



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 1st, 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 secretariat



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



Dominant land use	Agriculture, croplands
Secondary land use	Urban/industrial
Climate zone	Temperate subcontinental
Soil WRB classification	Cambisols
Soil type	More than 210 identified mainly alluvial origin
Dominant soil texture	Variable; predominant medium to fine, with high fraction of alterable minerals and carbonates
Soil threat(s)	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 infrastuctures 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); estabilishment of MRV (Measurement, Reporting and Verification) methodologies for monitoring and results verfications; development of Cabon farming scehmes

PO VALLEY REGION: STAKEHOLDERS ENGAGEMENT AND INTERACTION

STAKEHOLDERS INTERACTION

24 May 2023,
Rimini (Italy)

4

Policy and
government

7

Soil and Other
Advisors

7

Business

3

Research
community

10

Farmer/Land
Owner

22

CSOs
and NGOs

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