

Barriers to the use of Soil-Improving Cropping Systems

What we learned from stakeholders in the SoilCare study sites

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How to get from here to there?



We explored common barriers to the adoption of soil improving practices as a basis for identifying and designing effective and feasible policy actions

Which type of barriers did we explore?



Policy/ Institutional

- Policies/ policy instruments that might hinder or facilitate uptake
- Mix of voluntary vs. mandatory, soft vs. hard measures
- Monitoring and enforcement



Social/ Cultural

- Farmer attitudes, values, motivations
- Accepted behaviours/traditions
- Peer pressure/norms
- Social capital, trust



Technical

- Difficulty of implementing SICS
- Need for new skills/information/machinery



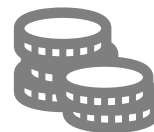
Biophysical

- Favourables/unfavourable conditions
- Crop type barriers



Knowledge/ Information

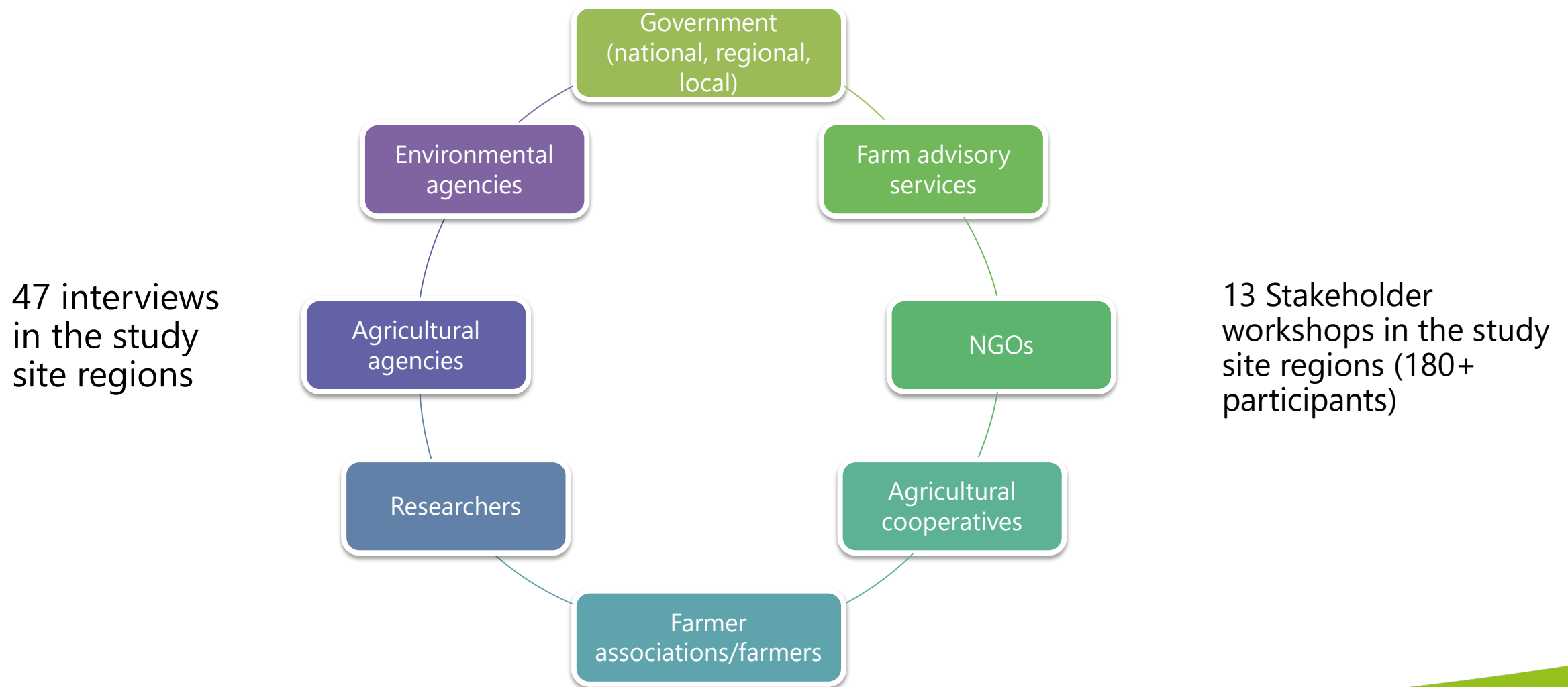
- Awareness of SICS and potential benefits/costs
- Availability/accessability of information
- Costs of obtaining information
- Capacity of farm advisory services



Economic

- Prices, supply chain arrangements
- Consumer preferences/ consumption patterns
- Investments and labour or other costs vs. benefits

How did we identify the barriers?





Policy/Institutional barriers

Adverse effects of policy design

UK Farmers encouraged to plant mix to favour bees/birds but which does not provide a very good soil cover



Lack of policy coherence/policy conflicts

BE Waste legislation prevents application of wood chips on fields



Unstable policy frameworks

BE Drastic policy change every 2-3 years, do not motivate farmers to invest in soil quality



Inflexible, top-down policies

PT Use of winter cover crops incentivised but not suitable to all regions



Lack of soil-specific, binding legislation

Multiple sites Many soil benefits are delivered as a "by product" of water policy implementation



Lack of monitoring/enforcement

UK < 1% of payment recipients are inspected by the Rural Paying Agency





Economic barriers

Transition costs

EL High (short and long-term) cost for e.g., organic fertiliser, costs of equipping machinery with right tools, purchase of new crops (Avocado) or additional seeds for cover crops



Time lag between change of practices and economic benefits

Multiple sites Farmers are more likely to only see (and take into account) immediate financial costs of changing to new practice rather than the long-term – soil and financial – benefits



Market pressures/ demands

BE Policy encourages farmers to plant cover crops and rotate crops but high demand for potatoes prevents uptake





Socio-cultural barriers

Society's awareness and valuing of soil

Multiple sites Need for consumers to better understand soil impacts of production methods to make more informed purchasing decisions



Growing demand for sustainable products

Multiple sites Growing demand for organic food



Peer pressure

CH Some practices could result in a "messy" look in the field which might discourage some farmers, as they fear the judgement of their peers, especially if are "early adopters"



Extent to which practice is established/ part of local tradition

EL Farmers as stewards of tradition: cultivation of olives plays traditionally a large role in the economy of Crete





Knowledge/Information barriers

Availability of information

BE High use of cover crops in the area due to good information dissemination



Adviser expertise and quality

ES No unified certification showing agricultural technicians' knowledge, high turnover which affects quality of advice

Advice costs the farmer money

BE Attending information meetings takes time; field-specific advice based on soil analysis costs money



Fragmented services

UK Lack of coherence between different advisory services (agricultural chambers, cooperatives, input companies, public organisations, NGOs, or independent advisers)



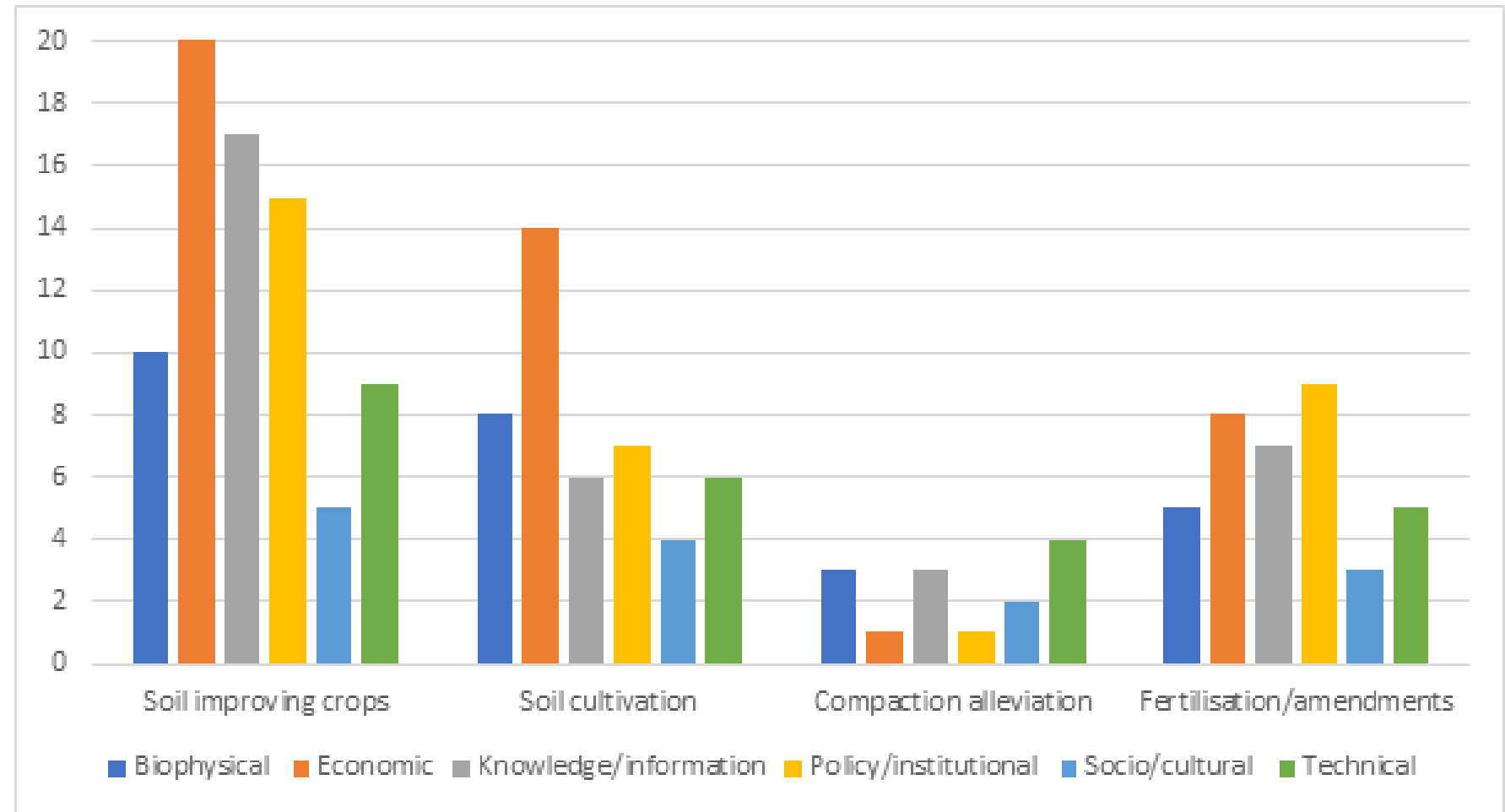
Insufficient resources/continuity of funding

Multiple sites Advisory services need more resources for experimental and demonstration farms



Factors affecting adoption of SICS

Count of unique adoption factors mentioned at least once during the study site workshops included in the analysis. Since some SICS belong to more than one cluster, there are overlaps between the clusters.



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

Economic

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

Knowledge/information

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

Thank you for listening!

What are the main barriers to the uptake of soil-improving cropping systems in your view?