SoilCare recommendations for policy actions

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Developing policy actions

Barriers to the uptake of SICS

Policy/institutional
Adverse policy effects, lack of coherence/policy conflicts, weak monitoring/enforcement top-down policies, unstable policy frameworks, lack of soil legislation/targets

Socio-cultural
Awareness/value of soil, peer pressure, demand for sustainably products, traditional practices

Knowledge/information
Availability of information, fragmented services, adviser expertise/quality, costs, continuity of funding for advisory services

Economic
Transition costs, time lag between change of practices and benefits, market demands, holistic approaches

How could EU and national/regional policy facilitate actions to promote the uptake of SICS?
How did we use these insights to develop policy actions?

We asked stakeholders at EU level and in the study sites:

− Which actions could remove barriers or strengthen enablers?
− How effective would they be in facilitating the adoption of SICS?
− How likely or easy would it be to implement the action?

### Barriers and enablers for uptake of SICS

<table>
<thead>
<tr>
<th>Barriers</th>
<th>Actions to overcome barriers or encourage enablers</th>
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<tbody>
<tr>
<td>Lack of coherence between different legislation</td>
<td>To simplify schemes, provide clear and user-friendly information, and remove bureaucratic barriers.</td>
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<tr>
<td>Lack of regulation to protect soil</td>
<td>Establish a good soil care in the long term.</td>
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<tr>
<td>Lack of enforcement and monitoring</td>
<td>Value practices of good soil care in the long term.</td>
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<td>Increased needs for some inputs</td>
<td>Actively support and encourage the development and implementation of good soil care practices.</td>
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<tr>
<td>Higher Investment and implementation costs</td>
<td>Simplify rules and make good soil care less burdensome.</td>
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<td>Fair subsidies ensured but controls on them not</td>
<td>More to “farmers - nature improving farming” Systems.</td>
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### Social/cultural

- Openness of new generation farmers to new practices
- Increase awareness for sustainable production
- Strengthen business, Extension/Advisory services, innovative incentive
- Increase in adoption and implementation of certain practices e.g. agri-climate

### Technical

- Technical support for machinery and consultancy about new management practices
- Financial support for machinery and consultancy about new management practices
- Support the use of appropriate technology

### Knowledge/information

- Positive experiences with advisory services and on-farm visits
- Previous experience of soil health awareness
- Awareness of the impacts of practices to make the advantages visible
- More knowledge about good practices, innovative and inspiring good practice stories

### Biophysical

- Climate conditions
- Geographical conditions
- Positive impacts on biodiversity
- Practical contribution to the landscape
- More knowledge about good practices, innovative and inspiring good practice stories

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How to remove barriers and strengthen enablers?

<table>
<thead>
<tr>
<th>Define long-term ambitions and targets</th>
<th>Increase coherence between policies/policy objectives</th>
<th>Design targeted (economic) instruments</th>
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<tr>
<td>Strengthen policy monitoring and enforcement</td>
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<td></td>
<td>Strengthen opportunities for learning and knowledge exchange for farmers</td>
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Define long-term ambitions and targets

Develop **soil targets as well as specific targets for different pressures affecting soil functions/causing soil threats** for integration in new policy initiatives

Promote SICS through relevant strategic and sectoral policies

- Provide **EU-level advice on Eco Schemes** (CAP)
- Scope for Commission action within the **formal review/approval process of the new CAP Strategic Plans and subsequent annual monitoring**
New CAP proposes changes to improve the overall coherence of CAP with environmental legislative instruments

- Potential conflicts with other sectoral legislation, such as energy and waste, at EU and national level might need to be better addressed.

Carefully analyse and align policy conflicts/potential synergies

- Future-looking **policy evaluations which cover soil health** as a criteria.
- Soil is cross-cutting in nature as a mediator of multiple land-based services and should be a **higher priority in any policy evaluation**.

**Two-way communication platforms** between policy makers, farmers and advisory services to create feedback loop.

**SoilCare**
Financial incentives need to be more targeted, both tied to specific actions and region (or environmental/geographic conditions) to result in the desired change.

- New CAP model provides opportunity to define different regional mandatory requirements (GAECs) and voluntary measures (Eco schemes).
- Prioritise farming techniques that serve multiple objectives, i.e., food production, sustainability and profitability.
- Reward benefits delivered (“carbon farming certification”).
- Involve farmers (and other relevant stakeholders) in development of CAP interventions/other instruments.

Facilitate a long-term transition to sustainable practices.

- Encourage non-financial economic instruments, for instance, schemes for sharing equipment and/or collective buying or national seed banks.
- Long-term arrangements (>7 years) enabled in policy frameworks are essential to win trust from influential farmers.
Strengthen policy monitoring and enforcement

Establish clear, robust, and reliable policy monitoring and enforcement frameworks and institutions

- For the CAP, move from monitoring of target areas/proportions covered by a specific policy measure to assessing environmental improvements
- Integrated systems for coordinated monitoring of relevant policies to enhance reliability and reduce administrative burden on public authorities
- Training of farm inspectors
- Agencies/units dedicated to monitoring of impact of policies on soil health

How to measure soil quality?
Indicators proposed for measuring soil quality (and yield) over a 2-3 year period

<table>
<thead>
<tr>
<th>Category</th>
<th>Indicator (Unit)</th>
<th>Method</th>
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<tbody>
<tr>
<td>Soil productivity</td>
<td>Crop yield or crop biomass in dry matter (t ha⁻¹ year⁻¹)</td>
<td>Yield measurement or quadrat sampling</td>
</tr>
<tr>
<td>Soil physical properties</td>
<td>Water stable aggregates (%)</td>
<td>Wet sieving (250μm – 2mm)</td>
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<tr>
<td>Soil biological activity</td>
<td>Earthworm presence (number/m²)</td>
<td>Mustard extraction method</td>
</tr>
<tr>
<td>Soil organic carbon</td>
<td>Total Organic Carbon (%)</td>
<td>Walkley- Black method</td>
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Strengthen opportunities for learning and knowledge exchange for farmers

Establish **regular** training and information on:
- Explain **costs and benefits** of new practices
- Provide **evidence** of **short-term as well as long-term benefits**
- **Policy requirements**, and administrative procedures
- Findings from **research projects** and **long-term field experiments** within the region

**Engage with farmers and trusted organisations** to deliver advice and training

**Support local networks of farmers/bottom-up initiatives**

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**Strengthen the capacity of Farm Advisory Services**
- Funding for continuity of services through CAP and national governmental funds to ensure that the advice delivered reflects current knowledge and remains impartial.
- Training of providers to keep up with new developments and to ensure coherent quality
- Farm Advisory Service increasingly privatised creating a two-track system (public vs private goods) with different objectives. \( \rightarrow \) opportunities for synergies between public and private advice for soil management should be exploited

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**Soil health** needs to be a strong component of **vocational training/continued education** for farmers at national level

**Farmers operate in a complex agri-food system**, and they do not always have the capacity to follow advice
- Dissemination of knowledge, awareness raising, and education should be used in parallel with economic and legislative instruments
Strengthen opportunities for learning and knowledge exchange for farmers

Lighthouses/living labs to demonstrate how to use and adapt different SICS in the region

Support local farmer-led networks where farmers can learn about “what works” for soil health from the experiences of others

What about the consumers?
Educate consumers about the advantages and disadvantages of conventional farming practices vs. sustainable practices to ensure increased demand for sustainably produced products and encourage the retail sector to make these more widely available to all sections of society.
- Innovation awards
- “Soil footprint” label
Priority actions identified by stakeholders

How likely are the actions to succeed in facilitating an uptake of SICS?

- Making soil health part of future sustainability assessments in policy evaluations
- Create mechanisms to ensure feedback between legislators and stakeholders
- Fair subsidies with strong controls to limit abuse
- Optimise technologies to minimise external inputs

- Labelling and certifications (e.g., with soil footprint displayed on products)
- Consumer taxation on products derived from “unhealthy” soil practices to fund reinvestment into SICS
- Lighthouse projects raising awareness for the need for SICS and providing examples of best practices adapted to local conditions
- Local knowledge exchange groups facilitated by advisory organisations.

How likely are the actions to succeed in facilitating an uptake of SICS?
Further information

- SoilCare deliverable D7.2: Recommendations for policy actions
- Country reports and policy summaries
- Policy briefs:
  - Soil health policies for CAP and agri-environment Directives
  - Soil health policies towards SDGs
  - Farmer networks and social capital for sustainable soil management
  - SoilCare contribution to the EU Soil Strategy Consultation
  - SICS adoption factors and opportunities