

## SERENA in EJP SOIL

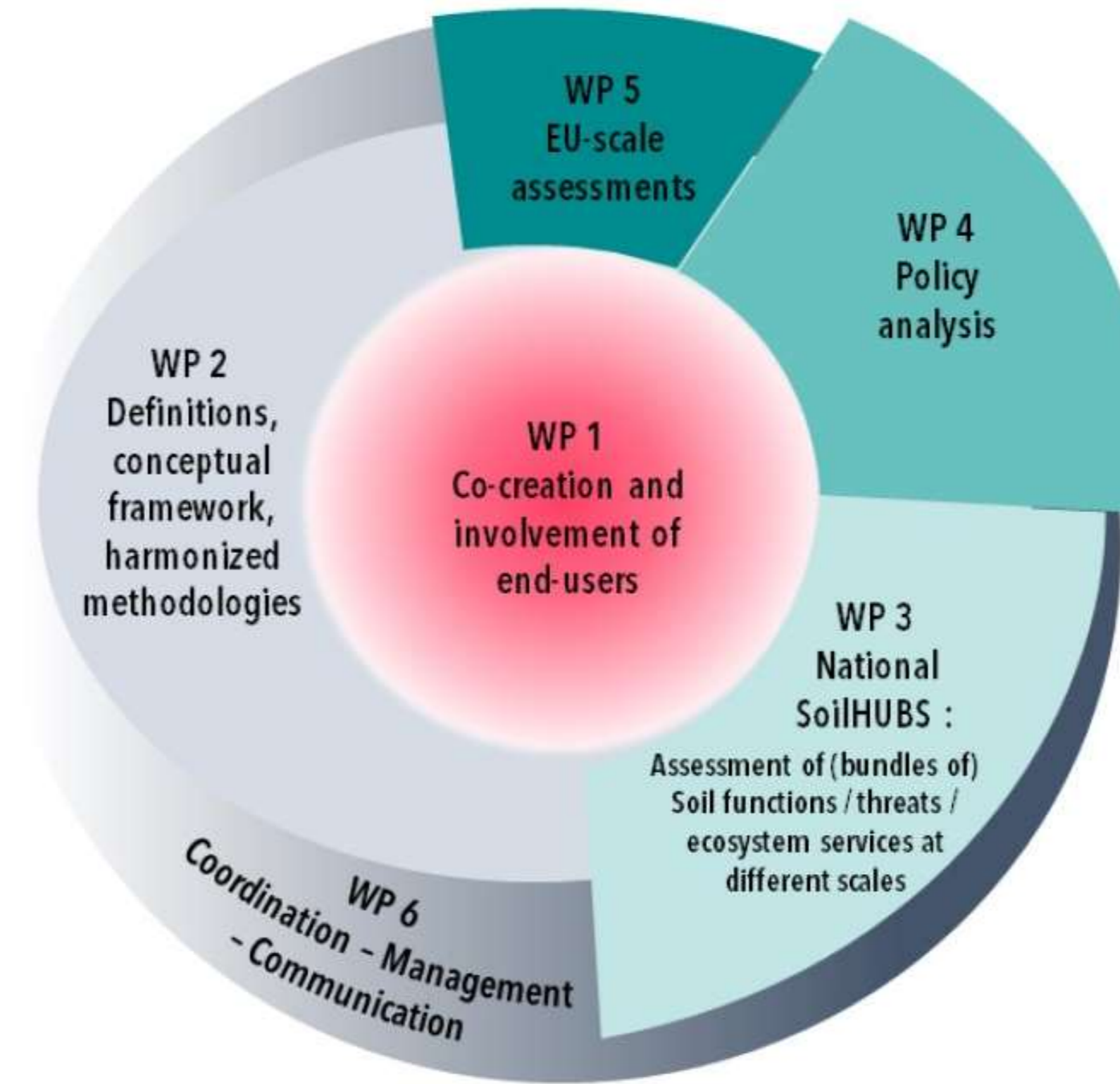
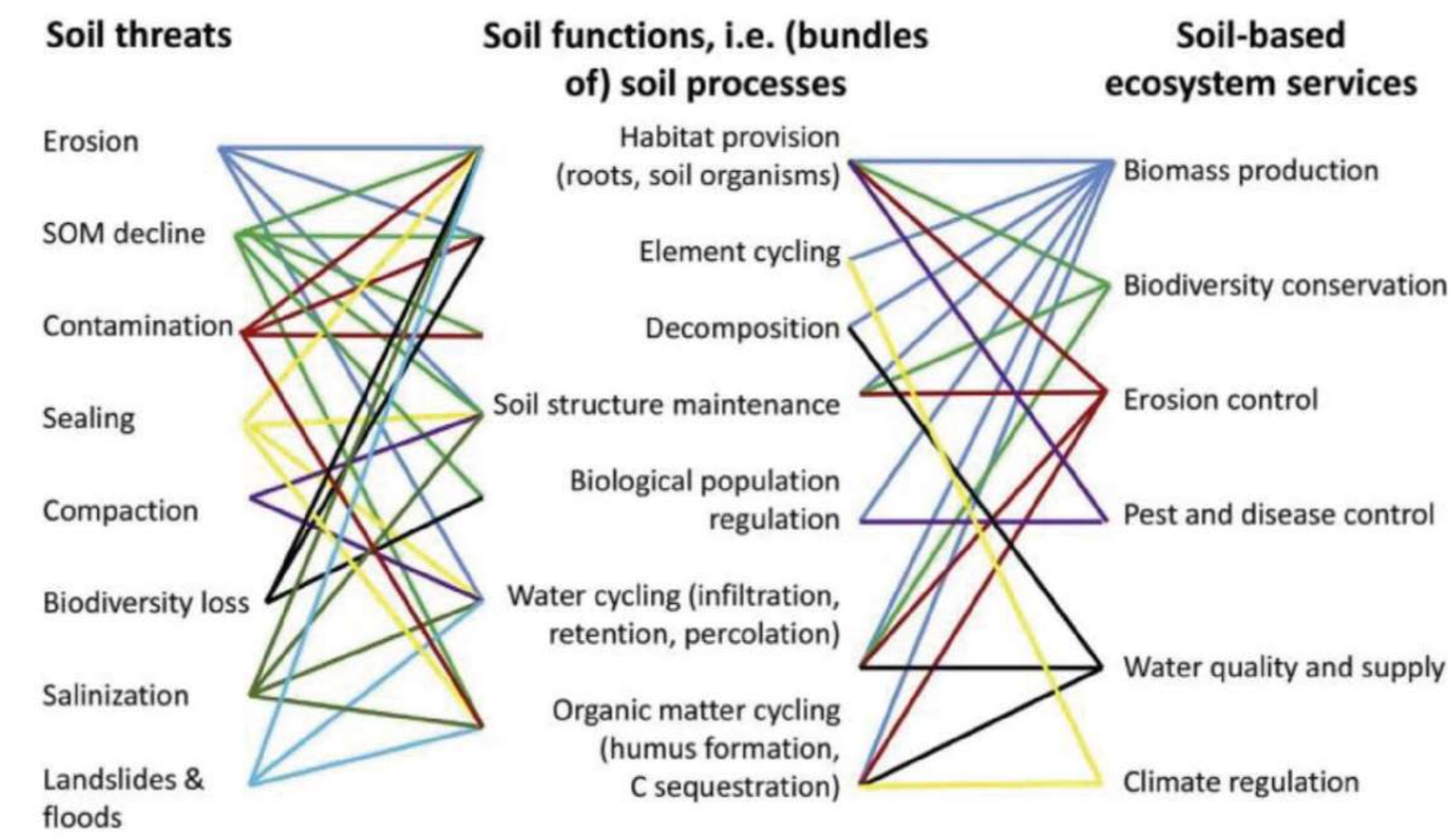
EJP SOIL is a European Joint Programme on Agricultural Soil Management contributing to key societal challenges including climate change, water and future food security. The objectives are to develop knowledge, tools and an integrated research community to foster climate-smart sustainable agricultural soil management.

In this framework takes place the project SERENA, started in November 2021, will last three years. 24 Partners from 16 EU member states are involved and will cooperate with the aim to analyze the positive contribution of data and indicators related to soil ecosystem services to enhance soil policy effectiveness.

The main objective of SERENA project is to assess, analyze and map soil ecosystem services bundles (i.e. the analysis of a set of soil-based ecosystem services, which are repeatedly appearing together across space and time) across European agricultural landscapes, highlighting how soil threats affect the supply of services bundles through adoption of a set of site-specific reference thresholds.

## Objectives

In SERENA, end-users are at the core of the project: they will collaborate to identify the most important soil threat/SES to be considered in the project in order to deliver products which are consistent, reliable and feasible in the different EU regions and in the different pedo-climatic and agricultural environments. One of the objective of the project is to make end-users aware of general trends under different scenarios and to involve them in identifying the ones that are interesting in mitigating the effects that these scenarios foresee.



This aim is implemented in two steps:

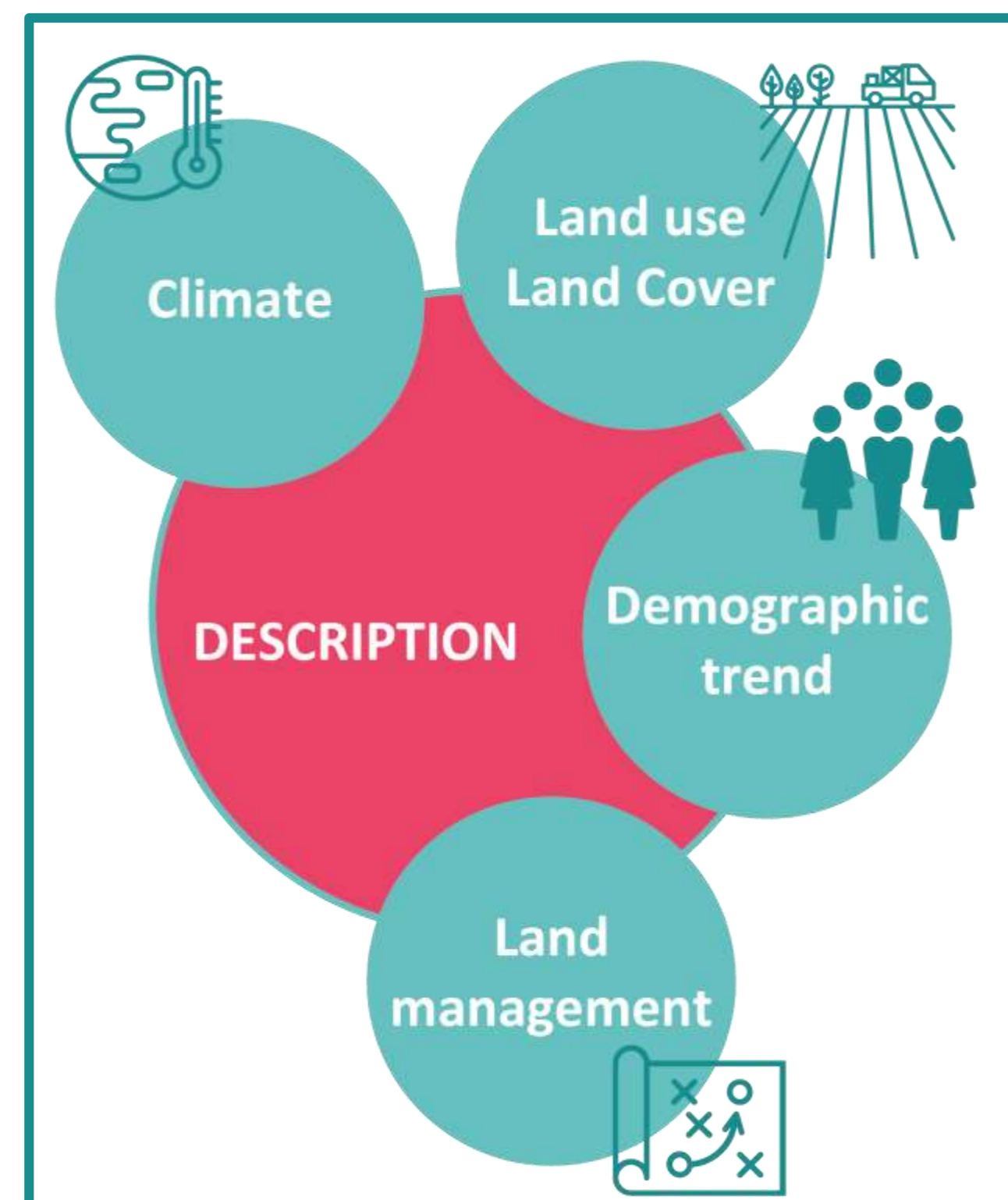
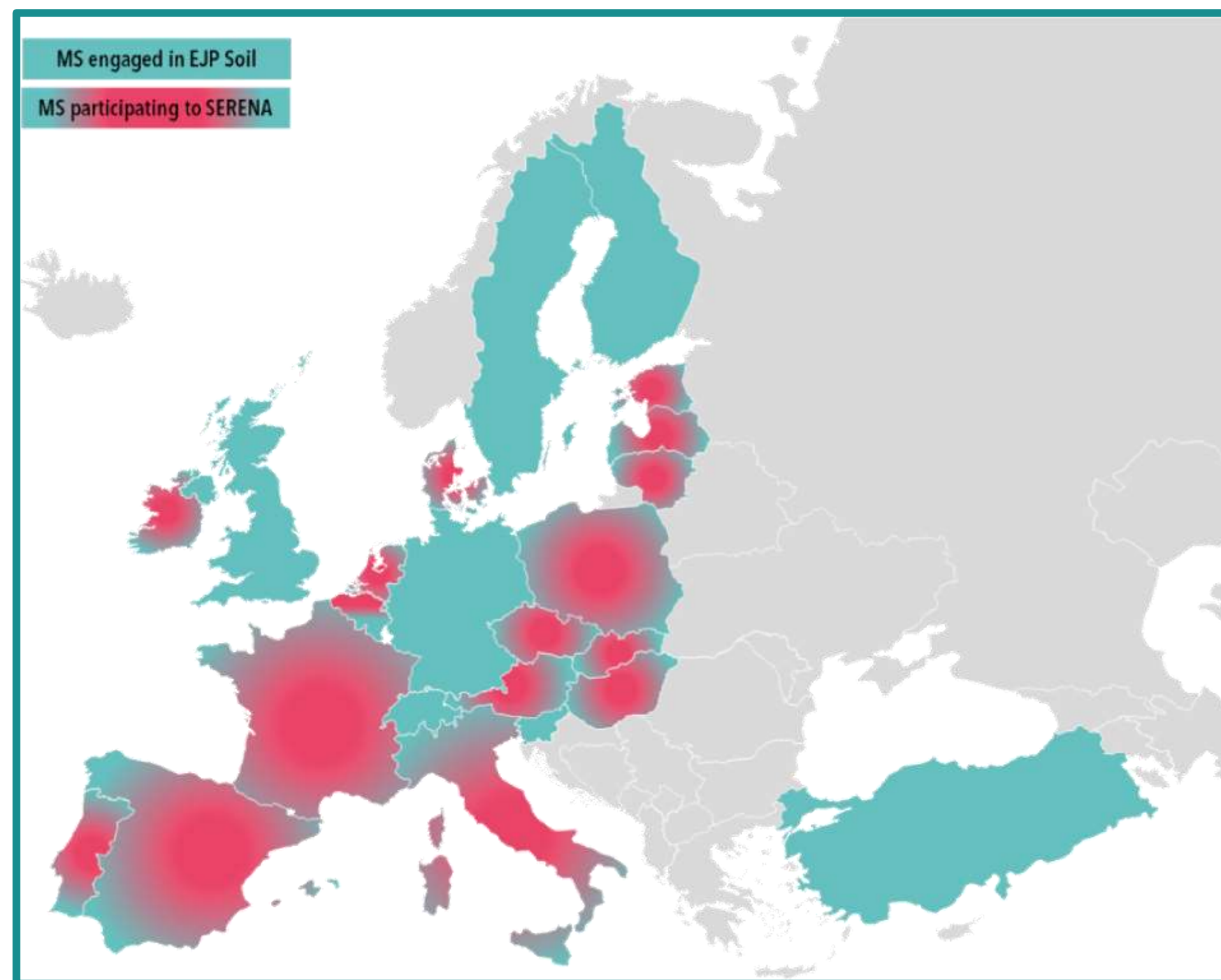
- to identify scenarios based on four main drivers:

- climate change
- land cover/use
- land management
- demographic trends

- to encourage end-users cooperation to co-construct the relevant scenarios that the four drivers could produce in agricultural soils.

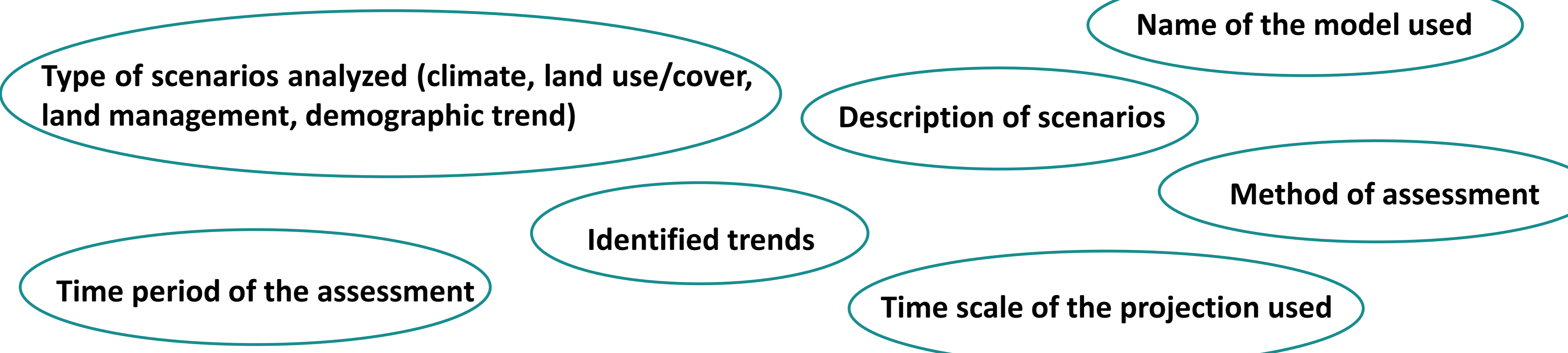


## Participants

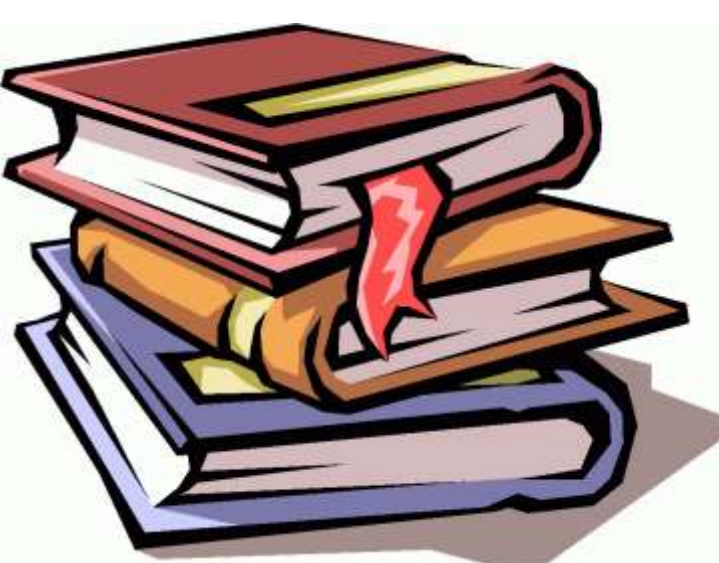


## Methods

The identification of scenarios was based on a literature review regarding institutional and large organization documents (in particular Global Land Outlook 2 report, IPCC reports, FAO reports, and European projects) and scientific literature selected, choosing among the collected studies in SERENA project, regarding Soil Threats and Soil-based Ecosystem Services and taking into account the four drivers here analyzed. A total of 30 references was obtained and key information were gathered and summarized to be communicated to end-users and discussed with them.



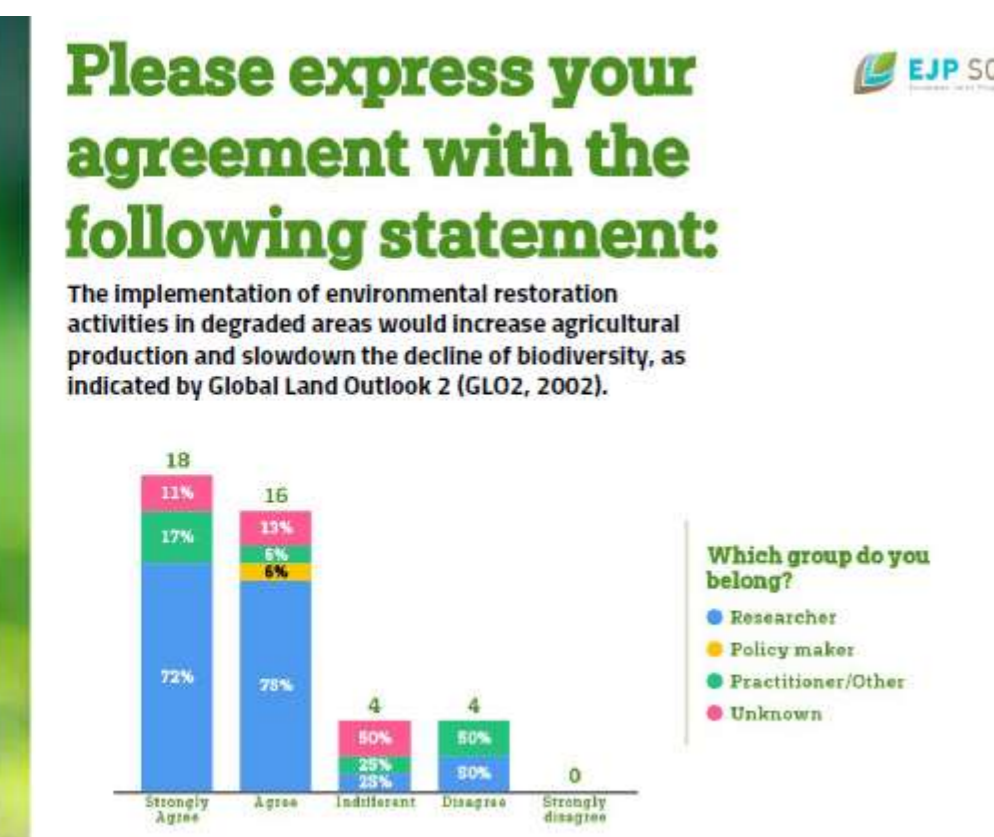
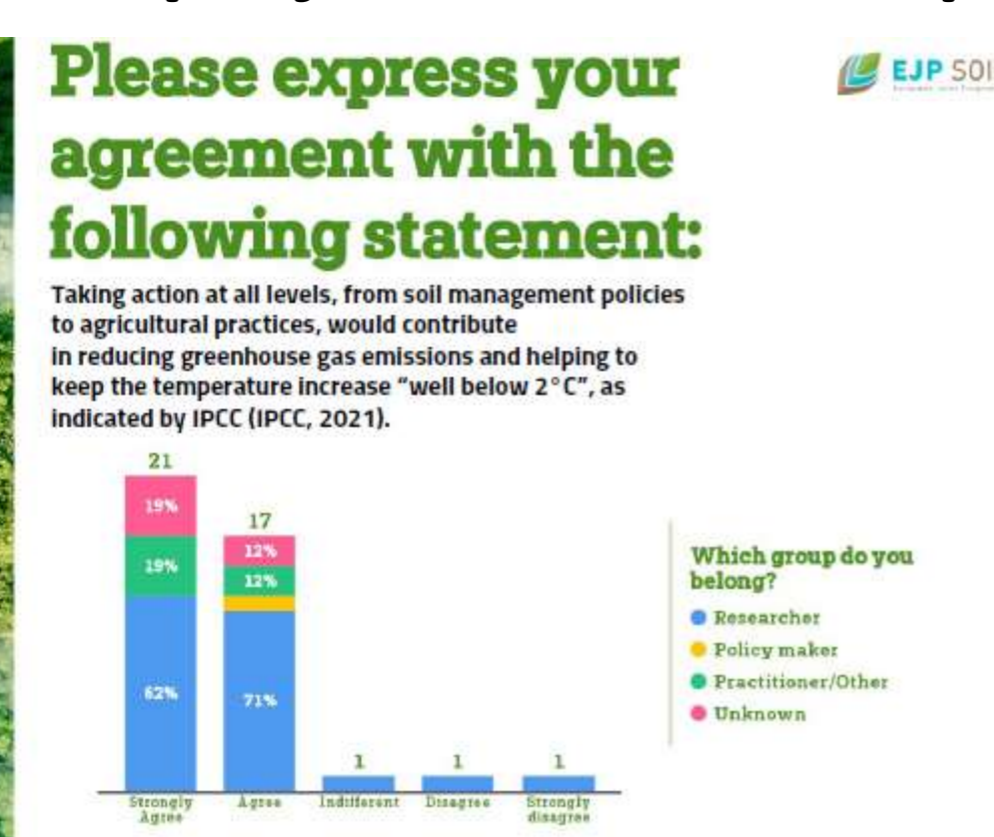
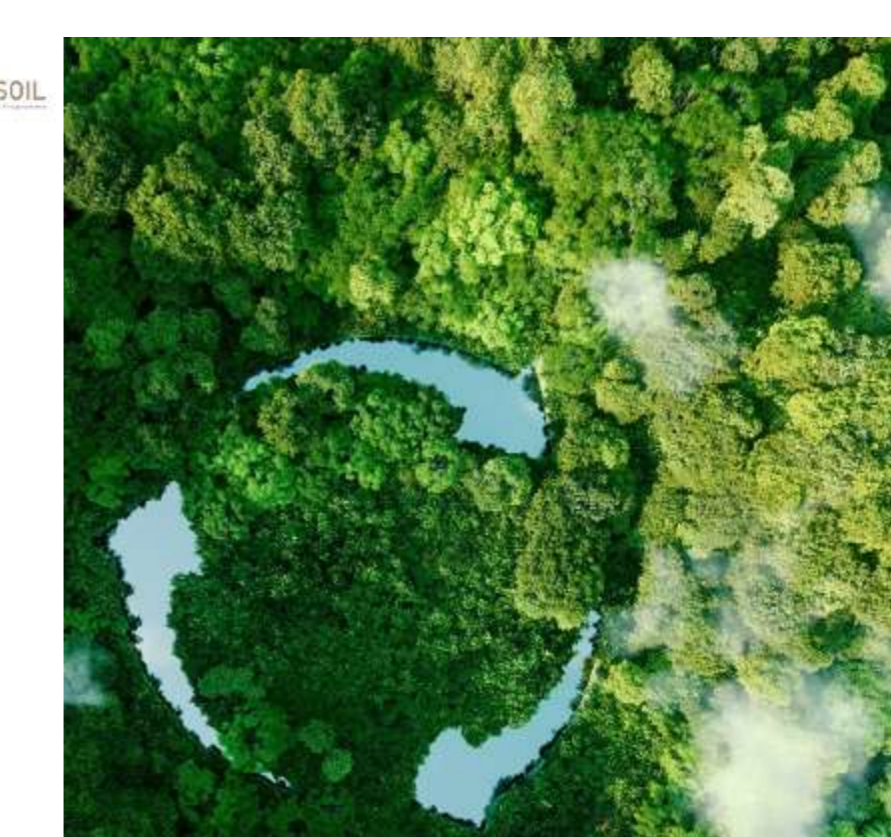
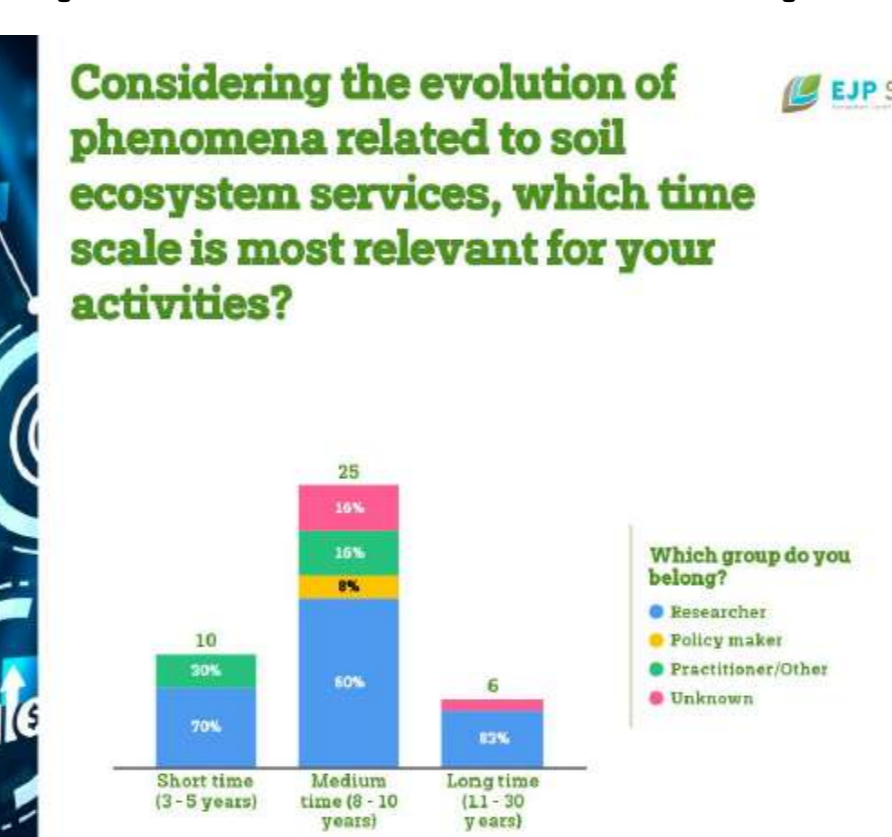
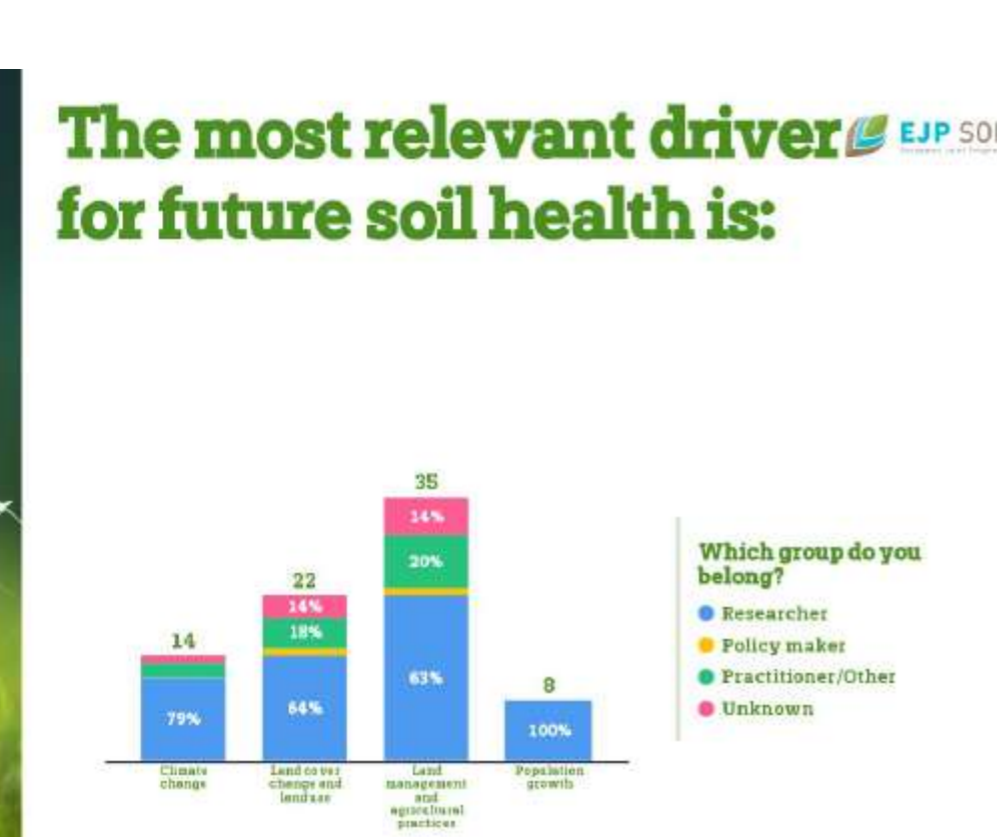
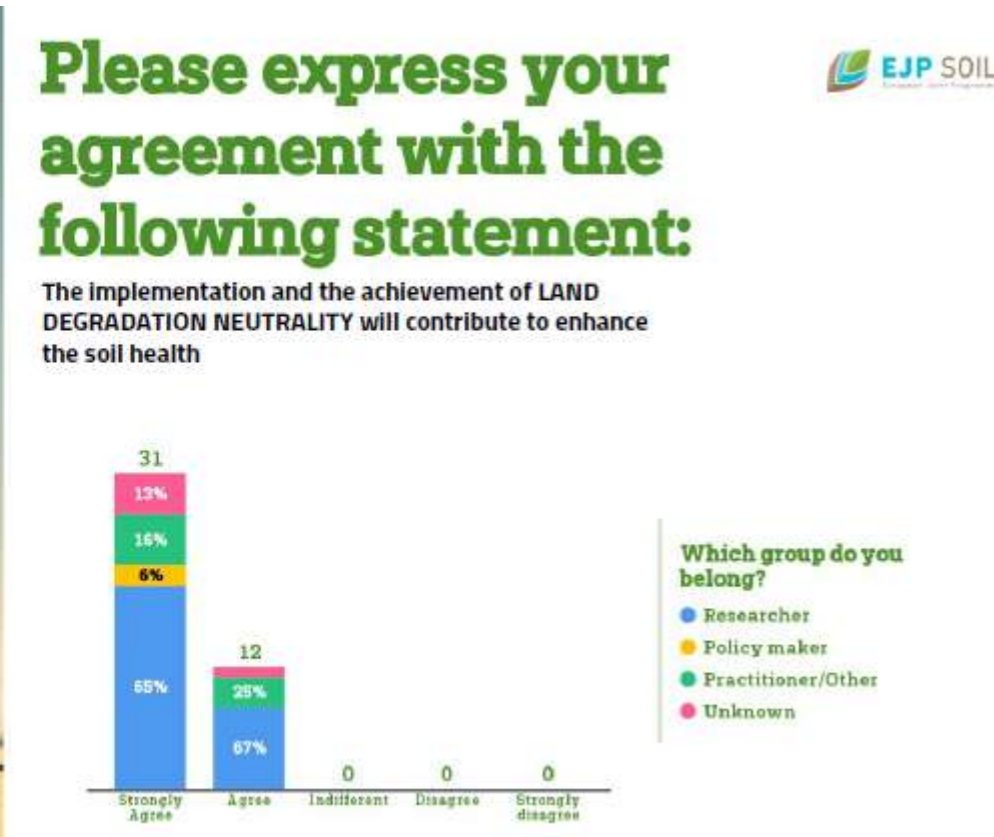
To involve end-users, a questionnaire was prepared in order to gather end-users opinions and to involve them to collaborate for identifying the most relevant scenarios for end-users, and to build the co-construction process.



## Results

We present some preliminary results that we have gathered from the responses of the participants in the webinar "LAND DEGRADATION AND HEALTHY SOILS: TOWARDS A GLOSSARY AND MONITORING SYSTEM" organized within the EJP SOIL Programme, to which the questionnaire was presented.

Next steps foresee the distribution of the questionnaire to all the end-users involved in the SERENA project. A workshop will be organized for a final discussion on scenarios.



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