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EIP-AGRI Workshop Shaping the EU mission 'Caring for soil is caring for life'

Mission Board for Soil Health and Food



CARING FOR SOIL IS CARING FOR LIFE

A Supportive Environment

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Lets go back to why we are in the situation of poor soil health...

- A hidden problem beneath our feet with little media or policy attention
- Poor uptake of existing knowledge
- A lack of innovation
- Linearity – not circularity
- Fragmented communities not working together across the system
- A policy, regulatory and business environment which does not protect soil

The mission has actions to tackle each of these issues.....

So R&I is not enough - we also need a 'Supportive Environment'

The mission will also explore opportunities linked to:

- Policies and legislation
- De-risking and guarantee mechanisms
- New CAP payment schemes
- Knowledge and Innovation Systems
- Public and private investments
- Regulations and taxes.....
- ...etc

Does this include a Soils Directive and new CAP payments (carrot and stick)?

Yes...the mission proposes:

- “A new **Soil Thematic Strategy and Directive** to be developed to provide a regulatory framework enabling changes as defined by mission roadmap and robust aligned soil monitoring programmes by each MS;”
- “**CAP new payment schemes** to reward effectively practices that improve and restore soil health through more diverse, regenerative and systems-based approaches in agriculture and forestry based on long-term contracts and compensation for results measured by the level of ecosystem services provision.”

But much more than this..... we go beyond agricultural systems (CAP); and a focus on public incentives to include business and private investment and critically **education and engagement....**

Training, education, communication and engagement is to be embedded in all activities

- **Training and education**

- Schools, universities, land managers, public gardens, **advisory and information services**



- **Communication and citizen engagement**

- Living labs and Lighthouses; multi-language platforms; partnership with ongoing activities



What is the evidence for the benefit of a supportive environment



Work is in progress to identify examples of what works for the full range of proposed actions ..but we need more examples of what works, where and why?

The mission presents some examples of current success:

- Sustainable management practices halting soil loss in drylands between 20 to 50%.. and in last 10 years has reduced soil loss by 20% in arable systems
- Introduction of cover crops increasing soil organic carbon by 6%
- Adoption of phosphorus loss reduction measures and recycling options reducing phosphorus losses by over 50%

How will we know if we are successful?

Successful policies have clear and measurable indicators of success which are tracked over time.

Therefore, monitoring at national and EU scale is an essential part of the mission.

The mission proposed a range of robust repeatable methods using range of data capture systems (field; citizen science; EO; sensors etc) which can be developed over time to track 8 indicators of soil health:

1. Presence of soil pollutants, excess nutrients and salts
2. Soil organic carbon stock
3. Soil structure including soil bulk density and absence of soil sealing and erosion
4. Soil biodiversity
5. Soil nutrients and acidity
6. Vegetation cover
7. Landscape heterogeneity
8. Forest cover

An unhealthy soil is present if any indicator is below an **agreed threshold defined for that soil type, land use and climate zone** (see Annex 2). Protocols for defining these to be developed. This follows principles already established for air, water and biodiversity.

Whilst we work on establishing agreed thresholds and standards, most agree on trends which indicate soil degradation..

- Continued trends for loss of soil organic carbon
- Excess nutrients leaching to losses to air and water
- Increasing acidification
- Increasing salinization and erosion
- Increases in bulk density
- Increasing levels of contaminants....

So continuation of current monitoring programmes already is very useful....

The mission highlights the central role of soil health for the other missions and many other EU targets....

At a glance: The mission's support to strategic EU targets which underpin the goal of Healthy Soils for Food, Nature, People and Climate

Food: 25% of organic farms by 2030 (Farm to Fork; EU Nature Restoration); Integrated Nutrient Plans (Biodiversity; Farm to Fork); neutral or positive environmental impact of the food chain (Farm to Fork); Recycling of organic wastes into renewable fertilisers (Farm to Fork);

People: Urban Greening Plans and increased reuse of urban soils (EU Nature Restoration and new Urban Mobility Strategy); 25% of organic farms by 2030 (F2F; EU Nature Restoration);

Nature: Protection of land (Biodiversity); Increased circular use of excavated soils (Biodiversity; EU Nature Restoration; Circular Economy, updated Bioeconomy Strategy); Biodiversity friendly soil (Biodiversity); 10% high diversity Landscape features (EU Nature Restoration); Improved protection and targeting for sensitive receptors (EU Nature Restoration; Zero Pollution; Farm to Fork); Protection of soil (Soil Thematic Strategy)

Climate: Certifying carbon removals (Farm to Fork); ensuring the food chain has neutral or positive environmental impact (Farm to Fork).

Expected impact

- **Soil health is the “starting point for systemic transformations across the whole food chain** from primary production to food industries and consumer behaviour”;
- **Practices in agriculture, forestry, industries and in urban areas** are oriented towards supporting soil ecosystems services;
- More resilient and safe primary production for **food and bio-based value chains**;
- **Increased awareness of consumers and society** on the importance of healthy soils and **on the role of citizens in preserving this resource**;
- Reduced impact of production and consumption patterns in Europe on soils at global level: **reducing the global footprint.**

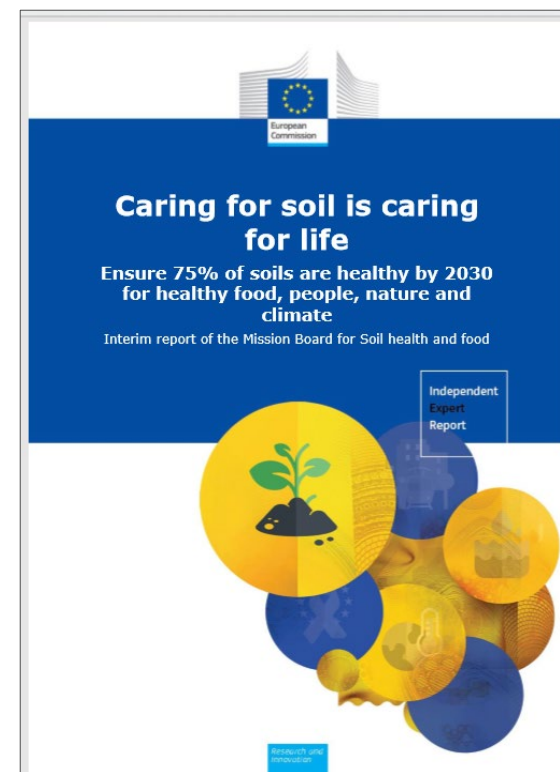
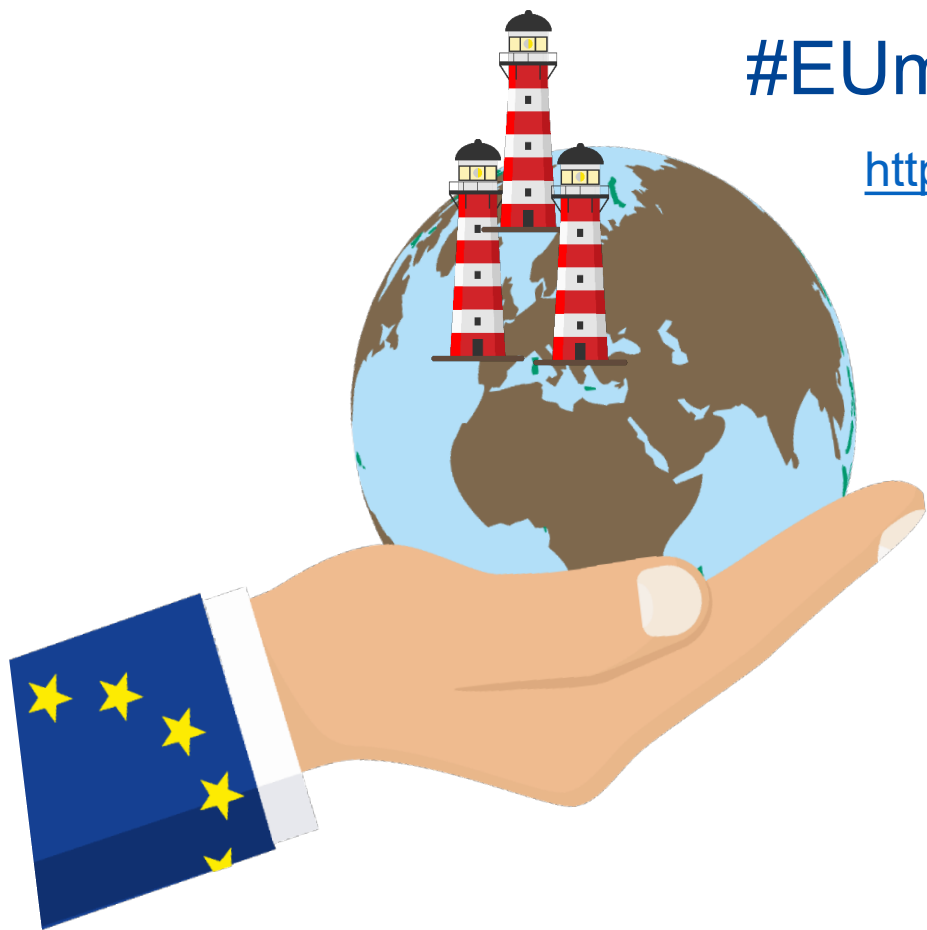


Thank you and questions?

#Mission Soil

#EUmissions # HorizonEU

<http://ec.europa.eu/mission-soil>



Useful links

- **EU mission Caring for soil is caring for life (mission report)**

<https://op.europa.eu/en/publication-detail/-/publication/4ebd2586-fc85-11ea-b44f-01aa75ed71a1/language-en/format-PDF/source-159637857>

- **Video on the Mission on Soil health and food** https://www.youtube.com/watch?v=53bbzE2lpKc&feature=emb_logo

- **Mission report handover to the European Commission (EU R&I Days)**

<https://youtu.be/oAG5-CQIOoc>

- **Soil mission session (EU R&I Days)**

<https://research-innovation-days-conference.online/hubs/mission>

- **On a mission to save our soils - the EU's plan to rebuild the land (Futuris episode, euronews)**

<https://www.euronews.com/2020/09/21/on-a-mission-to-save-our-soils-the-eu-s-plan-to-rebuild-the-land>

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EIP-AGRI workshop

Shaping the EU mission

'Caring for soil is caring for life'

Online 20-21 October 2020

All information of the workshop is available on
www.eip-agri.eu

on the event webpage
<https://ec.europa.eu/eip/agriculture/en/event/eip-agri-workshop-shaping-eu-mission-soil>

