



SoilCare

SOILCARE FOR PROFITABLE AND SUSTAINABLE CROP PRODUCTION IN EUROPE

Policy analysis:
**PROMOTING SICs
ADOPTION IN
KESZTHELY, HUNGARY**

SOIL HEALTH RELATED PROBLEMS ON SITE



Compaction



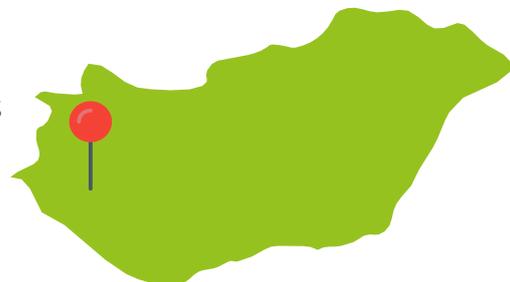
Erosion



Nitrates contamination



Nutrient loss



SOIL-IMPROVING CROPPING SYSTEMS FOR INCREASING SOIL HEALTH IN KESZTHELY, HUNGARY

The following Soil-Improving Cropping systems (SICs) were tested in Keszthely, Hungary, to address the main soil threats identified above:

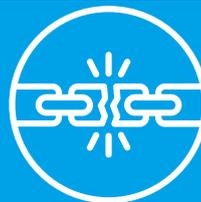
1. **Integrated nutrient managements (Organic/inorganic N fertilization, mineral fertilisation in continuous maize cropping)**
2. **Integrated nutrient management in combination with crop rotations (organic/inorganic fertilisation in different rotations)**
3. **Reduced tillage practices (Tillage in maize-wheat biculture).**

The SICs above present important practices that might benefit soil health if widely taken up. The main aim of this study was to formulate policy alternatives and actions and to facilitate the adoption of SICs.



Evidence gathered through desk research, interviews and a stakeholder workshop show that different factors contribute to and undermine the uptake of SICs in general, and of the practices tested in Keszthely, Hungary in particular. These include:

LIMITED COHERENCE BETWEEN POLICIES



WEAK ENFORCEMENT

AVAILABILITY OF GRANTS/SUBSIDIES



LACK OF INFORMATION

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POLICY SHORTCOMINGS AND OPPORTUNITIES FOR FACILITATING THE UPTAKE OF SICS

The existing policy framework in Keszthely, Hungary, already promotes the SICS covered by the SoilCare project through a range of existing regulatory, economic, and voluntary policy instruments and measures. The analysis shows that several economic policies promote the use of cover crops, the SICS tested at the study site, a practice which is relevant to alleviating compaction, halting erosion, and generally improving soil health. The same instruments incentivise reduced tillage practices which also reduce compaction and erosion while smart residue and controlled traffic management, which could address the same soil threats, are not incentivised, or regulated by existing policies.

Blue circles= SICS identified as potentially beneficial to the main soil threats and subsequently tested in the study site; Red circles = Other SICS promoted through existing mandatory, economic, or voluntary policy instruments in Keszthely, Hungary

	CROP ROTATION	GREEN MANURES, COVER CROPS, CATCH CROPS	INTEGRATED NUTRIENT MANAGEMENT	EFFICIENT IRRIGATION	CONTROLLED DRAINAGE	REDUCED/NO TILLAGE	INTEGRATED PEST MANAGEMENT	SMART WEED CONTROL	SMART RESIDUE MANAGEMENT	CONTROLLED TRAFFICKING	INTEGRATED LANDSCAPE MANAGEMENT
CAP GAEC Cross-compliance Standards	●	●					●				●
Act on the General Rules of Environmental Protection			●				●				●
Rules for Action Program against Agricultural Nitrate Pollution, Data Reporting and Record Keeping			●								
Decree on the Protection of Waters against Nitrates Pollution from Agricultural Origin			●								
Decree on Protection of Geological Medium and Groundwater against Pollution	●		●				●				
Rules about Agricultural Utilization of Sewage Sludge and Waste Water			●								
Decree authorizing the placing on the market and use of plant protection products and packaging, marking, storage and transport of plant protection							●				
Rules about Authorization, Storage, Marketing and Utilization of Fertilising Products			●								
National Action Plan to Improve Organic Farming	●	●	●	●	●	●	●	●	●	●	●
Ministerial Decree on Preparation of Soil Protection Plan		●	●	●							●
Act on Cultivated Land			●		●	●					
Act on the Protection of Cultivated Soil			●		●	●					●



Based on the results of this study, the following policy recommendations can be made:

SIMPLIFY POLICY
FRAMEWORK AND
ENFORCE IT BETTER



COHERENT, EASY TO
ENFORCE
REGULATIONS

Simplification of the policy framework and better enforcement:

Policies are viewed by stakeholders as complicated, incoherent, and poorly enforced. This makes it challenging for farmers to comply with policy requirements, especially if they observe that they face little consequence for non-compliance. While it is found that there are a number of policies already in place that impact soil, they require simplification both at EU and national level legislation. In addition, they need to be more effectively enforced to produce the intended outcomes and impacts. This also concerns ensuring policy is coherent and not working towards contradictory goals.

ESTABLISH MECHANISMS
FOR EFFECTIVE
KNOWLEDGE
DISSEMINATION AND
EXCHANGE



SOIL-SPECIFIC
AND REWARDING
REGULATIONS

Raising awareness of the environmental benefits of SICS:

There is need to provide farmers with information on SICS. There is very little awareness of the benefits of soil bacteria in the soil and what technique can facilitate its maintenance. Information needs to also be aimed at consumers, who should be encouraged to purchase from sustainably managed farms.

REWARD FARMERS
FOR THE BENEFITS
THEY DELIVER TO
SOCIETY



INTRODUCE
BETTER DESIGNED
ECONOMIC
INSTRUMENTS

Using available funding to promote SICS adoption:

Funding opportunities are the main driver for SICS adoption, especially funding from EU level. With the post-2020 CAP, new funding rules will be introduced. The Good Agricultural Environmental Conditions (GAECs) now offer a greater chance for soil protection. New conditions with the potential to improve soil health have been added, e.g., crop rotation is introduced under GAEC 8. The new agri-environment-climate measures present opportunities to address declining soil health. It will be key that Member States allocate enough available budget available to implementing soil health measures.

