SOILGUARD

PROJECT COORDINATOR

LEITAT
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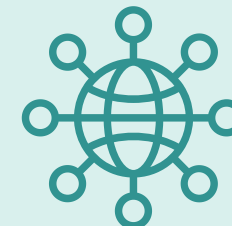sllado@leitat.org

4 YEARS

25 TRANSDISCIPLINARY PARTNERS WORLDWIDE

17 COUNTRIES

1 GLOBAL NETWORK OF KNOWLEDGE FOCUSED ON SOIL BIODIVERSITY

Sustainable soil management to unleash soil biodiversity potential and increase environmental, economic and social well-being

AIM

The aim of SOILGUARD is to boost the sustainable use of soil biodiversity to protect soil multifunctionality from land degradation, unsustainable soil management and climate change. Thus, increasing economic, social & environmental well-being.

METHODOLOGY TO CREATE EVIDENCE

To reach this ambitious aim, SOILGUARD will co-create an experimental design focused on understanding the region-specific benefits of sustainable soil management (SSM) to conserve soil biodiversity and the delivery of soil-mediated ES in present and future environmental conditions. This will be achieved by combining i) a cross-biome network of sites (220 sites across the globe), with ii) on-field climate simulations. Both experimental strategies will compare unsustainable vs SSM practices. In Europe, the sites co-selected for the cross-biome network will belong to the same NUTS-2 regions where the climate simulations are located.

Figure 1. All regions from the SOILGUARD cross-biome network of sites

Figure 2. Drought simulation (Spain)

Figure 3. Pilot heat wave simulation (Denmark)

EVIDENCE WILL BE USED TO

i) Quantify the environmental, economic, and social benefits of SSM and soil biodiversity, ii) increase the power to forecast soil biodiversity responses to projected challenges, and cascading effects on soil-mediated ES, iii) inform national, EU and global policy frameworks and iv) mainstream and support SSM practices implementation.

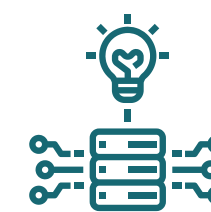## EXPECTED RESULTS

SOILGUARD NETWORK OF KNOWLEDGE (SNoK)

THE SOILGUARD'S NETWORK OF KNOWLEDGE (SNOK) AND THE CONNECTIVITY ENABLED BY SOILGUARDIANS APP WILL CREATE AN ECOSYSTEM OF INNOVATION FOR USERS TO SHOWCASE, LEARN AND SHARE EXPERIENCES.

SOIL BIODIVERSITY AND WELL-BEING FRAMEWORK

THE SOIL BIODIVERSITY AND WELLBEING FRAMEWORK WILL HAVE THE POTENTIAL TO BECOME A GLOBAL STANDARD GUIDELINE FOR FUTURE GLOBAL ASSESSMENTS OF SOIL STATUS, BASED ON SOIL BIODIVERSITY AND SOIL MULTIFUNCTIONALITY INDICATORS.

SOILGUARDIANS APP

ALL KNOWLEDGE CO-CREATED WILL BE SHARED THROUGH SOILGUARDIANS, A PREDICTIVE TOOL BASED ON THE CAUSAL LINKS BETWEEN SOIL BIODIVERSITY, SOIL MULTIFUNCTIONALITY AND WELLBEING TO SUPPORT STAKEHOLDERS ON THE TRANSITION TO SUSTAINABLE MANAGEMENT.