



# CSA: Preparing for the 'Soil Deal for Europe' Mission

✓ **HORIZON-MISS-2021-SOIL-01-01 /**

✓ Preparing the ground for healthy soils: building capacities for engagement, outreach and knowledge

✓ **Project Coordinator:** Dr. Niels Halberg - Aarhus University

✓ **Planned duration:** 36 Months, formal starting date July 1<sup>st</sup>, 2022.



## Academic partners

- AU
- WUR
- SLU
- INRAE
- NIBIO
- ZALF
- IUNG
- CSIC
- ÖMKi
- DELTARES
- JRC

## Consulting experts

- LESPROJEKT
- TRUST-IT
- COMMPLA

## EU & national associations \*

- ENOLL
- RE-SOIL
- COPA-COGECA
- ACR+
- F-PCTEX (ERIAFF)
- ACTA

Overall intention : Supporting the Soil Mission through the DG AGRI secretaria



# Objectives – addressing call expectations

- >To evaluate soil needs in regions of Europe across different soil use types (Agriculture, Forestry, Urban, post-industrial, ..) **in 20 demonstration regions in EU**
- To organise the expansion of EJP SOIL Hubs to broader Soil Health National Hubs
- To define model business plans for LL and LHs
- To map current and emerging LL and LH to promote networking and knowledge exchange
- To develop and launch a web portal to support networking, knowledge exchange and availability
- To generate spaces for knowledge exchange, capacity building and cross-regional connection
- To connect and promote exemplary education and social initiatives, and soil ambassadors
- To pave the path towards harmonised, standardised soil monitoring and data collection across the EU
- To explore the incorporation of EO and citizen observatories data in soil monitoring

## PO VALLEY REGION: REGIONAL INFORMATIONS

The most fertile arable land of Italy, extending over the provinces of Emilia-Romagna regions, surrounded by the Adriatic sea, the Appennines and the Po river



<b>Dominant land use</b>	Agriculture, croplands
<b>Secondary land use</b>	Urban/industrial
<b>Climate zone</b>	Temperate subcontinental
<b>Soil WRB classification</b>	Cambisols
<b>Soil type</b>	More than 210 identified mainly alluvial origin
<b>Dominant soil texture</b>	Variable; predominant medium to fine, with high fraction of alterable minerals and carbonates
<b>Soil threat(s)</b>	Soil sealing, SOM loss, drought/floodings, soil erosion, soil pollution, salinity, functional soil biodiversity deterioration

# PO VALLEY REGION: SOIL NEED ASSESSMENT

## DRIVERS

The extreme climatic events have accentuated:

- Rainfall is concentrated in shorted periods, resulting in longer droughts and higher flooding hazards. Reduction of snowfalls

## PRESSURES

Building activity and infrastructures expansion, overall separation of animal farming from agriculture production together with misalignement in animal manure cycling, landscape element renewal (headerows and buffer zones), mechanization, technologies and land managements

## STATE

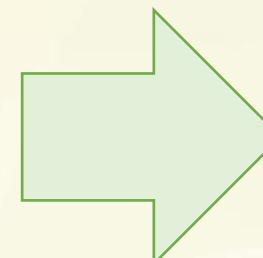
High rare of soil sealing (net soil consumption of + 658 ha), low SOM content (0,98-2,26%) with constant decrease

## IMPACT

Reduction of water retention capacity and availability, soil stability: numerous landslides and floodings. Lowering of soil structure and faster nutrients mineralizazion

## RESPONSE

Regional law L.R. 24/2017 (in force by 11.2024): max 3% land consumable, reducing regional land potentiality by 70% the hectares of transformable land . In the regional stretegic plan for CAP 2023-26 list of specific measures to incentivize the use of conservative practices for soil



## CONCLUSIONS

Identified needs include: further research on conservative agricultural practices and surrogates of manure (alternative sources of organic matter); estableishement of MRV (Measurement, Reporting and Verification) methodologies for monitoring and results verifications; development of Cabon farming scehmes



# PO VALLEY REGION: STAKEHOLDERS ENGAGEMENT AND INTERACTION

## STAKEHOLDERS INTERACTION

24 May 2023,  
Rimini (Italy)



### Relevant Soil Mission Objectives



3. Stop soil sealing and increase re-use of urban soils
4. Reduce soil pollution and enhance restoration
5. Prevent erosion