



# European DG activities and desires on soil and land research

Second INSPIRATION's POLICY ORIENTED  
WORKSHOP



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# EU Soil Policy Overview of recent activities and research needs



# The Soil Thematic strategy COM(2006) 231



- ❖ Thematic Strategy for Soil Protection adopted in September 2006, incl. proposal for a Soil Framework Directive, COM(2006)232
- ❖ Overall objective is protection of **soil functions** and **sustainable use** of soil, based on key principles:
  - ❖ Prevention of soil degradation
  - ❖ Restoration of degraded soils
- ❖ **four pillars** of which three non-binding
- ❖ To be implemented by MS
- ❖ 2012 Report from the Commission on the implementation of the STS COM(2012)46



# Soil threats considered



*Sealing*



*Organic matter decline*



*Salinisation+Acidification*



*Contamination*

*Erosion*



*Compaction*



*Landslides*



# Achievements under the Thematic strategy research and monitoring



- *EU-funded research projects*
    - **FP6, FP7, Horizon 2020**
  - *LIFE/LIFE+: 147 projects on Soil Protection*  
<http://ec.europa.eu/environment/soil/pdf/LIFE%20and%20Soil%20protection.pdf>
  - *Monitoring – soil data collection*
    - **A lot of soil data at national level**
    - **JRC European Soil Data Centre**
    - **LUCAS database**
      - >20,000 soil samples collected in 2009-2012 and analysed (physico-chemicals properties, Heavy Metals)
      - New campaign in 2015
    - **Land cover/land use monitoring: LUCAS, Corine, Copernicus at EU level**
- > However lack of systematic soil monitoring system accross EU and lack of harmonisation**

# Achievements under the Thematic strategy Integration



## Soil in CAP

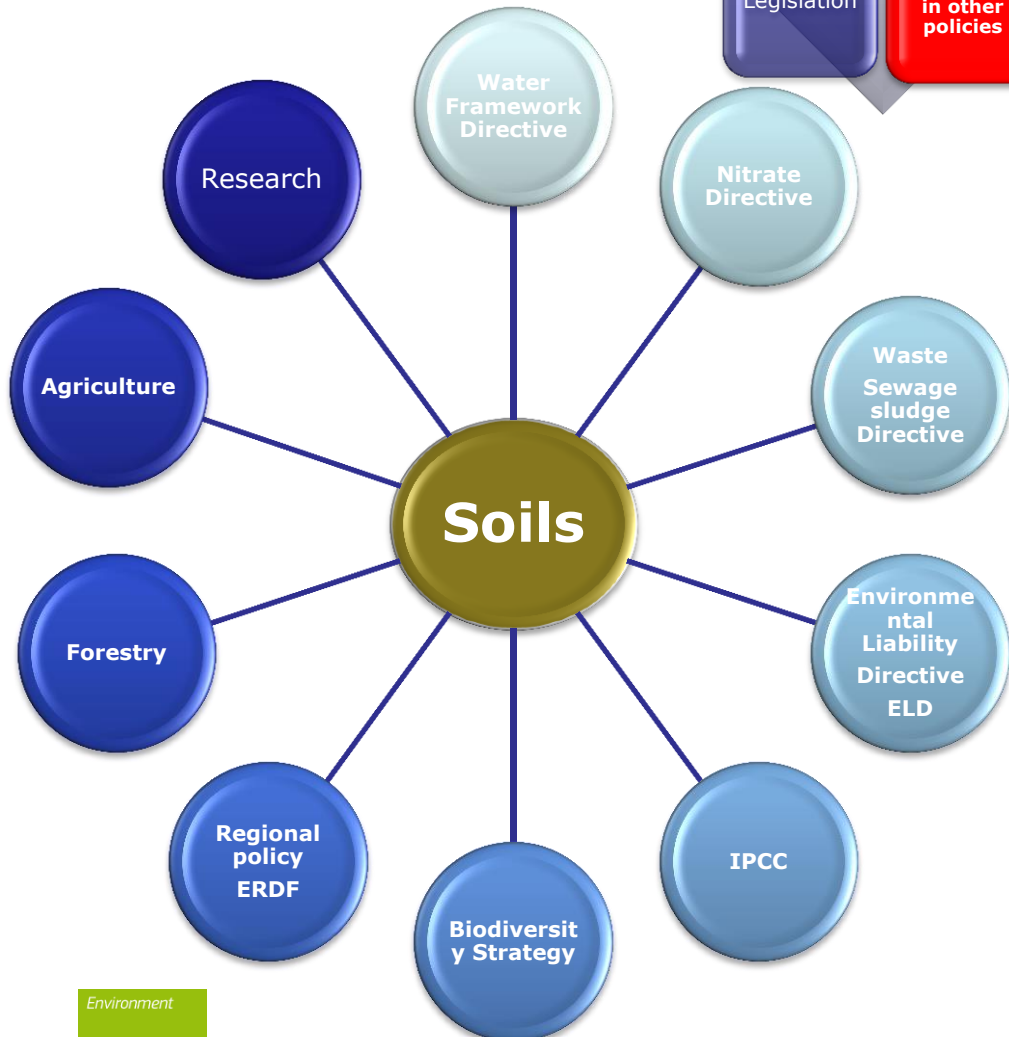
- Cross-compliance and Good Agricultural Practices
- Greening
- Rural Development

## Soil in EU environmental policies

- WFD, nitrates, waste, IED, ELD, biodiversity etc.

## Regional policy – urban sustainable development

2007-2013: EUR 3.4 billion for the rehabilitation of industrial sites and contaminated land areas





# Soil Framework Directive proposal

- *SFD Proposal pending for almost eight years without qualified majority in Council*
- *The Commission decided to withdraw the proposal in May 2014, opening the way for an alternative initiative*
  - **"The Commission remains committed to the objective of the protection of soil and will examine options on how to best achieve this. Any further initiative in this respect will however have to be considered by the next college"**
    - OJ C 163, 21.5.2014, p. 4 / OJ C 163, 28.5.2014, p. 15



# 7<sup>th</sup> Environment Action Programme



## Objective

- By 2020: "**land is managed sustainably** in the Union, **soil is adequately protected** and the **remediation of contaminated sites is well underway**;"
- This requires, in particular: "increasing efforts to **reduce soil erosion** and **increase soil organic matter**, to **remediate contaminated sites** and to enhance the **integration of land use aspects** into coordinated decision-making involving all relevant levels of government, supported by the **adoption of targets on soil and on land as a resource**, and land planning objectives;"

## Commitments

- "The Union and its Member States should also reflect as soon as possible on **how soil quality issues could be addressed using a targeted and proportionate risk-based approach within a binding legal framework.** **Targets** should also be set for **sustainable land use and soil.**"

# Key ongoing actions on EU soil policy

- *Awareness raising and **knowledge base***
- *Launch of an EU Expert Group on Soil Protection*
  - **Experts nominated by EU Member States**
  - **Reflexion on how to address 7<sup>th</sup> EAP commitments on soil**
- *Inventory of soil protection measures in all EU MS*  
[http://ec.europa.eu/environment/soil/pdf/Soil\\_inventory\\_report.pdf](http://ec.europa.eu/environment/soil/pdf/Soil_inventory_report.pdf)
  - **National legislations and non-binding measures + implementation EU policies**
  - **State of play, implementation, gap analysis**
- *Mapping and Assessment of Soil-related Ecosystem Services (MAES) Soil pilot*



## **A new momentum at global level**

- **International Year of Soil 2015**
- **FAO-Global Soil Partnership etc.**
- **SDGs**
- **Land Degradation Neutrality UNCCD**
- **UNFCCC – IPCC**
- **Soil Organic Carbon – GSP will publish a global SOC map by end of 2017**
- **Soil pollution – conference GSP/FAO in April 2018**
- **Convention on BD – IPBES**
- **Global Soil Biodiversity Initiative**
- **UNEA-3 Nairobi, 4-6 Dec 2017 – theme 'Towards pollution-free planet' – proposal resolution on soil pollution**

# Knowledge needs for EU soil policy



- *Short term:*
  - **need to update knowledge base – JRC and EEA our main knowledge providers**
  - **Economics – cost of land degradation at EU level – costs of protecting soil vs soil of restoring degraded soil (ELD – like)**
  - **Applied research: collect evidence on Soil Sustainable Management – costs/benefits**
  - **Soil Organic Carbon sequestration potential / CC**
  - **Soil quality indicator needed – standards on contaminants?**
  - **Land Degradation Neutrality (SDG 15.3)**

# Knowledge needs for EU soil policy



- *Medium – long term*

- **Soil biodiversity – still largely unknown**
- **Soil ecosystems and services delivered**
- **Soil (diffuse) pollution PPPs and chemicals – impacts on environment (soil BD) and human health – ecotoxicology/improve knowledge on pathways chemicals->soil->plant->Food**
- **Decontamination / fertilisers (Cd) and in context of circular economy**
- **Emerging contaminants**
- **Cost/effective monitoring/soil analysis methods**
- **Nexus approach**
  - soil-water-sediments
  - links soil-water-air pollution,
  - soil-biomass and bioenergy
  - Soil and circular economy

# Conclusions

- *Many research projects – potential duplication*
- *Better coordination needed*
- *A lot of knowledge lost*
- *Archiving outcomes of soil/landrelated projects*
  
- *Help us finding our way!*



**Thank you for your  
attention!**

[http://ec.europa.eu/environment/soil/index\\_en.htm](http://ec.europa.eu/environment/soil/index_en.htm)