

Modelling soil functions and soil threats for mapping soil functions and ecosystem services (SE2/INDICATORS1)

Conveners

- Thomas Weninger (BIOS)
- Costanza Calzolari (CREA)

Programme outline

Opening with 2 keynote speakers (from SIREN project and WP6 T.3)	20'
10 presentations of ongoing activities and approaches in Europe (4' each)	40'
Questions and discussion	20'
Conclusion and wrapping up	10'

Description

The existing indicators for the assessment of soil functions, soil quality and soil-based ecosystem services in Europe need to be refined, calibrated for the different pedo-climatic conditions and main agricultural production systems and eventually checked in terms of reliability and robustness. Accordingly, also soil threats indicators should be consistently revised in order to assess the pressures on the capability of soils to perform their functions and to underpin ecosystem services.

Aim of this call is collecting the experiences and ideas from active groups on these items, with a special focus on: a) the chain from soil properties to soil functions and ecosystem services, their assessment, mapping and modelling; b) the modelling approaches to assess the effects of soil threats and of agricultural soil management options on soil functions and on the provision of ecosystem services; c) operative definition of soil quality/health capable to fully consider the multifunctionality of soil.

Keywords: soil function indicators, soil quality, ecosystem services, multifunctionality of soil

Instructions for participants

The main goal of the session is to collect as many as possible experiences/ideas as a basis for the subsequent discussion and later proposal development. For this reason, the presentations will be limited to 4 minutes. A maximum of three slides are expected, focusing on the topical messages to be shared with the participants. Introducing keynotes are planned to be given by a representative of the team of the preparatory stocktaking project on indicator systems for assessing soil quality and ecosystem services (SIREN) and of the team of WP6, tasks 3.

As for the presentation, submit a one page abstract on earlier research/experience about the topic of the session, considering the proposed themes. The abstract should not exceed 700 words, and must include the title, authors, affiliations, and 2- 5 key sentences as starting points of discussion.

If the number of submissions exceeds the capacity of presentation slots, a selection will be based on the maturity of the soil functions/threats assessment system including mapping and modelling approach. All submissions will get the opportunity to prepare their slides which will be distributed among the participants before the EJP soil science days to enable comprehensive discussions. Deadline for abstract submission is March 21st.