

IDEA DEVELOPMENT

podcast

#1

CALL ANALYSIS

HORIZON-MISS-2024-SOIL-01-06: Harnessing the multifunctional potential of soil biodiversity for healthy cropping systems

Specific conditions	
<i>Expected EU contribution per project</i>	The Commission estimates that an EU contribution of around EUR 8.00 million would allow these outcomes to be addressed appropriately. Nonetheless, this does not preclude submission and selection of a proposal requesting different amounts.
<i>Indicative budget</i>	The total indicative budget for the topic is EUR 16.00 million.
<i>Type of Action</i>	Innovation Actions
<i>Eligibility conditions</i>	<p>The conditions are described in General Annex B. The following exceptions apply:</p> <p>Proposals must apply the multi-actor approach. See definition of the multi-actor approach in the introduction to this Mission.</p>
<i>Legal and financial set-up of the Grant Agreements</i>	<p>The rules are described in General Annex G. The following exceptions apply:</p> <p>Beneficiaries may provide financial support to third parties (FSTP) to implement demonstration sites and encourage stakeholder engagement. The support to third parties can only be provided in the form of grants. The maximum amount to be granted to each third party is EUR 60 000.</p> <p>Applicants should review Annex B of the General Annexes' standard conditions for 'financial support to third parties' for FSTP calls.</p>

Expected Outcome: Activities under this topic contribute to the implementation of the Mission A Soil Deal for Europe⁴⁹⁸ in particular to its specific objective 4 "reduce soil pollution and enhance restoration" and 6 "improve soil structure to enhance soil biodiversity" dealing with the most urgent soil health challenges. Activities will also contribute to the targets of the EU biodiversity strategy for 2030 and of the Farm to Fork strategy on pesticide use reduction (reducing the use and risk of pesticides by 50% and the use of more hazardous pesticides by 50%), the EU Action Plan on the Development of Organic Production, the Common Agricultural Policy, and will support the objectives of the future Nature Restoration Law and of the UN Convention on Biological Diversity COP-15. Activities will also provide knowledge to improve integrated pest management practices, directly contributing to the achievement of several of the Sustainable Development Goals (SDGs) in particular SDG's target 12.2 of achieving sustainable management and efficient use of natural resources by 2030.

Proposed activities should:

- Develop and test site-specific innovations including management practices, solutions and tools that promote soil biodiversity, enhance soil health, stimulate plant growth, reduce chemical inputs to control soil borne plant diseases and root-feeding insects, and support ground nesting pollinators.
- Set up demonstration sites to test the proposed innovations and promote the benefits of soil biodiversity and healthy soils not only for growers and the agroecosystem but for the entire food value chain.
- Assess the social, economic and environmental issues associated with the proposed innovative solution, including trade-offs, the impact on labour, safety culture, and risk management on farms;
- Generate comprehensive capacity building material, organize trainings or knowledge sharing activities, including the development of guidelines to accelerate the dissemination, uptake and upscale of results.
- Enhance peer-to-peer learning with relevant stakeholders from farmers and advisors to policy makers and consumers, supporting a coordinated scientific and policy approach towards healthy soils.

Proposals should focus on arable crops. Work under this topic should be carried out in various pedo-climatic zones⁴⁹⁹ and benefit both the conventional and the organic farming as reflected in the expertise of the consortia. Agroecological approaches such as those developed for example under organic farming should be capitalised on and given due attention in the proposed activities.

Proposals must implement the 'multi-actor approach' including a range of actors to ensure

Proposals should include a dedicated task and appropriate resources to collaborate with other projects funded under this topic as well as to capitalise on activities and results from relevant Horizon projects such as [EXCALIBUR](#), [SoildiverAgro](#), [EcoStack](#), [IWM PRAISE](#), [SOILGUARD](#), [WHEATBIOME](#), [TRIBIOME](#), [BIOservicES](#), [SOB4ES](#), [GOOD](#), [AGROSUS](#) and [CONSERWA](#) and those to be funded under *topic HORIZON-CL6-2023-FARM2FORK-01-7: Innovations in plant protection: alternatives to reduce the use of pesticides focusing on candidates for substitution*) and [HORIZON-MISS-2024-SOIL-01-05: Soil health, pollinators and key ecosystem functions](#) to avoid duplication, and to exploit complementarities as well as opportunities for increased impact.

Proposals should demonstrate a route towards open access, longevity, sustainability and interoperability of knowledge/data and outputs through close collaboration with the [Joint Research Centre's EU Soil Observatory \(EUSO\)](#), the [EU Knowledge Centre for Biodiversity](#) and the project [SoilWISE](#). In particular, proposals should ensure that relevant data, maps and information can potentially be available publicly through the EUSO.

[Potentially](#), the projects funded under this topic could also [cooperate with living labs](#) and lighthouses that will be created in this and future calls of the Mission 'A Soil Deal for Europe'.

#2

BIRD VIEW

innovative tool developed within LiveSeeding project,
designed by IPS Konzalting

CASE:



CHALLENGES OF TODAY

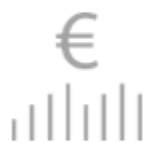
INTERNAL CHALLENGES

what could be internal challenges and bottlenecks



EXTERNAL CHALLENGES

what could be external challenges and bottlenecks



SOUNDS LIKE OPPORTUNITY

OPPORTUNITIES

what could be internal opportunities

what could be external opportunities



UNIQUE PROPOSITION

what is USP in this case?



CUSTOMERS & CHANNELS

*good practices to reach customers
channels used to sell products*



FUTURE

PROFITABILITY

what are and could be revenue streams



RECOMMENDATIONS

add recommendations



Annual meet

WP7 Coordination

Integration of knowledge, practices and
 WP1
 1- ~~2 stage~~ ~~network~~ ~~IPB~~ ~~method~~ ~~providing~~ ~~...~~
 2- ~~stage~~ ~~network~~ ~~IPB~~ ~~method~~ ~~providing~~ ~~...~~
 3- ~~component~~ ~~analysis~~ ~~and~~ ~~ecosystems~~
 4- ~~enhancement~~ ~~and~~ ~~ecosystems~~

APPROACH BOARD
 1- ~~curr.~~
 2- ~~Lab~~
 3- ~~gym~~
 4- ~~clm.~~

Annual contact point
 Stakeholder advisory board

WP5 Knowledge transfer and Policy
 1- ~~policy~~ ~~transfer~~ ~~to~~ ~~biary~~
 2- ~~public~~ ~~science~~
 3- ~~city~~ ~~science~~

Stakeholder Advisory Board

WP6 Com.

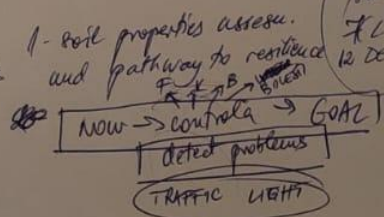
USER CASE? ~~stakeholder~~
 LIPPIELE ~~LIPPIELE~~

WP2
 1. SME
 2. EN-DE-MER

Innovative solutions for soil biodivers. and system resilience
 Technology and agronomy
 WP2
 1- innovative practices - soil biodivers. enhancement.
 2- ~~plot farms~~
 3- ~~ecosystem assessment~~

WORKSHOP WITH ~~stakeholders~~ ~~and~~ ~~farmers~~
 3. ~~workshop~~ ~~with~~ ~~stakeholders~~ ~~and~~ ~~farmers~~
 4. ~~guidelines~~ ~~for~~ ~~farmers~~

WP3
 1- ~~case studies~~ ~~and~~ ~~on~~ ~~farm~~ ~~implementation~~ ~~(LIFE + LIFE10)~~
 2- ~~Living Labs~~ ~~(LIFE)~~
 3- ~~Living Labs~~ ~~(LIFE)~~
 4- ~~Living Labs~~ ~~(LIFE)~~

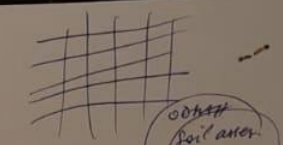


2. design of sustainable agronomy innov. strategy
 NARRATIVE
 RISK
 ECONOMIC
 CROPS - NUTRIENTS
 WP3 up-scaling and on-farm innov. implement

SD SOL DIAGNOSTICS
 TOOL
 ANALYSIS IN PROJECT
 MANAGEMENT SERVICE

WP4 Link between food and soil
 - Impact of indicators (econ.)
 - CBA
 - LCA
 - DELPHI methodology
 - ~~policy~~ ~~recommendations~~ (?)

ARABLE ~~CONV.~~ ~~TO~~ ~~ORGANIC~~



CONTR
 Soil action
 * LIFE10
 12 LIFE SITE

WP1

INTEGRATION OF KNOWLEDGE, PRACTICES AND ENVIRONMENTAL NEEDS

- A) 2-STAGE SURVEY
- B) COMPREHENSIVE ANALYSIS AND KNOWLEDGE INTEGRATION
- C) ENVIRONMENT AND ECO-SYSTEMS

WP2

INNOVATIVE SOLUTIONS FOR SOIL BIODIVERSITY AND SYSTEM RESILIENCE

- A) SOIL PROPERTIES ASSESSMENT AND PATHWAY TO RESILIENCE

WP6

COMMUNICATION AND DISSEMINATION AND EXPLOITATION

- B) DESIGN OF SUSTAINABLE AGRONOMIC INNOVATION PRACTICE (RISK, ECONOMIC, NUTRIENTS, WATER...)

- C) WORKSHOP WITH FARMERS (CO-CREATION)

WP5

KNOWLEDGE TRANSFER AND POLICY

- A) KNOWLEDGE TRANSFER
 - FARMERS
 - SCIENTIST
 - CITIZENS
 - POLICY MAKERS

- B) POLICY RECOMMENDATIONS
- C) ADVOCACY

WP3

UP-SCALING AND ON-FARM INNOVATION IMPLEMENT.

- A) CASE STUDIES AND ON-FARM (LTE + DEMO)
- B) DEMO ⇒ LIVING LABS

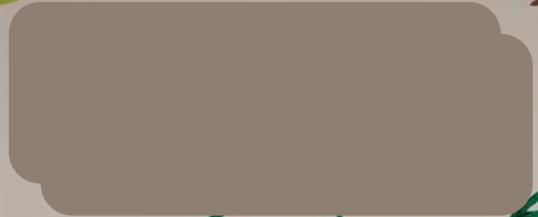
- C) INNOVATION PROXY - DIGIT (AI) ⇒ TOOL (e.g. SD app)

WP4

SOCIO-ECONOMIC LINK BETWEEN FOOD AND SOIL

- A) IMPACT OF INDICATORS
- B) CBA
- C) LCA
- D) DELFT

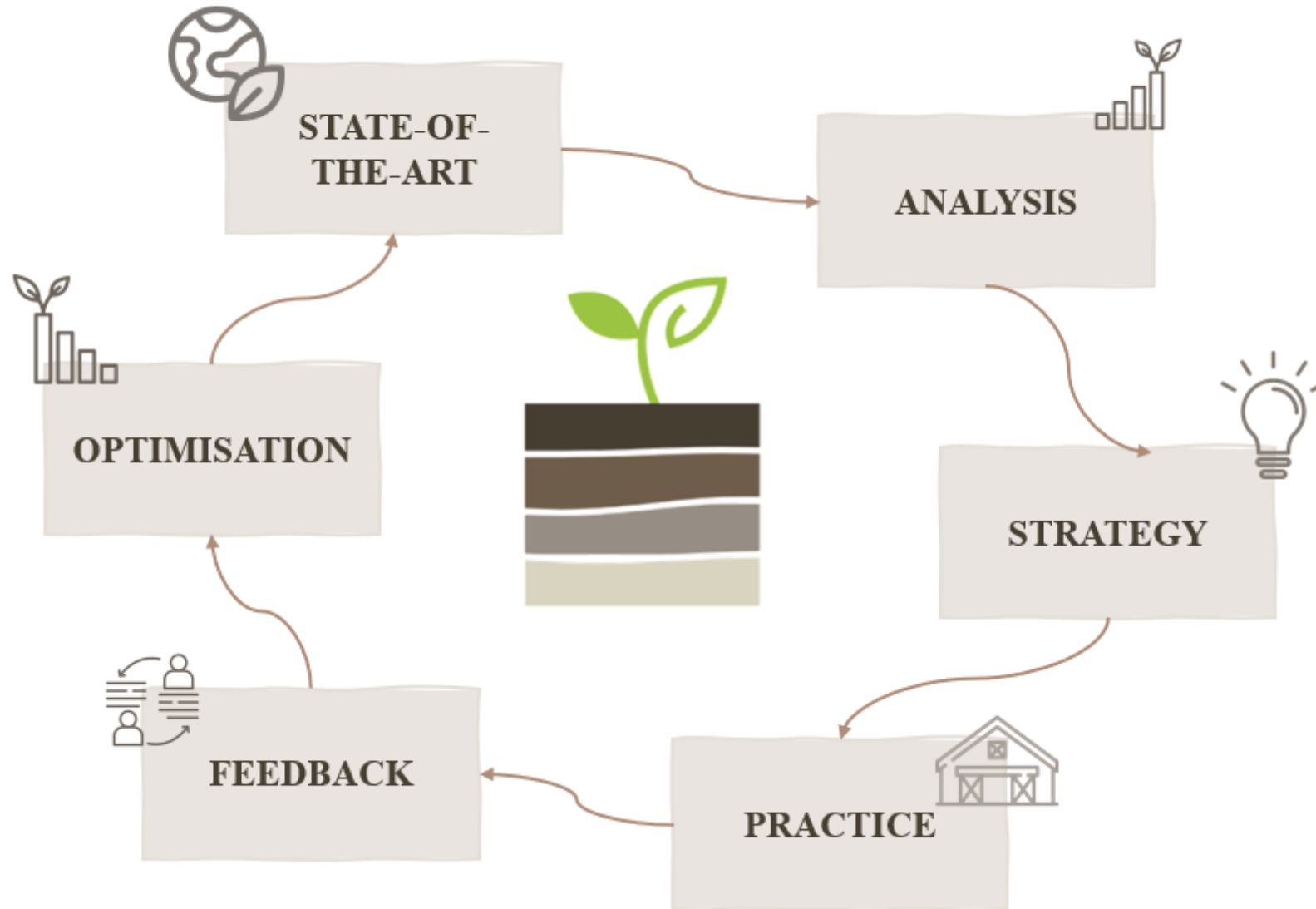
ARABLE CROPS
 CONVENTIONAL AND ORGANIC
 FOOD VALUE CHAIN (LABEL?)

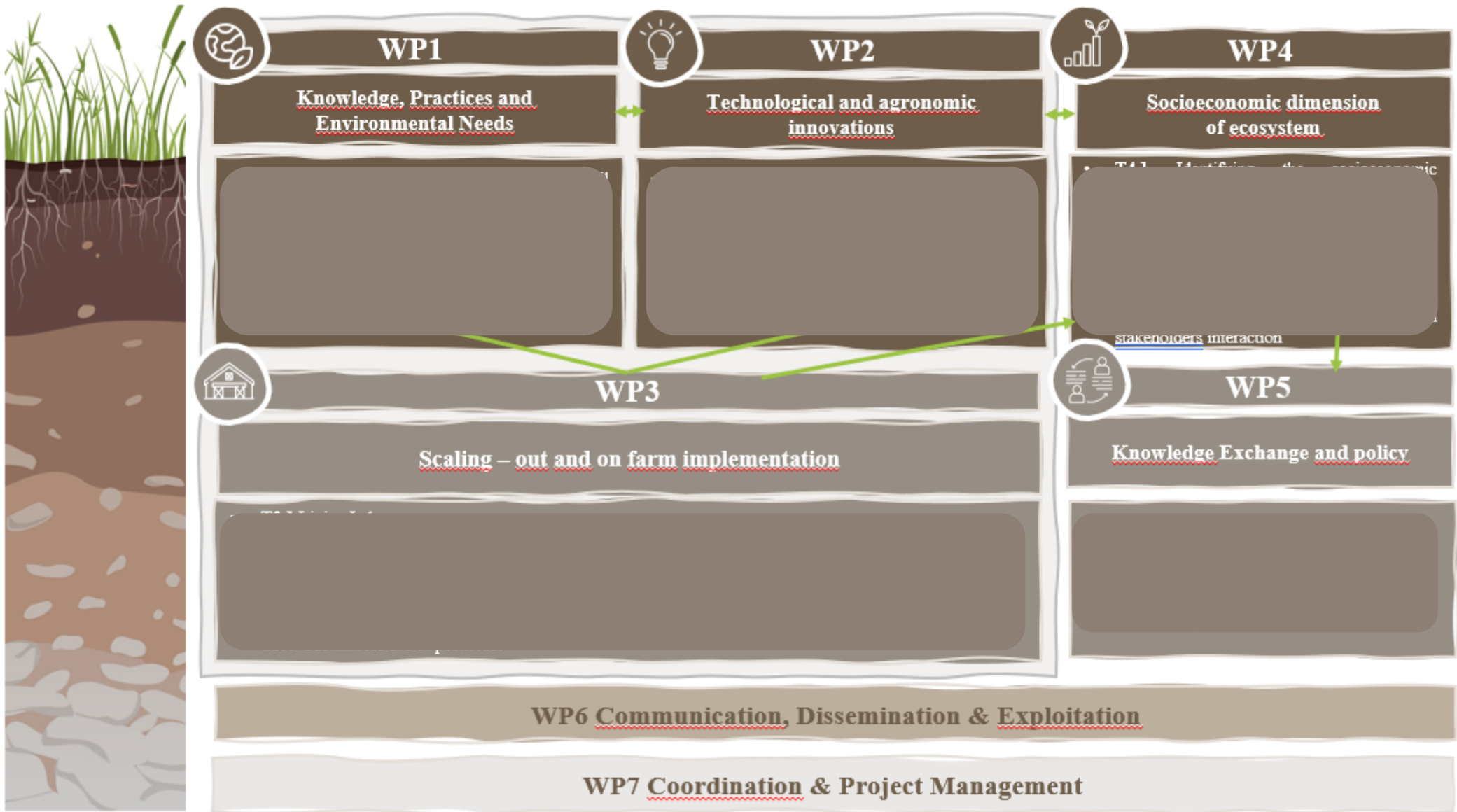


#3

BUILD THE PROJECT SPINE

TERRAVITA SOIL CONCEPT







- Consortium countries
- Demo sites
- Living Labs

Acronym	Country	Demo site	Living Lab	Long term experiment
	Germany	•	•	•
	Croatia			
	Serbia	•		
	Greece	•		
	Belgium			
	Italy	•	•	•
	Spain	•	•	•
	France	•	•	•
	Norway	•	•	•
	Denmark			
	Slovakia	•		
	Kazakhstan	•		
	Bosnia and Herzegovina			
	Romania	•		
	Montenegro	•		
	Portugal	•	•	•
	Switzerland			





Impacts

TECHNOLOGICAL IMPACT



SCIENTIFIC IMPACT

- **Target group:** Researchers, agronomist, soil scientists
- Provide an understanding of the challenges and priorities for further research, verification of soil
- Enable curriculum development for researchers to deal with the complexity required for sustainability assessment of cropping systems
- Promote innovative solutions in cropping systems, food system, identify novel cropping systems.

AGRONOMIC/VALUE CHAIN IMPACT



SOCIO-ECONOMIC IMPACT

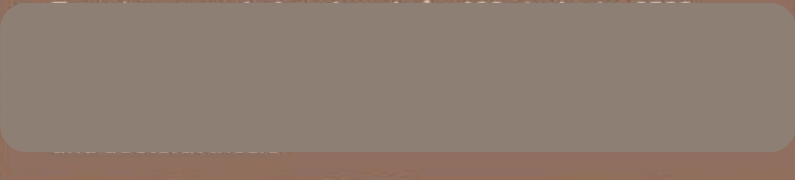


COMMUNICATION IMPACT

- Target group: whole value chain.
- Creation of **communication channels relevant** for key stakeholder groups and innovation dissemination (web, social media – Facebook, LinkedIn, Twitter, podcast)
- Availability of information at **different languages**



EDUCATIONAL IMPACT



EXPECTED OUTCOMES

Co-designing innovative agricultural practices to improve soil health and biodiversity through agroecological methods adapted to local conditions.

