

WORKSHOP TEMÁTICO 2

MISSÕES NO HORIZONTE EUROPA: MISSÃO SAÚDE DOS SOLOS E ALIMENTAÇÃO

Sessão online de informação e de discussão
com a comunidade nacional

16 de Junho | 15:15-16:15

A sessão terá início dentro de momentos.
Por favor, aguarde com o microfone e o vídeo desligados.
Esta sessão irá ser gravada apenas para efeitos de reporte.
Os slides apresentados serão disponibilizados após o evento.

AGENDA

15:15-15:20

Boas-vindas

Maria João Fernandes, Agência Nacional de Inovação

15:20-15:35

Apresentação da Missão Solo e do seu *Roadmap*

Teresa Pinto Correia, Universidade de Évora, Vice-Presidente do *Mission Board*, Missão *Soil health and food*

15:35-16:05

Interação com os *stakeholders*

Moderado por Ana Sutcliffe, Agência Nacional de Inovação

16:05-16:15

Conclusões e encerramento

Teresa Pinto Correia, Universidade de Évora, Vice-Presidente do *Mission Board*, Missão *Soil health and food*

Pedidos para o bom funcionamento da sessão:

- Por favor, mantenha o microfone e o vídeo desligados.
- Quando quiser colocar uma questão, por favor, utilize **APENAS** o *chat* e identifique-se com primeiro e último nome e organização que representa
- O moderador da sessão irá selecionar as perguntas a colocar ao orador por ordem de chegada e/ou relevância para a sessão.
- Se, devido a limitações de tempo, não for possível responder à sua questão, deverá endereça-la a nadine.teles@ani.pt.

https://youtu.be/oJF_GTmrJGI

PERIN
PORTUGAL IN EUROPE RESEARCH
AND INNOVATION NETWORK



FCT Fundação
para a Ciência
e a Tecnologia

**Soil hosts most of our
biodiversity**

A close-up photograph of several earthworms in dark, moist soil. The worms are reddish-brown with visible segments. Overlaid on the image is the text 'Soil hosts most of our biodiversity' in a bold, white, sans-serif font. There are also four small, white, hand-drawn heart symbols scattered around the worms: two on the left and two on the right.



Missões no Horizonte Europa 16 de Junho de 2020
sessões online de informação e de discussão com a comunidade nacional

Horizon Europe

MISSION BOARD FOR
SOIL HEALTH AND FOOD

The Mission: Caring for soil is caring for life

Teresa Pinto Correia

This presentation is delivered by a member of a Horizon Europe Mission Board, which is an informal group of experts set up by the European Commission to provide advice for the identification and implementation of missions in the future Horizon Europe programme. The contents of the presentation do not represent the official views of the European Commission nor do they constitute a commitment of any kind on its behalf.

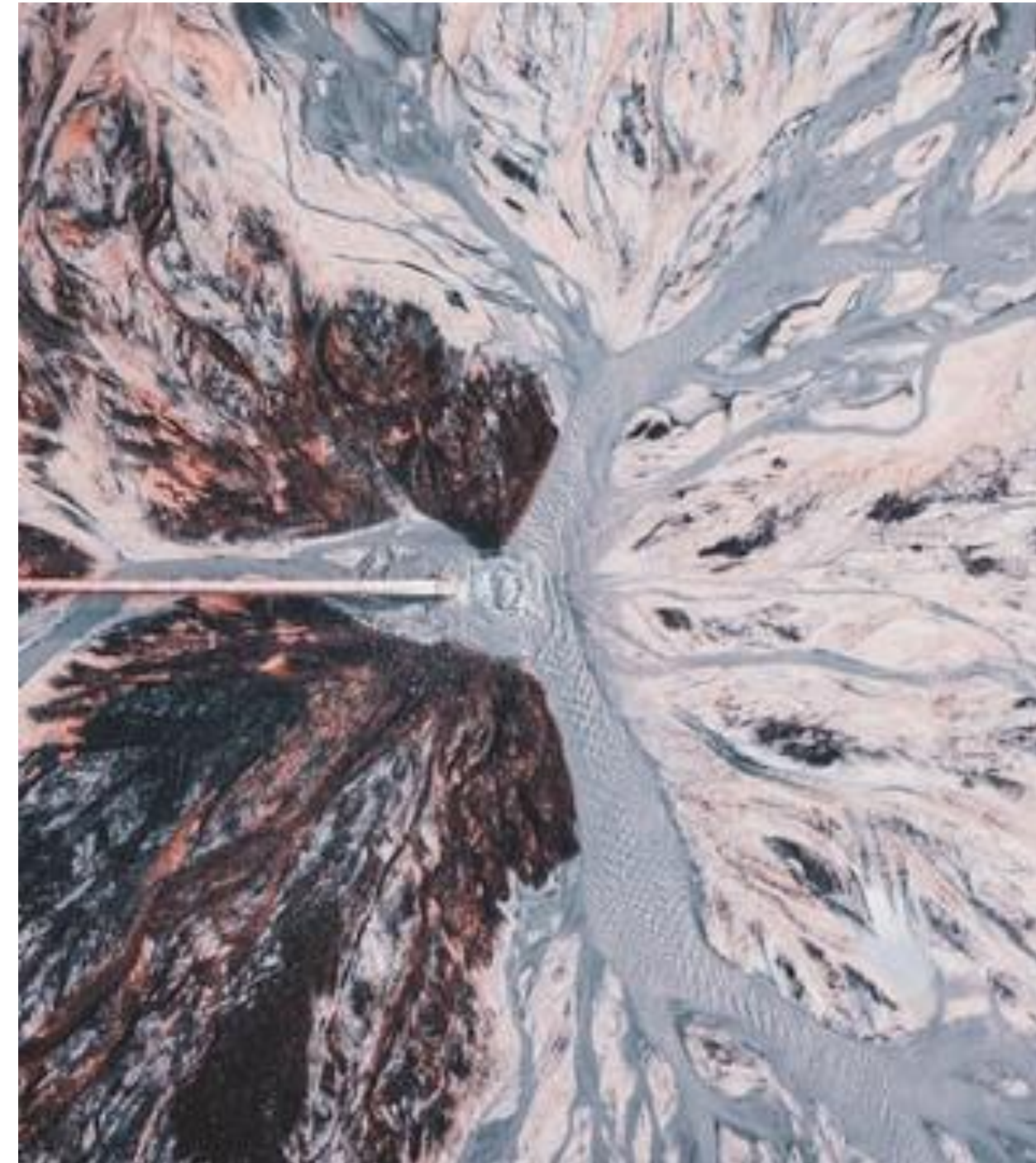
Research and
Innovation

Why do we have to act now?

Soils are threatened all over Europe and globally

For instance, in the EU:

- **2.8 million potential contaminated sites**
- **65-75% of agricultural soils** with nutrient inputs at levels risking eutrophication (excessive richness of nutrients)
- **only 13% urban development on recycled urban land**



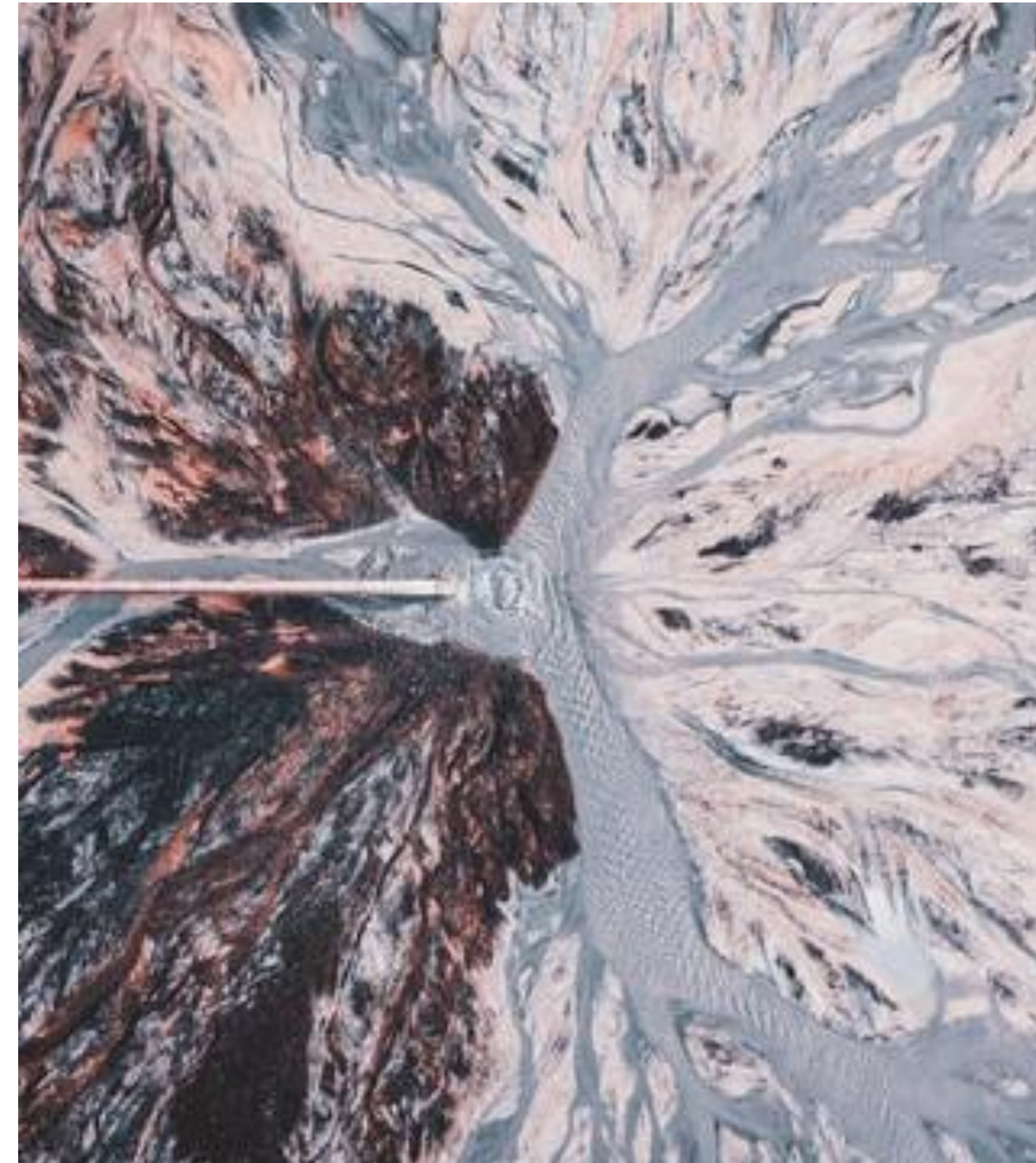
European
Commission

Why do we have to act now?

Soils are threatened all over Europe and globally

For instance, in the EU:

- **24%** of land with unsustainable **water erosion** rates
- **23%** of land with high density subsoil indicating **compaction**
- **25%** of land at High or Very High risk to **desertification** in Southern Europe



European
Commission

Why do we have to act now?

The costs associated with **soil degradation** in the EU may exceed **50 billion € per year**

The process of soil degradation can lead to a **collapse of landscapes and ecosystems** »» societies more vulnerable to extreme weather events, risks to food security and political instability. Land degradation is further exacerbated by the **effects of climate change**

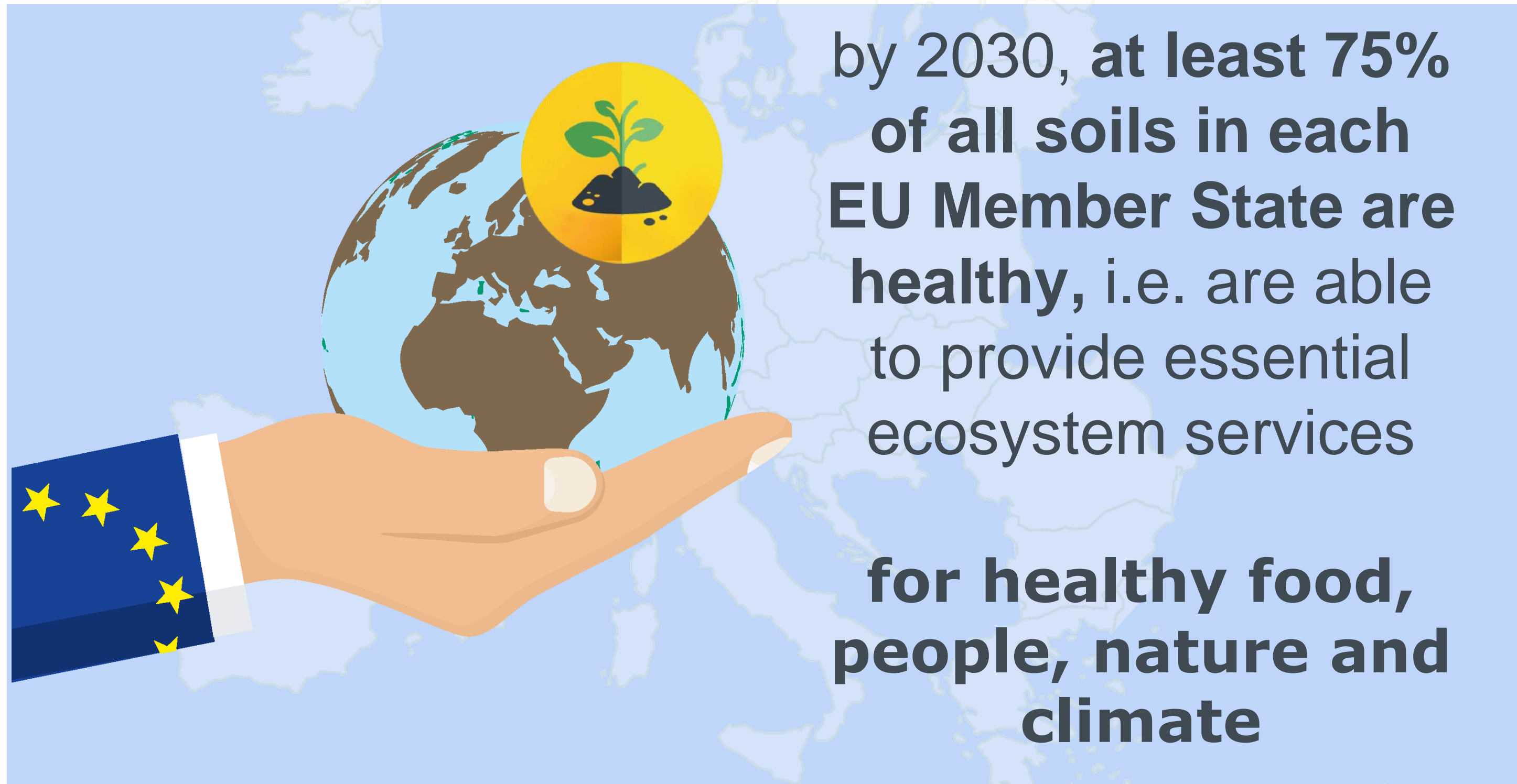


**Soil health may be lost quickly but is slow to restore.
The time for action has already been delayed for too long.
It is time to act.**



European
Commission

What do we want to achieve with this Mission?



by 2030, at least **75%**
of all soils in each
EU Member State are
healthy, i.e. are able
to provide essential
ecosystem services

**for healthy food,
people, nature and
climate**

This goal corresponds to a **100% increase in healthy soils in Europe in relation to now** »» 60-70% of soils are unhealthy as a direct result of current management practices !

Caring for soil is caring for life – what do we want to achieve with this Mission?

Tackle the issues that are threatening soils:

- **100% increase in healthy soils**
- **restore 50% of degraded land**
- **conserve soil organic carbon stocks** (e.g. in forests, permanent pastures)
- **stop soil sealing** and increase re-use of urban soils



European
Commission

Caring for soil is caring for life – what do we want to achieve with this mission?

Tackle the issues that are threatening soils:

- **reduce soil pollution:**
at least **25% area of EU farmland under organic agriculture**, and 5-25% of land with reduced risk from eutrophication, pesticides, anti-microbials, etc.
- **double the rate of restoration of polluted sites**



Caring for soil is caring for life – what do we want to achieve with this mission?

Tackle the issues that are threatening soils:

- **prevent erosion** on 30 to 50% of land
- **reduce by 20-40% the global footprint of EU's food** and timber imports on land degradation



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The Mission Building Blocks

a cross-scale, inter and transdisciplinary Research and Innovation programme;

Living Laboratories (*experimental farms*) and Lighthouses (*demonstration farms*) within and across farms, forest, landscape and urban settings;

Independent advisory services for farmers and foresters

a robust soil monitoring programme by each Member State using agreed methodologies & selected indicators;

communication
and citizen
engagement
embedded into
all activities

Supportive Environment:
policy framework, consumer
attitudes, market mechanisms
information platforms

Cooperation across sectors and citizen engagement at the core of the mission

Researchers, land managers, businesses, policy decision makers and citizens working together in

- **Living laboratories** → **to create knowledge**
- **Lighthouses** → **to test and demonstrate solutions**

Ambition »» to establish in the first years of the Mission at least five, preferably 10 living labs and/or lighthouses in each of the regions of the EU. This will result in 1000 – 2000 living labs and lighthouses as incubators and demonstrators of change.

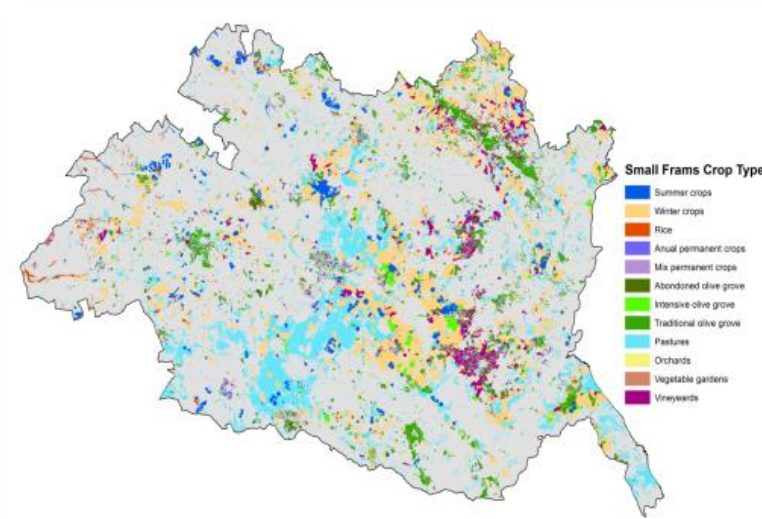
Research and Innovation (R&I)

Knowledge exists within individual disciplines, but there is hardly any **integrated knowledge** on soil health

Research **tailored to local/regional** circumstances & linked to living labs for more fundamental work.

Interdisciplinary teams with a **systemic approach** working in a **transdisciplinary mode**.

Integration of **natural and social sciences** at an equal level is crucial.



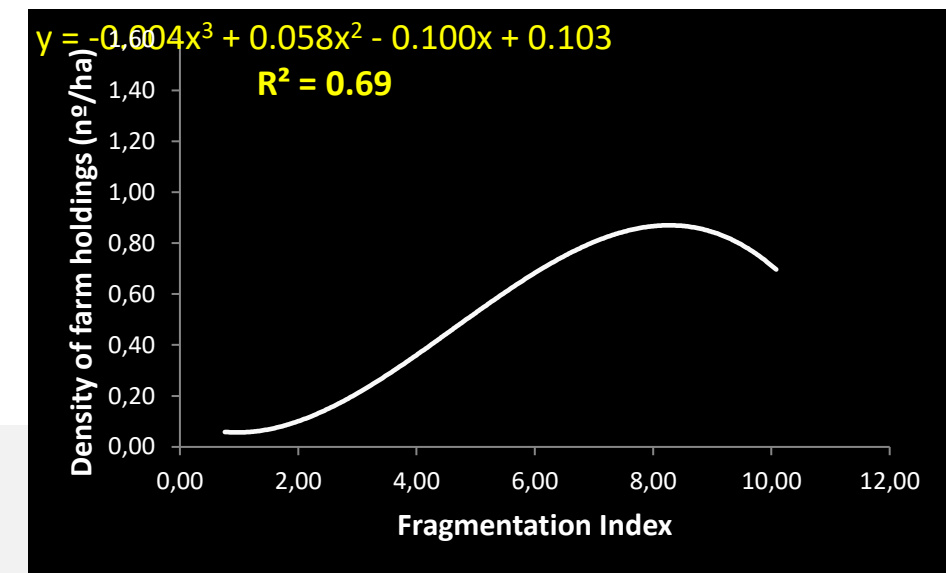
Scales:

plot, farm, landscape, regional, national, global, food systems

Monitoring

6 + 2 selected indicators

- 1) Presence of soil pollutants, excess nutrients and salts
- 2) Vegetation cover;
- 3) Soil organic carbon;
- 4) Soil structure including soil bulk density and absence of soil sealing and erosion;
- 5) Soil biodiversity;
- 6) Soil nutrients and acidity (pH) which we have matched to individual issues
- 7) landscape heterogeneity (composition and configuration)
- 8) area and composition of forest and other wooded lands



An unhealthy soil is present if any indicator is below an agreed threshold, defined for that soil type, land use and climate zone

Enabling Environment

CAP new payment schemes, with long term contracts, for more diverse, regenerative and systems-based approaches;

De-risking and guarantee mechanisms for those who engage in transformation towards increased soil health;

Regulations and taxes that reward goods produced in a soil protective manner;

Context specific **advisory services** to individual land managers

Online, easy to use, multiple platforms to access and share knowledge and experiences;

Changes across food systems, including at transformation, retail and consumer level, to provide the 'market pull' to drive the changes needed;

Public and private sector investments in R&D to foster sectoral innovations, city-region relations and regional food systems, waste management systems.

Soil health and food – at the right time!

Mission area is critical to **meet global political commitments** such as the Paris Agreement and Sustainable Development Goals

And it is highly relevant for new Commission priorities, notably the **Green Deal:**

Farm to Fork and Biodiversity Strategies

Land/soil management is relevant to major policy objectives on:

- food and nutrition security
- climate change mitigation
- protection of biodiversity
- reduction of pollution
- vibrant rural areas



Steps towards Horizon Europe Strategic Plan & Missions in the Work Programme



Do you want to know more?

Join the mission activities, have your say and spread the message

- EUSurvey

<https://ec.europa.eu/eusurvey/runner/mission-soil-health-and-food>

- Mission soil health and food webpage

https://ec.europa.eu/info/horizon-europe-next-research-and-innovation-framework-programme/mission-area-soil-health-and-food_en

- EIP-AGRI news

<https://ec.europa.eu/eip/agriculture/en/news/soils-matter>

- DG AGRI – Soil matters for our future

https://ec.europa.eu/info/news/soil-matters-our-future-2019-dec-05_en



Obrigado ! Thank you!

HorizonEU #EUmissions #MissionSoil

<http://ec.europa.eu/horizon-europe>

No seguimento da apresentação anterior,
gostaríamos que respondesse a um breve
questionário sobre a Missão*



*As respostas serão processadas de forma anónima



Q&A

Por favor, coloque as suas questões no *chat* e identifique-se com primeiro e último nome e organização que representa

Conclusões e encerramento



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Muito obrigada pela vossa presença!

Para mais questões, por favor contacte nadine.teles@ani.pt

Soil Health & Food

Horizon Europe Missions
DELIVERING SOLUTIONS TO SOME
OF OUR GREATEST GLOBAL CHALLENGES

#EUmissions #HorizonEU

#MissionSoil

