project called PREPSOIL.
- Poland has very good experiences with soil monitoring. There is a monitoring network with approx. 600 farms across Poland. There is also a separate monitoring of peatland soils to monitor and protect soil carbon, water retention and biodiversity reservoir.

Baltic Sea region cases studies:

Marina Semchenko, University of Tartu, Estonia

The effect of land use change on interactions between plants and soil organisms (ERC grant)

- Grant focuses on grasslands which provide essential ecosystem services. Habitat has gone through a transformation in time and is under pressure from climate change.
- Land use change triggers evolutionary shifts. Study sites are planned in England, Estonia and Öland.
- The aim is to uncover the consequences of adaptation to land use for soil functioning and the capacity to endure and adapt to future perturbations.

Lauris Leitāns, E2SOILAGRI leader of the project, Latvia

Enhancement of sustainable soil resource management in agriculture

- The objective of this project is to update national soil data for the development and improvement of climate change policy.

- The historical soil database has been updated and development of soil mapping methodology is in progress. The aim was to establish 200 soil carbon monitoring sites and exchange experience on sustainable management resources etc.

Dr. Monika Vilkienė, RDI Project Coordinator of Research Centre for Agriculture and Forestry, Lithuania

Climate change research in soil sciences: review and future collaboration possibilities

- Lithuania has ten long-term experiments going on for more than 50 years that can contribute to the soil mission implementation. Some of these sites have the potential to become part of a Living Labs.
- This year there are no soil monitoring actions, but for the next year the monitoring activities are planned.
- Lithuania is participating in EJP Soil projects.

Prof. dr. Vaclovas Bogužas, Vytautas Magnus University, Lithuania

Stabilization of soil organic carbon in agricultural soils: contribution to a Soil Deal

- Project has a field experimental station with 120 ha of arable land. 3500 experimental plots in 45 ha land etc.
- A stationary field experiment „crop rotation intensity“ was established in 1966.

Prof. Marta Pogrzeba, Institute for Ecology of Industrial Areas (IETU), Poland

Phytoremediation as a solution for heavy metal contaminated land

- Need to enhance the number of urban soils reused. When planting, there should be a consideration of using urban soil sites.
- Project tries to use biological methods for the management of degraded areas for contaminated soils.
- Energy crops can grow in contaminated lands.