

SoilCare advice review Interview schedule

NB Questions were asked about Sustainable Soil Management (SSM) rather than Soil Health Management (SHM) as the term SSM was considered to be more familiar to interviewees

PRELIMINARY QUESTION

Before starting with Section A, ask the interviewee about their job, job title and role.

SECTION A. CONTEXT

1. What are the distinctive features about the farming system/socio- economic context in your country that might impact SSM advice?

SECTION B. CHARACTERISTICS OF FARMERS- KNOWLEDGE & CAPACITY

2. What is the general level of farmer interest / competence in SSM? (are any qualified? for example in UK some farmers have FACTS/BASIS quals)
3. What are their knowledge needs regarding SSM practices and are advice providers addressing these?
4. What are the barriers to farmers engaging/accessing advice on SSM? (e.g. affordability?)
5. What are the barriers to farmers following advice on SSM (e.g the context of a competitive industry, capital, tenure, supply chain contracts, regulation, social/cultural factor etc)
6. Are there enablers/voluntary incentives for farmers to follow advice on SSM – e.g supportive farmer organisations, supportive peer-peer networks, scheme incentives, farm assurance schemes, organic farming, catchment/programmes?
7. Are farmers relying more on peer to peer networks now due to cost/quality of advice?

SECTION C. CHARACTERISTICS OF THE SYSTEM OF AGRICULTURAL ADVISORY SERVICES

C1 Governance structures

8. Can you characterise the advisory system for arable farmers in your country? For example does it have just 1-2 organisations¹ providing advice or it is pluralistic with many different organisations? Is it centralised or decentralised?
9. What is the main focus of the advisory services. Are they mainly driven by commercial interests (private goods) or by policy interests to protect the environment (public goods)?
10. To what extent is there integration or fragmentation between the different providers? To what extent is there a joined-up approach with linkages and partnerships between different providers?
11. Are there tensions or synergies between the different providers? Is there contradictory advice? What are the gaps ?
12. To what extent is there good linkage between research and practice?

C2 Characteristics of advisory systems that affect soil - management, organization, capacity

¹ Private, NGO, agricultural chambers, farmer organisations, private (independent and large scale commercial)

13. Who would you say are the key influencers of arable farmers in your country when it comes to managing/impacting the soil?
14. What are the main advisory services for providing advice that impacts soil (positively or negatively) on SSM? How do these work and who do they target?
15. Would you say that the advisory services in your country are well organised/managed/ resourced for delivering advice on SSM? Please explain your answer
16. What is the quality of advice/level of expertise from the different advice providers/advisers? (For example are some advisers more competent than others in delivering advice on soil practices (minimum tillage, nutrient management, cover crops, rotations etc?))
17. Do the different advisers have sufficient skills and expertise for delivering SSM advice? (Is education of advisers about soil at agricultural college sufficient? Is there continuous training/certification? How well connected are advisers to research? Is there quick staff turn over?)
18. Can you describe the attitudes, and motivations of the different sorts of advisers, their incentives, and organisational/ professional culture, are they valued, constrained by being in specific short-term projects?
19. Do they engage with the 'hard to reach' farmers and not just respond to those already carrying out good management?

SECTION D. PERFORMANCE

20. What are main strengths and weaknesses of the advisory services with respect to achieving SSM on farm? (may have been covered already in which case skip)
21. To what extent are private-sector companies limited in providing advice on SSM (prompt: advice limited to inputs, economic motivations lead to impartial or detrimental advice, trustworthiness?)
22. To what extent are public services limited in providing advice on SSM (resources, advice limited to policy instruments, farmer-respect)?

SECTION E. EVIDENCE OF FARMER CHANGED ACTIONS

23. What evidence is there that some advice/mechanisms are effective in terms of raising awareness, building capacity, persuading farmers to change to SSM. Can you give examples of evidence of: Adoption/adaptation of SICS; Awareness of soil health; Benchmarking, monitoring taking place; Learning and empowerment; Participation in schemes, programmes, open days

SECTION F. EVIDENCE OF LONG-TERM IMPACT

24. Do you think there are any long term SSM benefits (meeting policy objectives) that have could have resulted from advice/ advisory programmes ? For example, improvements in farming performance and resilience as a result of improved soil management following a programme of advice about improved SOM

Notes and definition were provided for the interviewer

Table S1 Headline findings about advice and soil from the country summaries (Poland to be added) :

all	<ul style="list-style-type: none"> • Most advice about soil is delivered under cross compliance regulations (through FAS), food assurance schemes, agri-environment schemes, and organic farming
BE	<ul style="list-style-type: none"> • The main Farm Advisory Service (FAS) provider is public (started 2007). • People who are in contact with farmers e.g. machinery builders, fertiliser advisers and who give advice are of enormous importance • Farmers are changing slowly but soil knowledge is low and hampers progression rates. Policies need to focus on giving advice better.
GR	<ul style="list-style-type: none"> • The advisory organization is heterogeneous, with all organization categories represented (public administration, public and private research, private sector, farm-based organisations, non-governmental organisations) • The responsibilities for regulating advisory services, agricultural research and education are located on state level. • Private sector -numerous private companies ranging from individual freelancers to companies with clients from large areas provide advisory services to farmers • Some states have a completely privatised advisory system which means that there is no public support from state institutions in terms of funding or advisory service provision. Inputs suppliers as well as private agro-environmental advisory companies provide advice. • Farmer-based organisations (FBO). German farmer's association (DBV) represents the most dominant lobby group of farmers
HU	<ul style="list-style-type: none"> • The role of the government is strong; the majority of advisory organisations belong to the public sector. Advisory services are: a) free advisory services at the national level, funded by the EU and public sectors (village extension services and the Hungarian Chamber of Agriculture); (b) the FAS, subsidized advice (c) commercial consultancy; and (d) consultancy by input providers. • Extension services (and training institutions, local system of farm advisory, and the Farmers' Information System) support applying the results of the R+D in practice and for ensuring knowledge transfer • FAS services farms 30–200 ha but demand is low. Very big farms have their own advisers, very small farms do not seek technical advice • The quality and consistency of advice is a problem, leading to lack of trust. • There is a lack of knowledge on SICS and how to adopt these practices. • Commercial advice linked to product sales conflicts with advice on soil management concerned with public goods.
NO	<ul style="list-style-type: none"> • Laws and policies identified as relevant for shaping agricultural practices are modelled according to several EU environmental directives • Norwegian advisory systems consists of: • The input supply industry, The food industry, Independent organizations such as the cooperative Norwegian Agricultural Extension Service (NAES)(Norsk landbruksrådgiving) but also independent private consultants., service such as banks, Governmental and public bodies especially at local and county level. • There is limited governmental support and responsibility for advisory services, while there is still a political objective to develop agriculture
SP	<ul style="list-style-type: none"> • The dominant type of advisory administration in Spain is the farmer-based organisations. • OPAs (professional farmer's organisations - exercise functions of technical and specialized advice for its affiliates, advise farmers in the field of public grants.) as well as Agro-Food Cooperatives are the most important part of the current advisory system and the ones who are present in all regions and provinces (95%) • there are private, usually small organizations, which are present in some regions.

	<ul style="list-style-type: none"> • Knowledge transfer needs investing in • Information is very important and needs to spread through multiple channels in the languages used by farmers in each country or region
UK	<ul style="list-style-type: none"> • .Advisory services are largely privatised, the gov contracts agencies and NGOs to deliver public good advice, private good advice is delivered by the private sector • The system is fragmented • The balance between regulation and voluntary practices is finely tuned • It is in transition due to brexit
PL	<ul style="list-style-type: none"> • The main provider of farm advisory services (The Agency for Restructuring and Modernisation of Agriculture as well as The Agricultural Advisory Centers) is public. • People who are in contact with farmers e.g. machinery builders, fertiliser advisers, chemicals and biologicals providers and who give advice are of enormous importance

Fig Framework

