

SUELOS SANOS EN LA AGRICULTURA ESPAÑOLA



BIODIVERSIDAD DEL SUELO Y GESTION SOSTENIBLE
POTENCIANDO EL BIENESTAR AMBIENTAL, ECONOMICO Y
SOCIAL



Cristina Yacoub
Scientific Coordinator

19 / 10 / 2023



The research leading to these results has received funding from the European Union Horizon 2020 Research & Innovation programme under the Grant Agreement no. 101000371.

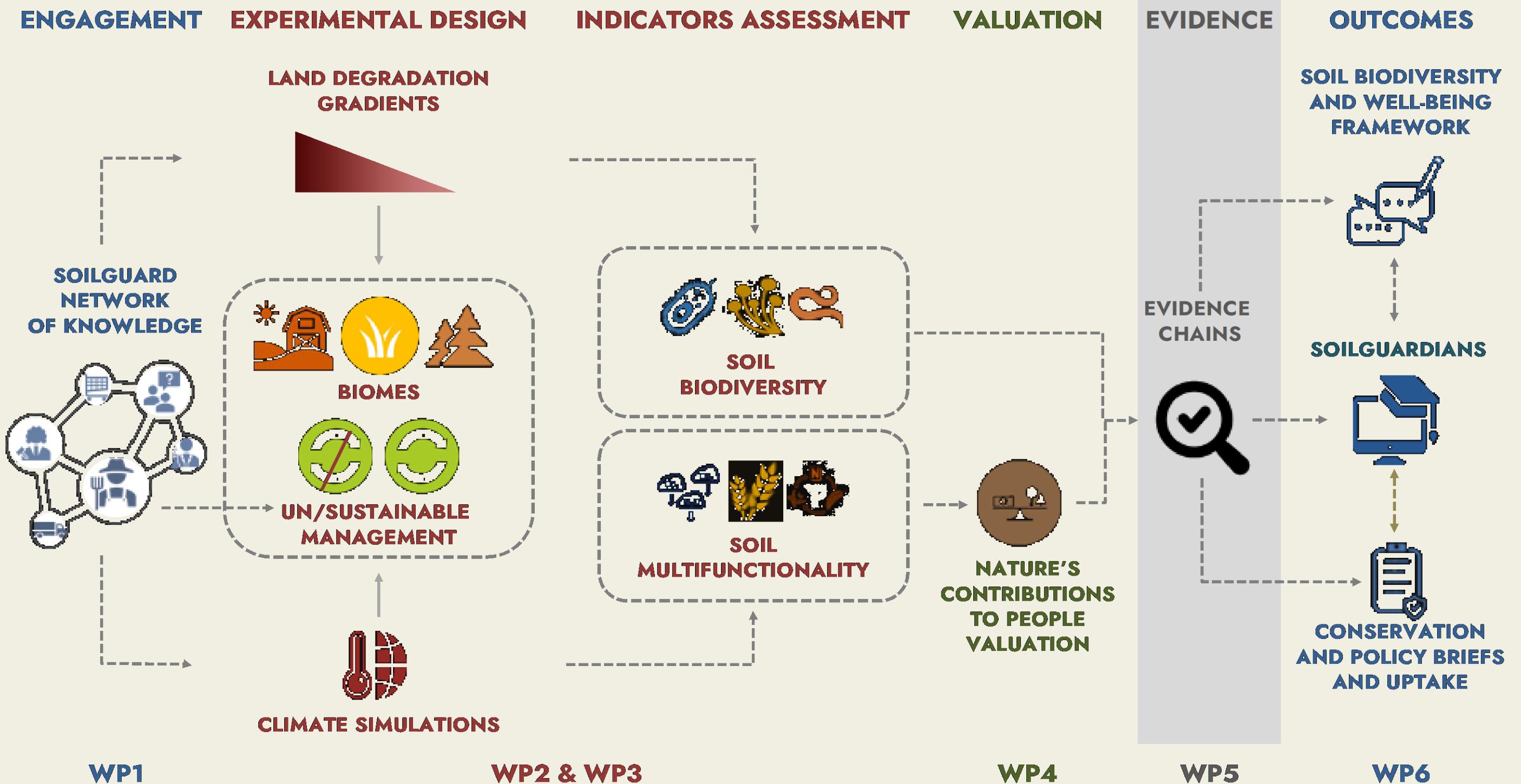


PRINCIPALES LAGUNAS DE CONOCIMIENTO

- 1) Situación **actual** de la **distribución de las especies** del suelo en los distintos biomas y regiones biogeográficas.
- 2) El **peso de la biodiversidad del suelo** en el suministro de CNPs mediadas por el suelo y su **valor económico y sociocultural**.
- 3) **Efectos de la degradación del suelo** sobre la biodiversidad del suelo y la pérdida de suministro de CNP relacionados.
- 4) **Efectos específicos regionales de la gestión insostenible del suelo** y de los factores de estrés del **cambio climático** sobre la biodiversidad del suelo y el suministro de CNP.

Sustainable soil management to unleash soil biodiversity potential and increase environmental, economic and social wellbeing





Situación actual de la distribución de las especies del suelo en los distintos biomas y regiones biogeográficas

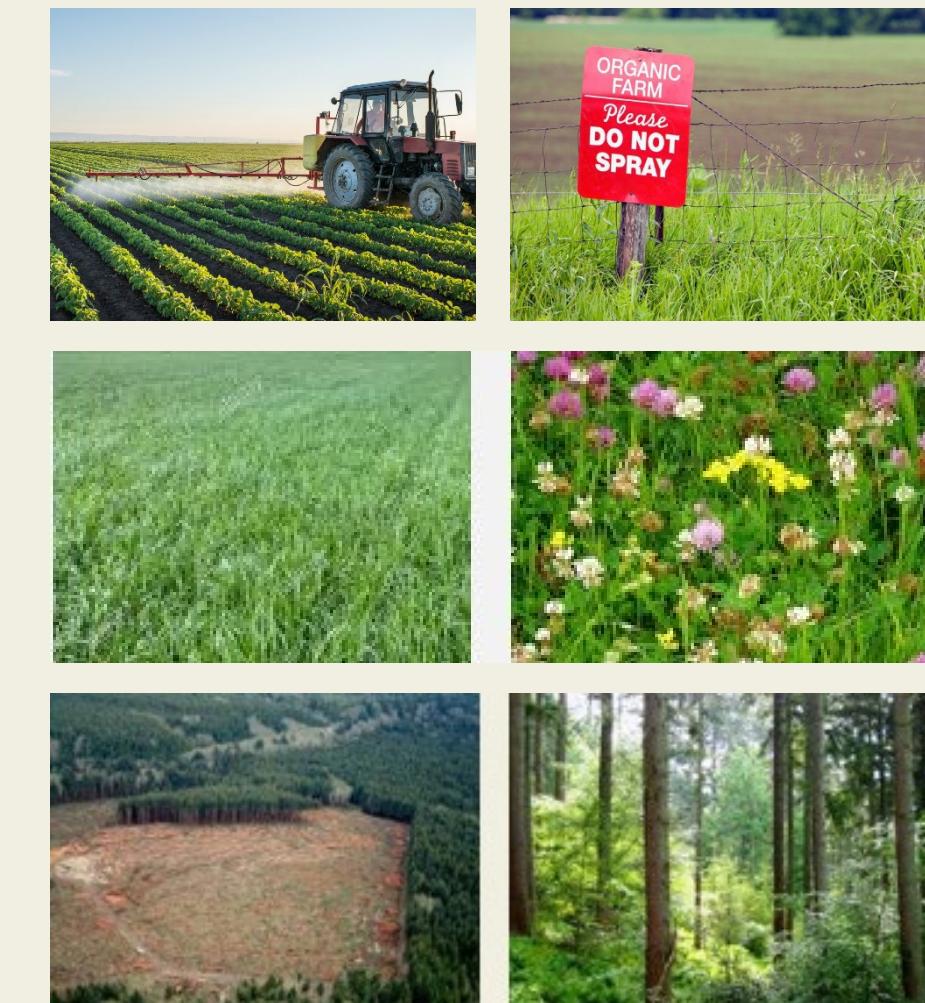
3 biomas con un total de 234 puntos

- Tierras de cultivo
- Pasturas
- Silvicultura

10 regiones



2 gradientes de degradación en cada región



2 prácticas de gestión por bioma

- Convencional vs. orgánico (190 puntos)
- Monocultivo vs. especies mixtas (20 puntos)
- Tala rasa vs. cubierta continua (24 puntos)

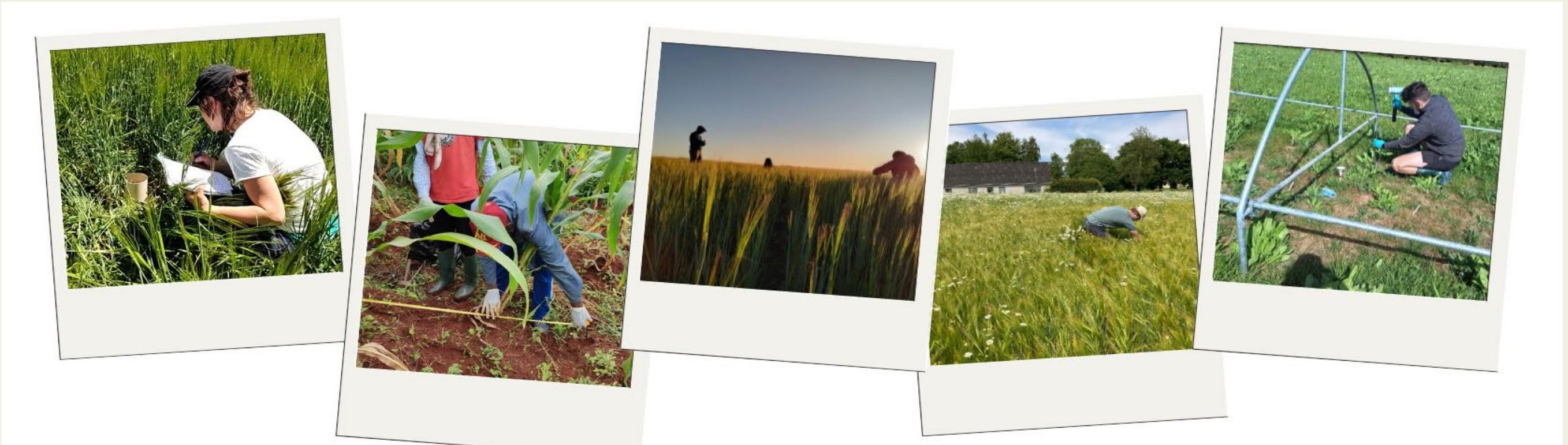
8 grupos de biota del suelo

- Virus
- Bacteria
- Archaea
- Hongos
- Protozoos
- Nematodos
- Micro artrópodos
- Lombrices de tierra

2 aproximaciones analíticas

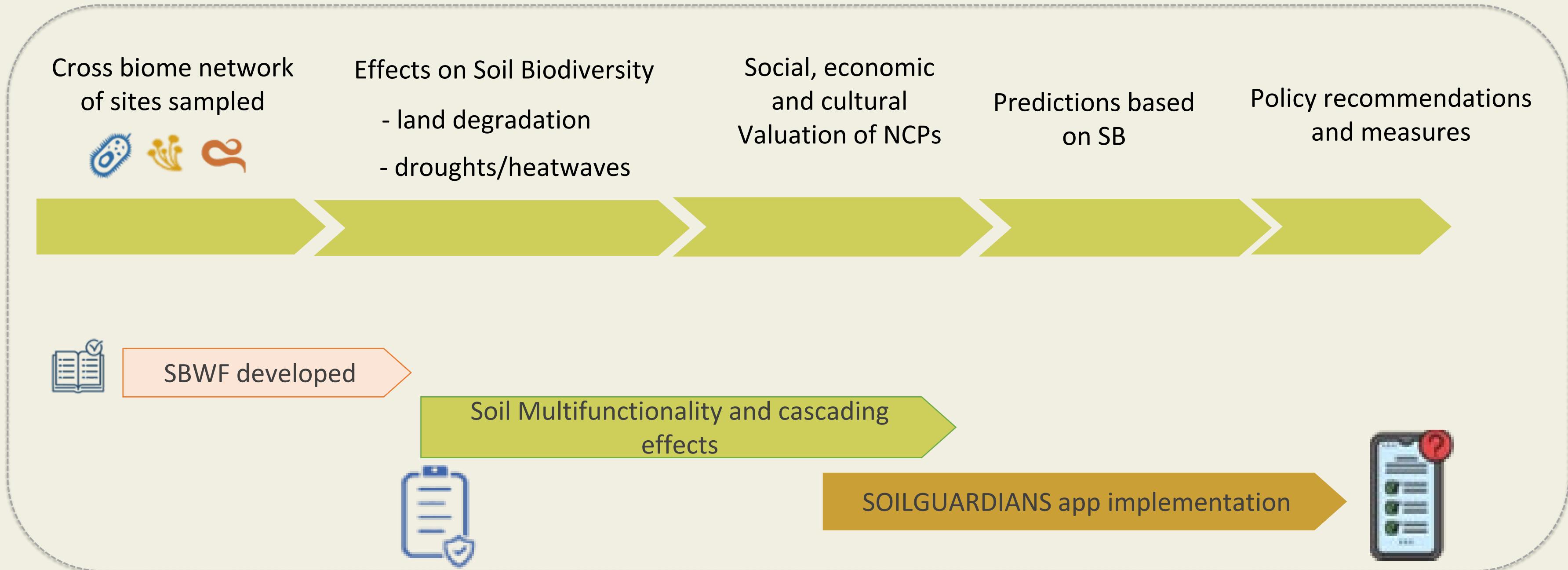
- Morfotipificación
- Molecular (DNA-based)



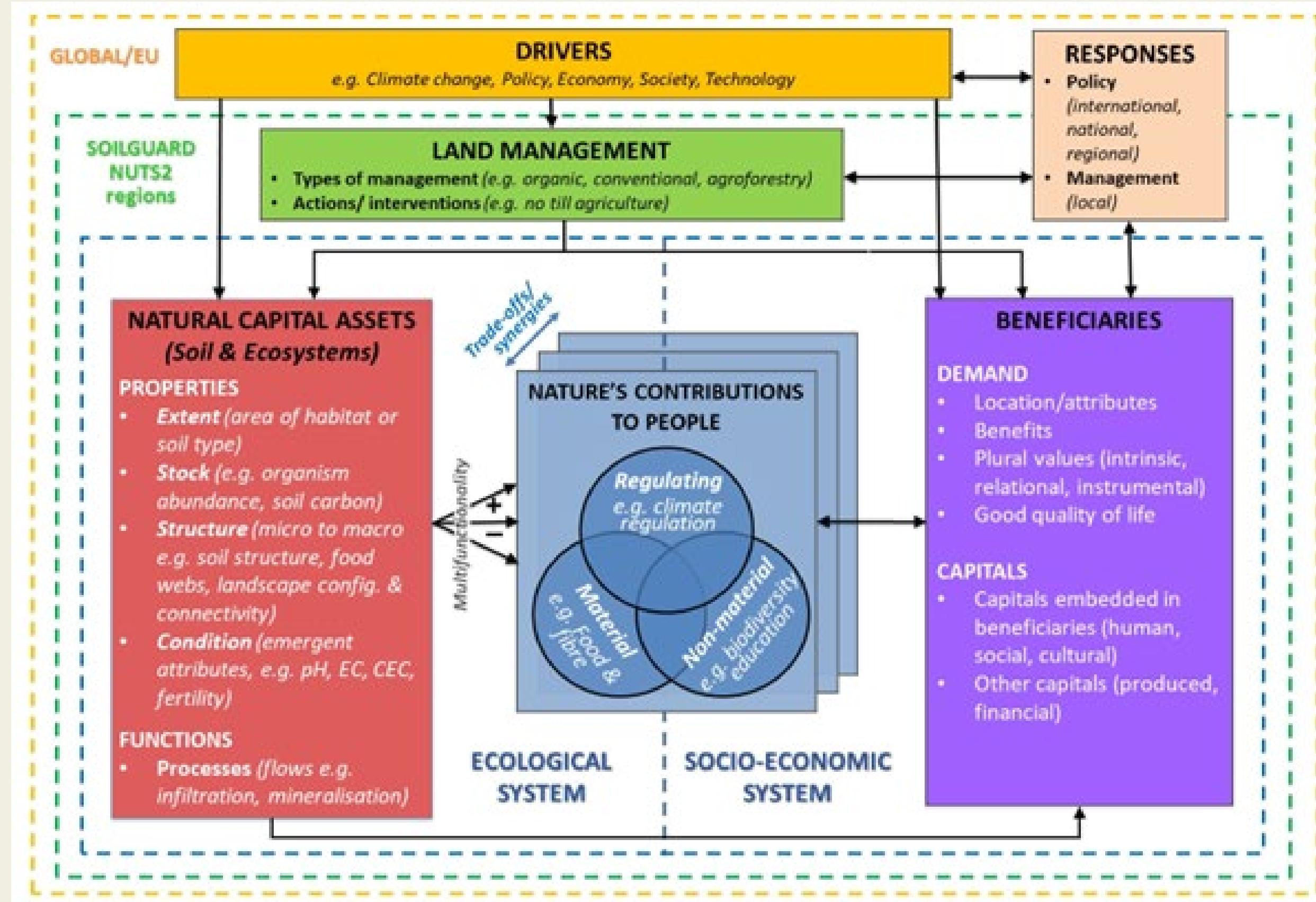


The research leading to these results has received funding from the European Union Horizon 2020 Research & Innovation programme under the Grant Agreement no. 101000371.

Soilguard Network of Knowledge



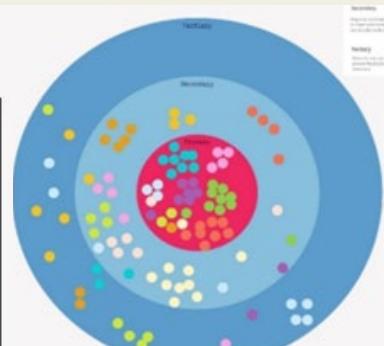
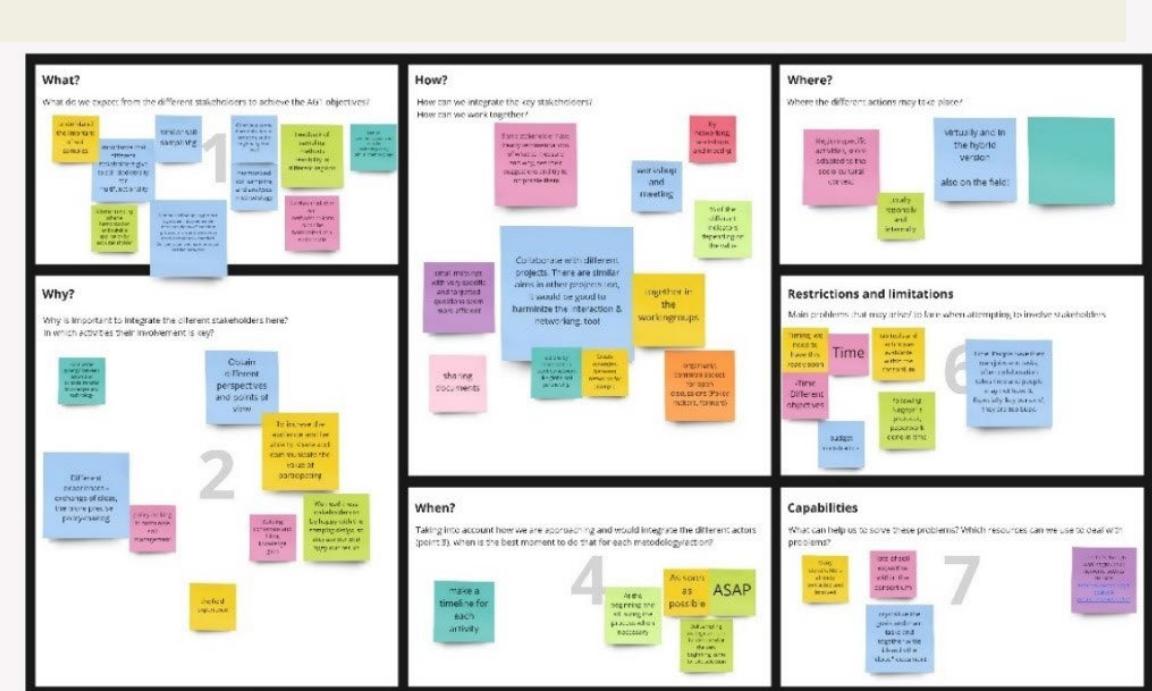
Soil Biodiversity and Wellbeing Framework



The research leading to these results has received funding from the European Union Horizon 2020 Research & Innovation programme under the Grant Agreement no. 101000371.

SOILGUARD

Red de conocimiento



1 Cross-biome Network of sites

LEiTAT
Technological Center

Sección 1 de 3

SOILGUARD AG4 Questionnaire/Workshop

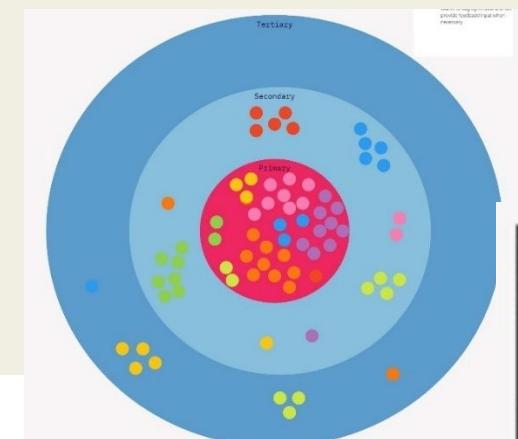
SOILGUARD will co-create a conceptual and analytical framework with the potential to become the global standard for future assessments of soil biodiversity status and its contribution to soil multifunctionality and human wellbeing. This framework will be validated in an innovative experimental design, combining multiple study sites across biomes and regional land degradation gradients with in-situ climate change simulations. Thus, creating the evidence to fill the gaps of knowledge and quantify the environmental, economic and social consequences of unsustainable soil management. 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.

In order to best achieve this, a strategic plan has been developed, which includes key stakeholder, methodologies, and activities to best consolidate linkages with major soil and biodiversity initiatives.



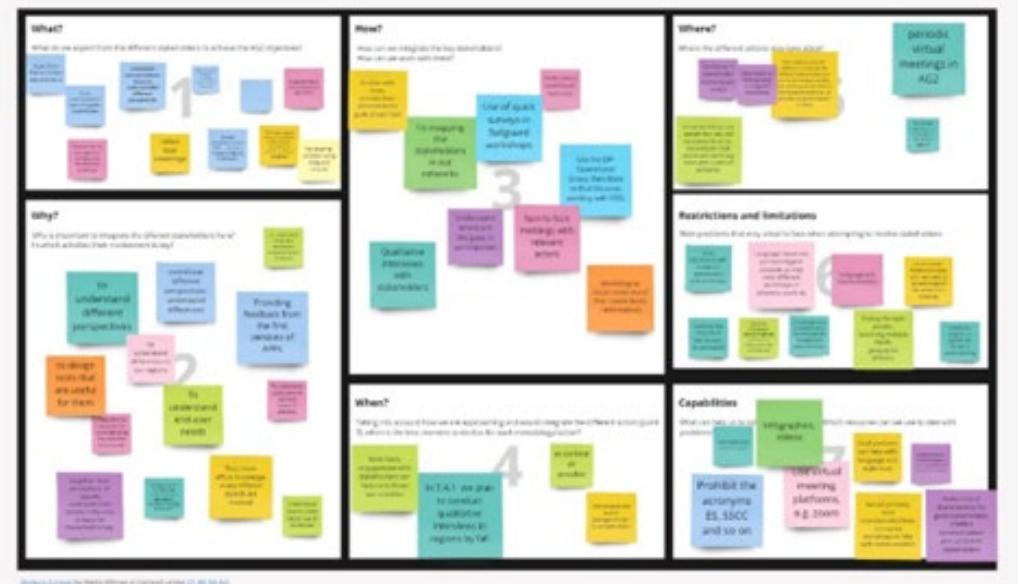
4 Global Soil Assessment

ELO
European Land Observing Organization



2 Community of practice

cooperativas agro-alimentarias
España



3 Soil and biodiversity conservation

IUCN



**Soil biodiversity,
conservation
& informing policy**

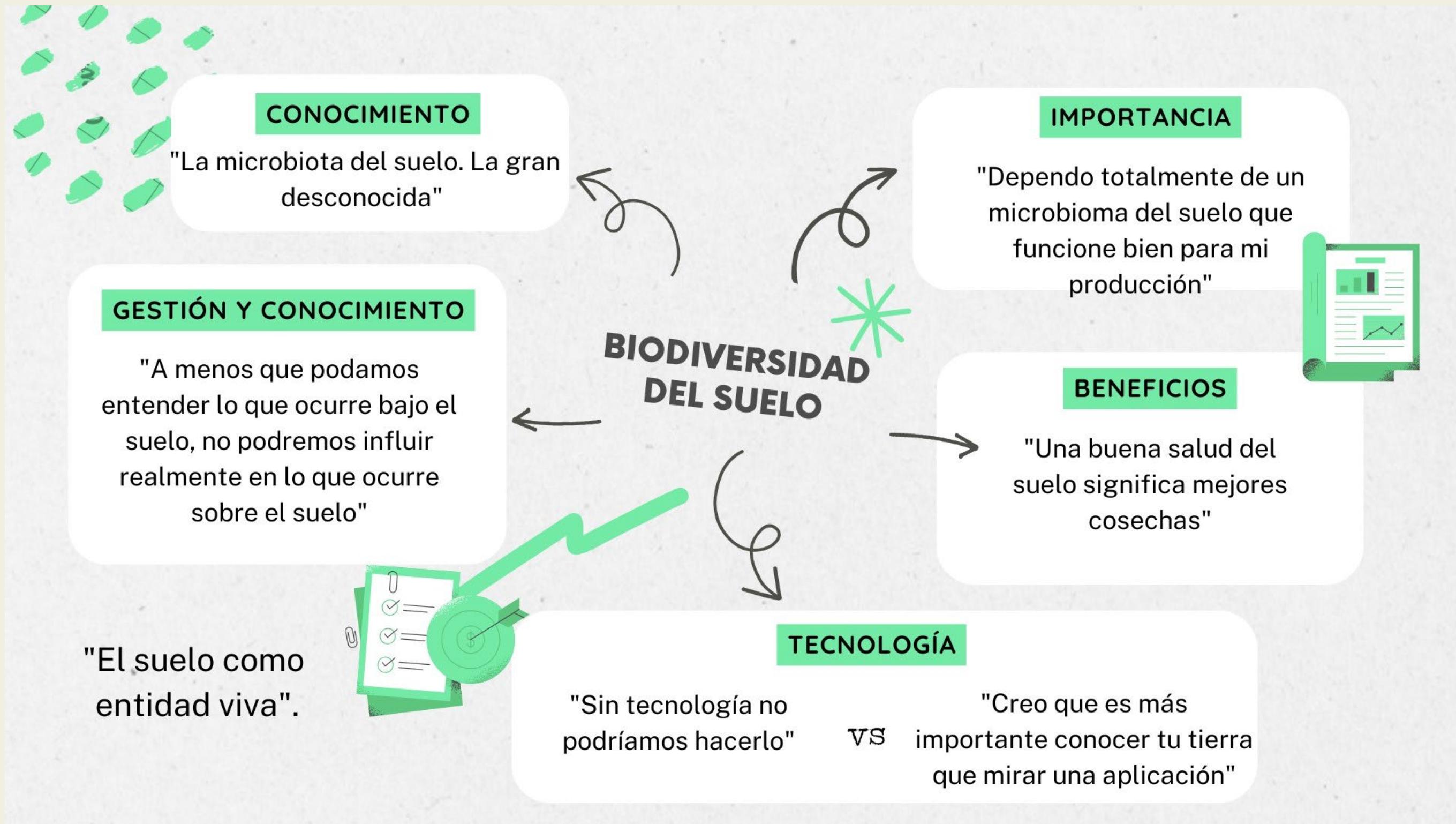
When: 1 June, 10:00am CEST
Where: Online

NEXT
GEN
EU



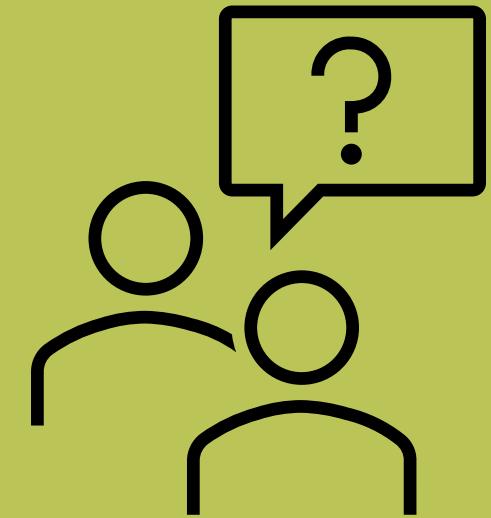
The research leading to these results has received funding from the European Union Horizon 2020 Research & Innovation programme under the Grant Agreement no. 101000371.

SOILGUARD





¡Muchas gracias!



Cristina Yacoub

C/ de la Innovació, 2
08225 Terrassa (Barcelona)
cyacoub@leitat.org



The research leading to these results has received funding from the European Union Horizon 2020 Research & Innovation programme under the Grant Agreement no. 101000371.