



SoilCare

SOILCARE FOR PROFITABLE AND SUSTAINABLE CROP PRODUCTION IN EUROPE

Policy analysis:
PROMOTING SICs
ADOPTION IN
BRITTANY, FRANCE

SOIL HEALTH RELATED PROBLEMS ON SITE



Compaction



Low soil fertility



Weeds



SOIL-IMPROVING CROPPING SYSTEMS FOR INCREASING SOIL HEALTH IN BRITTANY, FRANCE

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

1. **Use of different cover crops (e.g., oats versus mixed cover crops, interseeding cover crops in maize)**
2. **Soil cultivation measures to reduce or eliminate tillage (e.g., early sowing of wheat)**

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 several factors affect SICs uptake. These include:

- Environmental conditions
- Lack of solidarity between farmers
- Changing policy objectives
- Top-down approaches to policy design and implementation
- Lack of a dedicated soil policy
- Insufficient policy enforcement and impact monitoring
- High transition costs
- Lack of targeted incentives
- Need for education and training

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THE CASE STUDY SITE

The French study site consists of two areas in Brittany, namely the Semnon catchment area and the Linon catchment area. Dairy farming is the main agricultural sector in both of these catchments, with many large companies farming in the area. Organic farming and alternative growing methods have been growing much for 10 years, driven by societal demand.

Annual climate hazards, due to climate change, are becoming stronger. This is a major problem for the cattle management, because food autonomy is threatened. Farms have to be more resilient to climate hazards. They are developing new approaches: innovative crops, new grass management methods.



Top: Cover crops (experiment 1)
Bottom: Early sowing of wheat (experiment 2)



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POLICY SHORTCOMINGS AND OPPORTUNITIES FOR FACILITATING THE UPTAKE OF SICS

The table below indicates that SICs adoption is already promoted through a range of existing regulatory, economic, and voluntary policy instruments and measures in Brittany, France. The analysis shows that several policies regulate and incentivise the use of cover crops and reduced tillage, including the CAP GAEC standards, and the CAP Greening Payment Requirements. In addition, environmental and water policies establish cover crop and tillage management requirements for certain areas.

Red circles = SICs uptake promoted through existing mandatory, economic, or voluntary policy instruments in Brittany, France. Blue circles = SICs covered by the wider SoilCare project.

	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		●	●	●	●	●			●	●	●
CAP Greening Payments	●	●									●
Rural Development Programme for Brittany	●		●				●	●			
Law for the Future of Agriculture, Food and Forests							●				
Investment Supports for Farms			●				●		●		
Environmental Code	●	●	●								
Rural and Marine Fishing Code	●	●	●	●	●	●	●	●	●		●
Law on Water and Aquatic Environments	●	●	●			●			●		
Nitrates Regulation		●	●			●			●		
Plan Ecophyto II	●		●				●	●			



Based on this analysis and feedback collected from stakeholders, the following recommendations were formulated:

CONSIDER DEVELOPING A DEDICATED SOIL POLICY



Despite the existence of policies incentivising and regulating the use of SICS in Brittany, their focus is not specifically soil related. While it is clear, both from the interviews and looking at the issues reported by grass-root organisations, that farmers are aware of soil threats in the region, the instruments in place may potentially reward behaviour which, while not detrimental to the environment, cannot be considered soil-improving. The development of a dedicated soil policy should therefore be considered. Such an intervention should be designed to accommodate farm diversity, featuring a robust monitoring and enforcement system.

REVISE THE EXISTING POLICY FRAMEWORK TO INCLUDE LONG-TERM TARGETS

Different priorities put forward by policies over time can create undesirable effects which are sometimes hard to remedy. An example from the region is the focus modernisation of farming in the last decades which led to practices that are today considered unsustainable. Policy design should incorporate the longer-term benefits and integrate a more holistic approach so that elements like soil which necessitate longer cycles can also be considered.

INVOLVE FARMERS IN POLICY-DESIGN AND IMPLEMENTATION

To ensure compliance with policy instruments, design appropriate measures, and foster innovation, farmers not only need to be better informed about policy instruments but should also be involved in their design and implementation, to the extent possible. This will be especially crucial for the national and regional implementation of EU policies, most importantly the post-2020 CAP which will give greater flexibility to Member States when designing their Strategic Plans. In this regard, one stakeholder at the adoption workshop suggested experimenting with new instruments or policy tools at a local or sub-regional scale first before analysing the impact of their adoption on national/regional level.



PROVIDE TAILORED SUPPORT TO FARMERS TRANSITIONING TO SUSTAINABLE PRACTICES



Financial instruments should allow long-term change in practices rather than finance one off interventions. They should be designed in a way that offers integral solutions to farmers, for instance they should cover costs associated with machinery or other investments associated with change, which are important barriers for farmers.

INTRODUCE MORE TARGETED FINANCIAL INCENTIVES

Incentives should be more targeted and tied to specific actions to result in the desired change. For example, a subsidy could be tied to the use of a specific crop rather than a target such as “reduce the amount of maize grown” as it is currently done by the RDP for Brittany.

OFFER REGULAR TRAINING AND INFORMATION SERVICES TO KEEP FARMERS INFORMED ABOUT NEW DEVELOPMENTS AND INSIGHTS



Dissemination of knowledge, awareness-raising, and education are important components of policy interventions and they should be used in parallel with economic and legislative instruments. Regular training, informative sessions on latest innovations are preferred to one-off training sessions which have limited impact.

ENGAGE WITH FARMERS AND TRUSTED ORGANISATIONS TO DELIVER ADVISE AND TRAINING

Peer to peer learning and bottom-up initiatives are powerful tools to deliver knowledge to farmers as they play a great degree of trust in their fellow producers. There are examples of successful voluntary initiatives that are considered very effective in changing convictions and practices. Among those, farmers' groups are especially important. Such groups have a greater success of convincing farmers to adopt SICS for several reasons and can help demonstrate how to adapt practices and targets to specific geographic or other constraints, which may make SICS adoption more attractive to farmers in the region. These voluntary initiatives can be supported by direct education to provide a better understanding of the benefits of SICSs to farmers, especially targeting the older generation of farmers.

