



UNISECO

UNDERSTANDING & IMPROVING THE SUSTAINABILITY OF AGRO-ECOLOGICAL FARMING SYSTEMS IN THE EU

Deliverable Report D7.2 A Guide to Transdisciplinarity for Partners

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ACRONYMS

AEFS	Agro-ecological Farming Systems
AKH	Agro-ecological Knowledge Hub
DST	Decision Support Tool
EC	European Commission
EU	European Union
GDPR	General Data Protection Regulation
IPR	Intellectual Property Rights
MAA	Multi-Actor Approach
MAP	Multi-Actor Platform
NGO	Non-governmental Organisation
PAG	Project Advisory Group
SES	Socio-Ecological Systems
SRG	Stakeholder Reference Group
UNISECO	Understanding and Improving the Sustainability of Agro-ecological Farming Systems in the EU
WP	Work Package



EXECUTIVE SUMMARY

The UNISECO project aims to enhance the understanding of socio-economic and policy drivers and barriers for the further development and implementation of agro-ecological practices in EU farming systems. The transdisciplinary approach, one that seeks to integrate knowledges from across academic disciplines and the science-policy-practice nexus, places a strong emphasis on participatory processes to foster co-learning and co-construction. This approach aims to generate novel insight to feed into the development of innovative management strategies and incentives for the implementation of agro-ecological practices and to inform the assessment of environmental, economic and social impacts of these practices at farm and territorial levels.

This report describes the transdisciplinary framework for the UNISECO project and provides 'structures' to facilitate meaningful interactions for shared learning, synthesis, integration and co-construction of innovative, actionable knowledge for practical outcomes. Material has been drawn from resources of academia and practice, including the personal experience of the UNISECO consortium partners.

The introduction defines our use of the word 'actor' and describes the Multi-Actor Platforms (MAPs) approach being used within the UNISECO project. The MAPs create a structure to facilitate engagement with relevant actors across the phases of UNISECO's research and dissemination activities. Guidance on the criteria and process for selection of individuals to be part of the MAPs is provided in D7.1, Guidelines for the Selection of Multi-Actor Platform (Budniok *et al.*, 2018).

Section 2 places the UNISECO approach within the wider context of the move toward transdisciplinary research and provides the conceptual background to the project's participatory approach.

Section 3 focuses on the role envisaged for members of the MAPs. It provides operational insight to the remit, functions, and implementation of activities in which members of the MAPs will be involved. It considers issues such as the aims of engagement, who to involve, method and timeframe for engagement, and anticipated commitment of effort for actor involvement. This is detailed for all activities that seek to include EU-level MAP members and for those that will draw upon the individual Case Study MAPs within each of the partner country.

Section 4 provides guidance for engagement with the MAPs at EU and case study levels. Specifically, it discusses how to design research activities to support the co-construction of knowledge and to facilitate full participation. A set of 'decision topics' are discussed including those pertaining to: i) the purpose for involvement; ii) who to include; iii) format for involvement; iv) spatial and temporal context for the activity; v) information provision and collection; and, vi) activity outputs and outcomes. Additionally, a set of general principles for participatory involvement are provided alongside a collection of related 'implementation tips'. This section closes with a description of the evaluative component embedded within UNISECO. A set of guidelines will be made available to consortium partners and then included in D7.3, Report on Assessment of Transdisciplinary Tools and Methods (Smyrniotopoulou *et al.*, in preparation).

As a whole, the report takes account of the different levels of participatory engagement processes (EU, case study) with respect to the type and diversity of participants. It touches on equitability and rights of participation including intellectual property issues relating to co-construction and co-learning. Additionally, it addresses the practicalities of implementation such as timing of engagement and ways to foster trust, understanding and fairness to support participation and co-construction across different types of knowledge, experiences and perspectives.



1. INTRODUCTION

UNISECO (UNderstanding and Improving the Sustainability of agro-ECOLOGical farming systems in the EU - UNISECO) is a European research project aiming to enhance the understanding of socio-economic and policy drivers and barriers for the further development and implementation of agro-ecological practices in EU farming systems. The UNISECO project seeks to promote the co-learning and the co-construction of new knowledge across academic disciplines, and with non-scientists associated in some way with farming systems. Such insight will feed into the development of innovative management strategies and incentives for the implementation of agro-ecological practices in participatory case studies in 15 European countries. It will also inform the assessment of environmental, economic and social impacts of these practices at farm and territorial levels.

Throughout UNISECO there are multiple opportunities for co-learning that can help build capacity for collaborative working through a transdisciplinary process. The consortium is committed to being a genuine transdisciplinary project, i.e. one that integrates knowledges from across different scientific disciplines and from actors external to the scientific endeavor (Tress *et al.*, 2005). This commitment is reflected in the consortium composition of partners from scientific and non-scientific organisations, and the emphasis on engagement from individuals external to the consortium from multiple non-academic sectors (e.g. policy, supply chain, production) at European and case study levels.

For the purposes of UNISECO, the word ‘actor’ is used as a broad, encompassing umbrella term to refer to the non-consortium individuals who will be involved in the project. Each of these individuals will have a different type of role within the Agro-ecological Farming Systems (AEFS) and sustainability assessment, e.g. producers (i.e. farmers or farmer organisations), retailers, food industry, consumer, environmental non-governmental organisations (NGOs), policy makers, and thereby a different ‘stake’ in, and perspective on, issues. Use of the term ‘actor’ thus differs from that of the European Commission (EC) which uses it to refer specifically for individuals in the chain of activities / outputs within, for example, a farming system, and who may not necessarily be someone who has a ‘stake’ in the issues at hand.

A core framework through which ongoing involvement in the UNISECO project is to be facilitated is the UNISECO-associated ‘pools’ or ‘platforms’ of key actors at European and case study levels, i.e. the Multi-Actor Platforms (MAPs). This two-level approach creates a structure to enable timely engagement with relevant actors across the various phases of UNISECO’s work packages (WPs) to foster the transdisciplinary and co-construction approach central to UNISECO.

To facilitate the planned involvement of multiple actor groups, this document provides a detailed synthesis of the project activities in which MAP members may be included. It provides guidance to the UNISECO consortium partners for the coordination, development and implementation of these activities to support meaningful and inclusive interactions for shared learning, synthesis and integration of diverse forms of knowledge, and the co-construction of innovative, actionable knowledge for practical outcomes.

The content considers such issues as who (to involve), when and how (processes for engagement), and to what end (aims, outputs and outcomes). It considers the various methods being used within the UNISECO activities with respect to equitability of participation and differences in the level of participatory engagement (e.g. EU-level or Case Study MAPs) with respect to type and diversity of participants. To generate the detailed content in relation to the ‘who, when, how, to what end’, the lead partner of an activity completed a MAP Engagement Activity Template (Appendix 1); Appendix 2 provides an example of a completed template for two early-project activities with EU-level MAP members. The completed MAP Engagement Activity templates formed the basis of an iterative discussion between WP1, WP7 and the lead partner for each activity for further refinement and clarification of details (Sections 3 and 4), and the identification of key issues to be considered to provide targeted guidance for engagement with the MAPs at EU and case study levels (Section 4).



This document is a companion to the UNISECO guidelines for development of the MAPs (D7.1 Guidelines for the Selection of Multi-Actor Platform; Budniok *et al.*, 2018) and a forthcoming set of guidelines for the evaluation of the MAPs and broader transdisciplinary process used within UNISECO, which will be included in D7.3, Report on Assessment of Transdisciplinary Tools and Methods; Smyrniotopoulou *et al.*, in preparation). The former (D7.1) provides guidance as to the criteria and process for selection of individuals to be part of the EU-level and Case Study MAPs. The latter (D7.3) develops a monitoring and evaluation framework for assessing the MAP structure and the wider transdisciplinary approach taken in UNISECO and reports results of the assessment. These three deliverables sit within the aims of Work Package 7 (Multi-actor Engagement) which seeks to facilitate the development and testing of new transdisciplinary methodological approaches in policy research and analysis, and facilitate internal communication among partners concerning transdisciplinary methods.

2. BACKGROUND

A transdisciplinary approach is increasingly advocated by funders and end users of research, as well as scientists. Such an approach has been identified as particularly fruitful for investigating complex, ‘wicked’ problems, often with a ‘real world’ dimension such as those under consideration within the UNISECO project. These problems frequently involve: i) uncertainties in scientific knowledge; ii) human activities and interactions; and iii) political, economic and cultural dimensions of knowledge that can influence research and its impact (Aslin and Blackstock, 2010; Brown *et al.*, 2010). The combination of perspectives and skills that can be brought together through a transdisciplinary process has the potential to generate novel insight and solutions to address societal challenges (Pohl, 2008; Polk, 2015).

Given the centrality of a transdisciplinary frame for the UNISECO project and the concomitant need for inclusive involvement of a range of actors, co-learning and participatory processes are fundamental to the project’s approach. Following Tress *et al.* (2005), we emphasise a high degree of integration between academic and non-academic participants, bringing our respective perspectives to tool development, eliciting and assessing management strategies and incentives for sustainable AEFS, carrying out effective dissemination activities and creating impact on the ground. An ambition of UNISECO is to develop and build capacity for the process of conducting transdisciplinary research in partnership with non-academic partners.

To this end, the project utilises the MAP concept as a mechanism by which to provide a range of opportunities throughout the project’s duration, for the involvement of individuals with relevant expertise who are not formally part of the project consortium partners. These ‘moments of engagement’ may have different questions or different purposes for engaging non-academic actors; fundamentally they seek to meaningfully include actors in the development of solutions for AEFS in Europe.

The transdisciplinary approach, embedded in the composition of the consortium partners and the MAPs, aims to strengthen the capacity of the project partners and actors to assess the sustainability of different AEFS, and to prioritise policy intervention needs. Thus, UNISECO’s transdisciplinary approach acknowledges the multiplicity of knowledges and experience that exist both within and external to the academy. This goes beyond research as a process whereby information is ‘extracted’ from participants for use by academic researchers or in which actor groups are merely recipients of scientific knowledge. To build capacity, the approach purposefully seeks, for example, to foster meaningful participation through contributions from actor groups to outputs and delegate power through leadership within research activities.

This approach has been informed by Arnstein’s (1969) seminal work on citizen participation in decision making and that of Bizjak *et al.* (2017) in their consideration of participation in light of the information-rich age of the internet. Arnstein’s typology, a ‘ladder of participation’, includes eight



different mechanisms through which individuals might, or might not, be involved in decision making. These are clustered into three categories based upon the degree of citizen empowerment that can occur, i.e. the extent to which a citizen’s contribution is a substantive one (see Figure 1). The categories move from processes that do not facilitate participation (i.e. non-participation category), through those that Arnstein characterises as steps toward participation yet are often essentially tokenistic. Within this category are activities that aim to inform or consult with the public, or the inclusion of citizens on a committee or board. Arnstein argues that while consulting and inclusion can provide mechanisms through which citizens can voice their interests and concerns, without an essential shift in the balance of power in terms of who is involved in the final decision making, these are merely gestures toward involvement.

Arnstein’s third category of processes includes approaches of partnership, delegation and citizen control, which gradually shift the balance of power towards citizens being more fully embedded in, and responsible for, decisions. This same trajectory is considered within Bizjak *et al.* (2017) in relation to access to information; their scale moves from information as a component of ‘public right to know’ initiatives through to partnership in the final decision. Figure 1 seeks to integrate these two ways of considering participation, highlighting the availability of information in relation to each of the categories of citizen involvement. Information becomes something that is increasingly co-constructed as one moves from non-participation to citizen power. As previously noted, there is an ambition within the UNISECO project to develop capacity toward further empowerment of a range of actor groups in decisions that influence policy, practice and research.

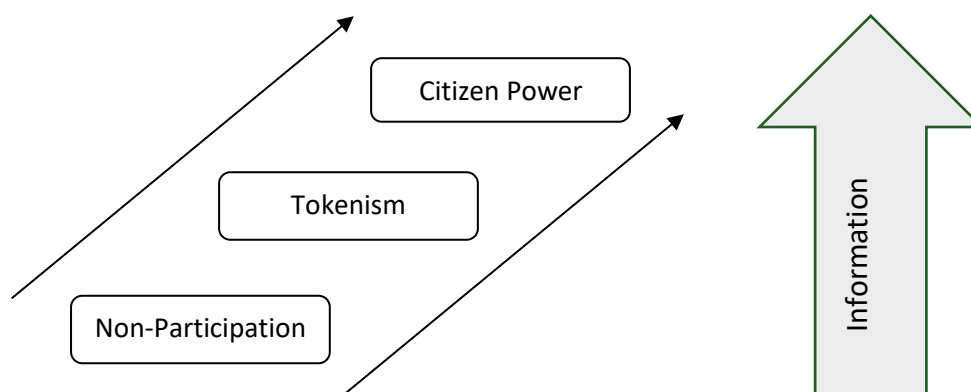


Figure 1. Categories of citizen involvement in decision making processes ranging from less to more citizen empowerment, with an indication of increasing availability of and access to information and the possibility for co-construction of knowledge (modified Arnstein, 1969; Bizjak *et al.*, 2017).

To illustrate these concepts with an example, UNISECO seeks to develop a new transdisciplinary methodological framework, integrating the participatory application of different decision support tools (DSTs) into a Socio-Ecological Systems (SES) framework. This integration aims to enhance the capacity of actors (e.g. farmers, advisors, policy makers) to assess the sustainability of economic, environmental and social synergies, and trade-offs of the implementation of agro-ecological practices. The contextualization of these appraisals through participatory processes facilitates cooperation and knowledge sharing amongst farms, and between farms and other actors, to support economic viability, job creation and the provision of public goods. Note that within UNISECO, the term ‘farm’ is used to capture both farmers and farm households.

3. MAP FRAMEWORK

The UNISECO transdisciplinary framework comprises the two levels of Multi-Actor Platforms (MAPs), one at EU-level and one for each of the 15 case studies, as well as the composition of the consortium

which includes partners from researchers across multiple scientific disciplines (e.g. natural, social) and from non-research organisations (e.g. WWF, ELO, GAN). Key intersection points for co-learning and co-construction of new insights and outputs through participatory processes exist within research and dissemination efforts. The tables and figures in this section (see also Appendices 3 and 4) provide details about the aims, methods and timeframes for engagement, and the anticipated commitment of effort for actors in each of the activities that seek to include individuals at EU and Case Study levels. Collectively, these materials **provide insight to how each activity fits within the wider UNISECO effort for participatory engagement.**

The **UNISECO MAPs** consist of: i) **a single European-level ‘pool’ of individuals**, drawn from across organisations with European or international remits, and individuals with relevant expertise and availability; ii) **15 Case Study-level MAPs, each one associated with a UNISECO case study.** For the Case Study MAPs, the pool of individuals is drawn from those of most relevance for the case study area, thus their frame of reference may be national, regional or farm-level. This structure reflects the levels at which the UNISECO project is working and aims for the creation of impact.

The MAPs are complemented by additional mechanisms through which the project receives feedback and inputs. These include the Project Advisory Group (PAG) made up of individuals with relevant academic expertise, and a Stakeholder Reference Group (SRG) which is comprised of a representative from each of the Case Study MAPs. An important additional strand is that of the engagements that will occur through the involvement of individuals in a single activity, for example the involvement from farms in the farm-level assessment activities in WP3.

This section focuses on the role envisaged for members of the MAPs within the UNISECO research and dissemination activities. As relevant, the PAG, SRG and farm-level WP3 activities are mentioned to illustrate the complementarity amongst the groups of non-consortium partners that are associated with UNISECO. Here consideration is given to issues of remit, functions, and the operational implementation of activities for engagement with the MAPs.

3.1. Remit

The remit for a Multi-Actor Approach (MAA) as envisaged by the EU is to provide more than what a stakeholder advisory board might deliver (e.g. facilitating impact), and to be more than a targeted dissemination mechanism (EIP-Agri, 2017). Within UNISECO, a MAA is incorporated into all stages of the project. At the outset, it was part of the proposal development process (e.g. initial identification of actors and discussion with actors to define research questions and to identify practical implications). Now it is integrated into all phases of research (WPs 2 to 6) and dissemination (WP8). Our approach considers each actor to have a particular perspective or ‘stake’ in the issues that are being investigated through the UNISECO project. It is envisaged that the contribution of a variety of perspectives will strengthen the applicability and impact of findings. Thus, core to the remit of actors associated with UNISECO is to ‘bring these voices to the table’ and not ‘stay neutral’ as might be expected in other situations (e.g. EU-level organisations associated with the support of research project proposals).

Broadly, the involvement of individuals in the MAPs within UNISECO occurs through:

- i) The contribution of different sources of information, knowledge and insight;
- ii) The identification and refinement of specific direction and content for methods and tools;
- iii) Discussion of, and feedback on, intermediate and end-of-project research findings;
- iv) Probing the validity of research outputs;
- v) The co-construction and evaluation of the robustness of management strategies and policy recommendations; and,
- vi) Reflective review of the MAP approach incorporated into UNISECO.

For comparison, the PAG provides advice and input on the central scientific scope and direction of



the UNISECO project. The SRG provides a bridge between the case study and EU levels, offering a forum to promote dialogue and co-learning across the science-policy-practice nexus. The combination of representatives from each Case Study MAP and the built-in 'interaction points' with EU-level MAP and PAG representatives (e.g. at project meetings) affords important opportunities for a flow of knowledge and expertise between levels and across actor groups.

The remit, through the involvement and commitment of individuals in the MAPs (in particular) and in the PAG and SRG, is to:

- maintain awareness of, and provide a bridge to, other knowledge (e.g. practitioner expertise) and groups (e.g. EIP- Agri Operational Groups, H2020 projects) of relevance to UNISECO;
- co-generate and co-develop innovative solutions that focus on the usability of findings that can be applied in practice and adopted by others;
- foster co-ownership of solutions with an aim for wider impact;
- facilitate co-construction of practical knowledge which is easily understandable and accessible; and,
- act as a 'multiplier' of knowledge through the 'cooking' of new knowledge and being actively involved in the whole dissemination process.

3.2. Activity Functions and Methods for Engagement

This sub-section focuses on the types of involvement requested of individuals associated with UNISECO through the project MAPs. Table 1 provides details of the aim of each activity that draws on EU-level MAP members, and Table 2 illustrates the equivalent information for the Case Study MAPs. These are to be read to answer the question of '**why**' we want involvement and '**how**' we will engage with members of the MAPs. Section 4 provides further details for each activity (e.g. types of actors to include, timing, practicalities) as well as specific guidance on the methods for engagement with MAPs.

Questions addressed in this sub-section are:

- What is the purpose of the project activity?
- What type of engagement are we asking from MAP members (e.g. review, evaluation)?
- What method will be used for this engagement?



Table 1. Aim and method for EU-level MAP engagement across UNISECO research and dissemination activities.

Activity ^a	Aim	Method for Engagement
Work Package 2: Socio-Ecological Systems (SES) framework for sustainability assessment of Agro-ecological Farming Systems (AEFS)		
2.2.9	Review and input to proposed UNISECO AEFS typology as to whether the proposed typology effectively captures the more sustainable farming practices and systems in the EU	Written consultation Interactive session in project meeting
2.3.5	Evaluate robustness of selection process for case studies and to validate whether the case studies cover the EU situation in a balanced way	Written consultation Interactive session in project meeting
2.4.3	Discuss and evaluate the advantages, limits, difficulties in applying the SES framework for sustainability assessment of farming systems	Workshop
Work Package 4: Assessment at territorial level		
4.3.4	Co-development of scenario at EU level for exploration of future option space for implementation of different farm level innovations in AEFS	Workshop
4.3.6	Co-review and refine scenario development at EU level	Workshop
Work Package 6: Integrated sustainability assessment, end-user tools and recommendations		
6.1.6	Consultation on prototype plans to gather ideas for the design and functions of the spatially explicit interactive online tool/story maps	Interactive session in project workshop
6.2.5	Validate sustainability assessment for AEFS	Workshop Interactive session in project meeting
6.3.6	Validate spatially explicit interactive online tool	Interactive session in project meeting
6.4.6	Consult on content, structure and function for handbook providing guidelines for planning, assessing and (potentially) carrying out sustainability enhancing agro-ecological practices	Interactive session in project meeting
6.5.5	Co-construction of policy briefs from interim emergent findings as to structure, language and relevance of topic for audience	Interactive session in project meeting Review of draft documents
6.5.8	Co-construction of policy briefs from end-of-project findings as to structure, language and relevance of topic for audience	Interactive session in project meeting Review of draft documents
Work Package 8: Dissemination		
8.3.5 and 8.3.7	Collect material for Agro-ecological Knowledge Hub (AKH), project website and other communications channels (including social media)	Video-recorded short interviews and testimonials

^a Activities ordered numerically within work packages

Table 2. Aim and method for: i) Case Study-level MAP engagement across UNISECO research and dissemination activities, and ii) involvement from farms.

Activity ^a	Aim	Method for Engagement
Work Package 3: Assessment at farm level		
3.1.5	Provide information about the Socio-Ecological System (SES) defined in the case studies (e.g. resource management, outputs of production, actors, interactions between actors, rules agreed and their enforcement, governance, change of arrangements over time)	Interviews or Workshop
3.2.5	Review and input to a set of case study-specific indicators for use in the assessment of socio-economic performance of farms	Interviews or Webinar
3.2.8	Collect data from farms in the case study with the DSTs and explain and validate assessment with participating farms	Interviews or Survey Workshop
3.2.10	Review and verify results of the analysis of DSTs to explore key parameters of uncertainty to assure broad coverage of potential impacts and performance	Focus group or Interviews
3.3.4	Acquire information about drivers and barriers enhancing or hindering implementation of agro-ecological practices	Interviews or Workshop (align with 5.3.6)
3.3.5	Co-create management strategy solutions with the key actors of the case study AEFSS	Focus group or Workshop
3.4.5	Collect information on, and empower users to, better understand environmental, economic and wider socio-economic impacts of farming practices to explore possible alternative practices and the impacts and trade-offs of these alternatives	Workshop
Work Package 5: Governance and policy assessment		
5.2.6	Collect information on key networks in place in each case study, as well as on their potential role of co-managing the market and policy incentives in place. Particular attention will be paid to transaction costs, conflicts, collaboration, partnerships and networks, studying how different actors influence policy agendas and shape contexts in which the decision-making process is developed	Interviews only Interviews plus workshop
5.3.6	Collect information and co-create solutions in order to assess the main strengths and weakness of the policy framework and market mechanisms currently in place; i) how existing market and policy instruments are used in different SES; ii) which innovative approaches have been implemented or experimented; iii) which are the main drivers for policy innovation and the degree to which these are replicable in different situations	Focus group Workshop
5.4.5	Assess the degree of applicability of innovative market and policy incentives designed to promote the innovative management strategies developed through Task 3.3	Interview; Written consultation; Focus group
Work Package 8: Dissemination		
8.3.5 and 8.3.7	Collect material for the AKH ^b , project website and other communications channels (including social media)	Video-recorded short interviews and testimonials

^a Activities ordered numerically within work packages; ^b AKH = Agro-ecological Knowledge Hub

A synthesis of the aims of these activities identifies the specific type of contribution to the UNISECO project that is being asked of members of the MAP through a variety of methods for engagement. These functions for the MAP members include:

- Collecting and providing relevant information;
- Discussion, evaluation and validation of research results;
- Identification of key barriers and drivers for the transition to AEFS;
- Co-construction of management strategies and market and policy incentives to strengthen the sustainability of farming;
- Review and validation of the practice-relevance of methods and tools;
- Identify and promote local initiatives;
- Facilitate innovative practices;
- Evaluation of policy measures and proposals;
- Elaboration and co-creation of scenarios; and,
- Co-construction of innovative strategies to increase sustainability.

3.3. Actor Commitment and Timescale for Engagement

This sub-section provides further details for the operational implementation of the activities, specifically considering the type of actor (e.g. policy, farming representatives) to be involved in each activity, the extent of that involvement (e.g. a 2-hr meeting, a 1-day workshop), and the timing of each multi-actor engagement opportunity that draws upon the MAPs across the UNISECO project. Also incorporated is mention of when activities seek to include individuals from the SRG and PAG, as well as at the farm level (i.e. in WP3). The intention is to **illustrate the timing for, and linked nature of, the activities** in the UNISECO project timeframe **and the scope of involvement**. This is to foster a deeper understanding of when 'hotspots' for engagement will occur, with subsequent implications for demand on MAP members' time, and project partner effort and resource requirements.

Questions addressed in this sub-section include:

- When does each research and dissemination activity occur throughout the project?
- How do these activities relate to one another in time, and what are the implications for implementation (e.g. actor availability, partners' time)?
- What types of actors are relevant for the aim of the project activity?
- How many actors do I need to include in an activity?
- What commitment of time and contribution to the UNISECO project are we asking of actors?
- Are there opportunities to collaborate with other project activities in terms of actor engagement?

Figures 2 and 3 provide an overview of the scale of engagement opportunities that include EU-level MAP, PAG and SRG members (Figure 2), and Case Study MAPs as well as farm level assessments (Figure 3). Engagement is scheduled throughout the project, for example, dissemination activities 8.3.5 and 8.3.7 occur from commencement to project end, with notable 'hotspots' of activities that will both draw upon the pool of actors within each MAP and be resource intensive for partners. For example, during the fourth quarter of 2018 and the first quarter of 2019 four project activities involve individuals from the EU-level MAP pool. There are similarly intensive periods of overlap between activities that will draw upon the Case Study MAPs' pool of individuals which occur in Q1 and Q4 of 2019.



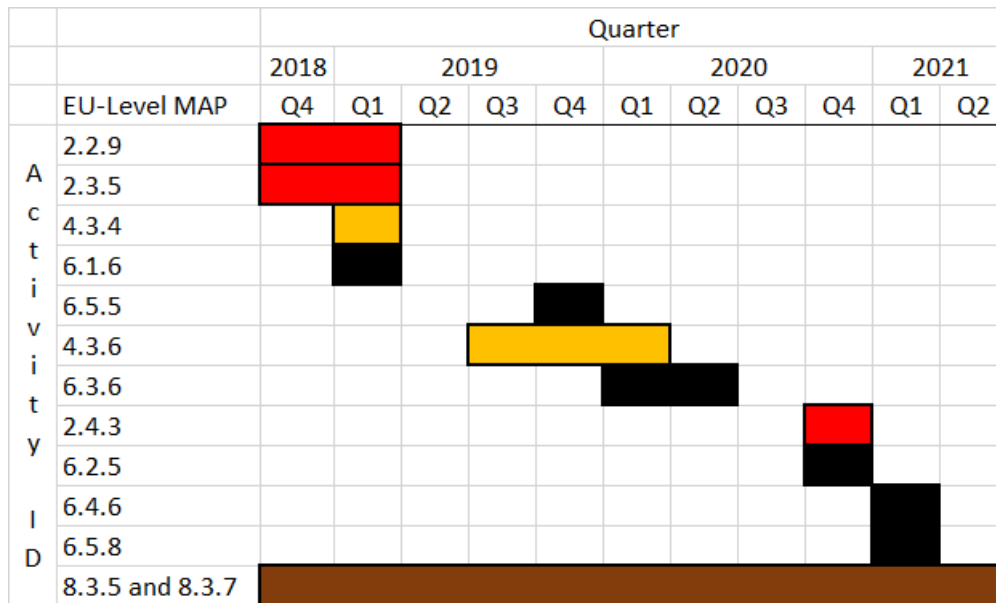


Figure 2. Timetable for involvement of individuals within EU-level MAP, the Stakeholder Reference Group (SRG) and the Project Advisory Group (PAG) in research and dissemination activities. Colours correspond to activities within a given WP which will engage with EU-level MAPs, SRG or PAG: red WP2, orange WP4, black WP6, brown WP8.

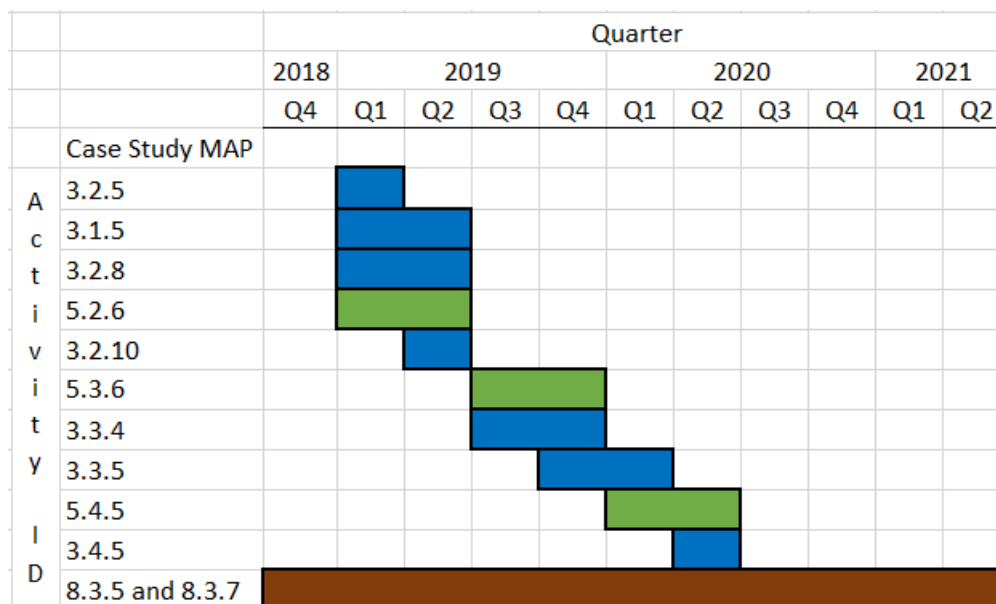


Figure 3. Timetable for involvement of individuals within Case Study MAP and involvement from farms in research and dissemination activities. Colours correspond to activities within a given WP which will engage with Case Study MAPs or farms: blue WP3, green WPs, brown WP8.

Tables 3 and 4 provide, for each activity, an in-depth look at the anticipated: i) type of actor group to be involved; ii) number of individuals sought to be included; and iii) commitment for involvement in the activity. Table 3 focuses on activities that draw upon EU-level MAP members, SRG and PAG, and Table 4 details this for activities associated with Case Study MAPs and the farm-level activity within WP3. Mentions have been included of relevant actors who are not members of a MAP to indicate the ‘interaction points’ where issues, knowledge and experience from other sources can be integrated into the UNISECO system.

Table 3. Activities that draw on EU-level MAPs, the Stakeholder Reference Group (SRG) and the Project Advisory Group (PAG), ordered by timepoint in project.

Activity	Timing ^a	Type of Participant	Number of Participants	Anticipated Commitment
2.2.9	Q4 2018 to Q1 2019	Good practical knowledge and experience of Agro-ecological Farming Systems (AEFS) practices and farming systems in Europe	5 people minimum	Review summary materials and respond to 3 review questions Contribute to discussion at project seminar
2.3.5	Q4 2018 to Q1 2019	Good practical knowledge and experience of AEFS practices and farming systems in Europe	5 people minimum	Review summary materials and respond to 3 review questions or Contribute to discussion at project seminar
4.3.4	Q1 2019 to Q2 2019	Food system actors, e.g. different types of farmer organisations, retailers, food industry, consumer and animal welfare organisations, environmental NGO	10 to 15 people	Review background material Attend half-day workshop
6.1.6	Q1 2019	Individuals with a stake in agro-ecological farming and sustainability assessment	10 to 15 people	Review background material Attend interactive workshop session
6.5.5	Q4 2019	Policy makers and practitioners	5 to 10 people	Attend interactive session in project meeting Provide reviews of draft briefs
4.3.6	Q3 2019 to Q1 2020	Preferably the same individuals who attended first workshop (Activity 4.3.4)	10 to 15 people	Review background material Attend half-day workshop
6.3.6	Q1 2020 to Q2 2020	Individuals with a stake in agro-ecological farming and sustainability assessment	10 to 15 people	Review background material Interactive session at project meeting
2.4.3	Q4 2020	Individuals selected based on skills, interest and availability	10 to 15 people	Review background material Attend half-day workshop or Interactive session at project meeting
6.2.5	Q4 2020	Individuals with a stake in agro-ecological farming and sustainability assessment	10 to 15 people	Review background material Attend half-day workshop or Interactive session at project meeting

Activity	Timing ^a	Type of Participant	Number of Participants	Anticipated Commitment
6.4.6	Q1 2021	Individuals with a stake in sustainability assessment, e.g. EC, organisations and representatives of advisors, extension agents, farms, other land managers, consumers and food and drink industry, environmental and animal welfare organisation	15 to 20 people	Review draft handbook Attend Interactive session in project meeting
6.5.8	Q1 2021	Policy makers and practitioners	5 to 10 people	Attend interactive session in project meeting Provide reviews of draft briefs
8.3.5 and 8.3.7	All Qs	Anyone in EU-level MAP, SRG, PAG or other EU-level actors (e.g. EU Communication officers including EIP-AGRI) who has taken part in a UNISECO research activity	10 to 40 in total (including those done with case study participants)	Provide 1 to 3 min interview/testimonial; Review edited version for comment, modification, publication. For example, multiple short segments might be compiled for a longer synoptic video about the project

^a Q=Quarter. For further details on time within the quarter, see D1.1 – Project Management Plan (Schwarz *et al.*, 2018)

Table 4. Activities that draw on Case Study MAPs, ordered by timepoint in project. This includes the farm-level assessments (Activity 3.2.8, WP3) which involves farms who may not be part of Case Study MAPs.

Activity	Timing ^a	Type of Participant ^b	Number of Participants	Anticipated Commitment
3.2.5	Q4 2018 to Q1 2019	Case Study MAPs (e.g. administration members, extension officers) and selected farms	3-5 people	Attend 1 hr Interview or Webinar
3.1.5	Q1 2019 to Q2 2019	Multiple actor groups e.g. farms, advisors, local community members/consumers, processors, government representatives, NGOs, retailers, cooperative members at case study level and individuals involved in the wider policy arena	5 to 10 farms plus 5 to 10 from other relevant actors	Attend 1 to 3 hr interview or attend half-day workshop
3.2.8	Q1 2019 to Q2 2019	Farms selected for social, environmental and economic performance assessment	8 to 12 farms	Preliminary preparation Host one day farm visit from researcher Half-day workshop

Activity	Timing ^a	Type of Participant ^b	Number of Participants	Anticipated Commitment
5.2.6	Q1 2019 to Q2 2019	Farmers associations, farm advisory services, environmental NGOs, local administrations, leaders of initiatives under study (e.g. cooperatives, nature conservation agencies, local association, certification bodies, food system actors); drawn from Case Study MAPs, possibly involving some new participants	Option 1: minimum 8 people Option 2: minimum 5 (interview + workshop) + 5 (workshop)	Preliminary preparation Option 1: 1.5 hr interview Option 2: 1.5 hr interview + 1-day workshop, Or 1-day workshop
3.2.10	Q2 2019	Case Study MAPs and selected farms	3 to 5 people	1 hr interview Or 1 to 2 hr group discussion
5.3.6	Q3 2019 to Q4 2019	Local / regional representatives from minimum 5 key groups: public, production, industry, consumers, experts. Additional groups to consider: distributors, NGOs, trainers/educators, universities / technical centres, certification bodies	10-15 per workshop	Review background material Attend half-day small group discussion or workshop
3.3.4	Q3 2019 to Q4 2019	Key actors from across the value chain; selection informed by case study context and findings from Tasks 3.1 and 5.2	5 to 15 people	Attend 1 hr interview or Attend half-day workshop
3.3.5	Q4 2019 to Q1 2020	Different value chain actors. e.g. farms or farming representatives, producer groups, rural women's associations, advisors, processors, regional marketing initiatives, regional ministry or government offices, communal policy actors, public administrations and authorities, nature protection associations, local interest groups, consumer associations, other land managers (forest, peat, energy and construction) and scientists	Approximately 10 (8 to 12) per focus group or Approximately 15 (13 to 20) per workshop	Review advance material Attend two 2 to 3 hr focus groups or Attend half-day workshop
5.4.5	Q1 2020 to Q2 2020	Farmers, consultants, processors, retailers, consumer's associations, certification bodies, policy makers with both national and case study level perspective (from Case Study MAP and possibly with some new participants)	About 10 (7 to 13) at both levels, i.e. Approximately 20 in total	Attend 1 hr interview or Complete written consultation or Attend 2 hr focus group

Activity	Timing ^a	Type of Participant ^b	Number of Participants	Anticipated Commitment
3.4.5	Q2 2020	Farmers and advisors who applied the DSTs to their farm	10 to 12 (including workshop facilitators)	Attend half to 1-day workshop
8.3.5 and 8.3.7	All Qs	Anyone in Case Study MAPs or other case study actors who has taken part in a UNISECO research activity	10 to 40 in total (including those done with EU-level MAPs, SRG, PAG)	Provide 1 to 3 min interview/testimonial; Review edited version for comment, modification, publication. For example, multiple short segments might be compiled for a longer synoptic video about the project

^a Q=Quarter. For further details on time within the quarter, see D1.1, Project Management Plan (Schwarz *et al.*, 2018). ^b Unless specified, the term ‘farm’ is used to encompass farmers and farm household.

To **reduce participant burden**, i.e. the risk of ‘actor fatigue’, as well as to lessen the potential for project partner overload, the following should be considered:

- Are there opportunities for activities to be combined or coordinated? For example, a single workshop could provide an opportunity for engagement by the same set of actors to participate in multiple activities on a single day.
- Is it possible to replace more time-consuming workshop activities with individual interviews or by a less-time consuming webinar (e.g. a webinar would reduce travel time)?
- Which type of actor groups will be needed for different activities that occur during the same time period? And, is there scope to improve the distribution of opportunities for involvement across a wider set of individuals?
- Are there opportunities to ‘extend’ involvement beyond the pool of individuals within the MAP? For example, incorporating an interactive session at another project-related event that includes individuals not associated with a MAP?
- Can the timeframe for an activity be shifted either earlier or later than was originally scheduled in order to reduce the number of activities occurring within a given time period?
- Should an intended participatory engagement mechanism be modified due, for example, to actor or venue availability, time constraints, etc.?
- Can we avoid busy times of year when actors have, or are preparing for, other commitments, e.g. harvest time for farms, lead up to holiday period?

To illustrate the above approach, EU-level MAP involvement was envisaged as taking a workshop format for two early-project activities (2.2.9, 2.3.5) for incorporating actor input to, review and evaluation of, a farm typology and the selection of a case study within each partner country. These activities were combined into a single written consultation with the same individuals from the EU-level MAP. This was because of:

- i) the alignment in the time period when the involvement was needed, and the inability to shift these activities to later in the project due to their foundational role within UNISECO; and,
- ii) the synergy between the requested type of engagement (i.e. input, review, evaluation) and the conceptual nature of the activities (i.e. a conceptual typology, a set of criteria based on a conceptual SES framework).

The consultation was complemented by an interactive discussion session incorporated into a project-related seminar with EU-level actors who were not part of the UNISECO EU-level MAP. This facilitated the inclusion of additional inputs. Appendix 2 provides a detailed description of these two activities in relation to the implementation originally intended, and the revised approach based on a review of timescales and MAP member availability.

4. GUIDANCE FOR ENGAGEMENT WITH MAPS

This section provides guidance for engagement with the MAPs at EU and case study levels. Specifically, it discusses **how to design research activities to support the co-construction of knowledge and to facilitate full participation**. It also provides a set of short-term outputs and mid-term outcomes for each activity (Tables 5 and 6) which will facilitate the monitoring and evaluation of the specific activity and the MAP approach being used in UNISECO. The guidance provided is at a broad, high level in order to avoid ‘micro-management’, thereby leaving space for the particularities of each activity, local context, set of participants, etc. The purpose is to ensure a comparability and robustness of implementation across activities with an underpinning set of common aims which include:

- The identification and interpretation of societal expectations using participatory processes with a range of actors (including end users);
- The integration of knowledges across actors in the process of solution development for transitions to AEFS and in sustainability assessments;
- Guiding the efficient planning and implementation of engagement in line with the new General Data Protection Regulation (GDPR) requirements; and,
- Recognising time and labour requirements of MAP engagement.

As a general approach, lead partners for each activity and or task are responsible for providing training and guidance on specific tools incorporated into UNISECO (e.g. DSTs). The role of WP7 is to provide a structure within which engagement with MAP members (as well as PAG and SRG members as relevant) can be developed with a degree of consistency in approach across activities. An organisational structure has been developed to facilitate implementation of the transdisciplinary framework. This ‘transdisciplinarity’ group comprises:

- One “Transdisciplinarity officer” per Work Package;
- One “Transdisciplinarity” liaison per Case Study team.

Preferably this is the same individual acting for both roles although it is recognised that this may not always be feasible. The role of this /these individual(s) is/are to:

- Be the communication point person between WPs, Case Studies and WP7;
- Organize events for engagement as needed; and,
- Report on engagement with MAP members.

Note that for the SRG, which comprises 1 representative from each Case Study MAP, WP1 will work in collaboration with WP7 on its management and functionality, which includes the dissemination of materials and acting as a ‘bridge’ between case study and EU level. WP1 and WP7 will also be responsible for reviewing the effectiveness of interactions with and between members of the SRG to promote dialogue and collaborative learning between science and actors.

4.1. How to Design Activities that Support Co-construction

As detailed in Tables 1 and 2 (Section 3.2), the research activities within UNISECO cover a broad spectrum of qualitative and quantitative methods. This sub-section considers a **core set of issues to be considered** with regard to the implementation of project activities that seek to involve actors in a



meaningful way towards knowledge co-construction. It can be considered a form of ‘protocol’ for thinking through the design of an activity. Figure 4 illustrates a set of decision points associated with each issue, including the types of sub-issues that might be considered for each. For topics that have been introduced in previous sections, indications are provided below:

- i) Purpose of involvement (see Tables 1 and 2, Section 3.2);
- ii) Who to include (see Tables 3 and 4, Section 3.3);
- iii) Format for involvement (see Tables 1 and 2, Section 3.2);
- iv) Spatial and temporal context for the activity;
- v) Information considerations;
- vi) Intended output and outcome.

Each of the following sub-sections provides further discussion of these six topic areas and associated issues for which decisions might need to be made.

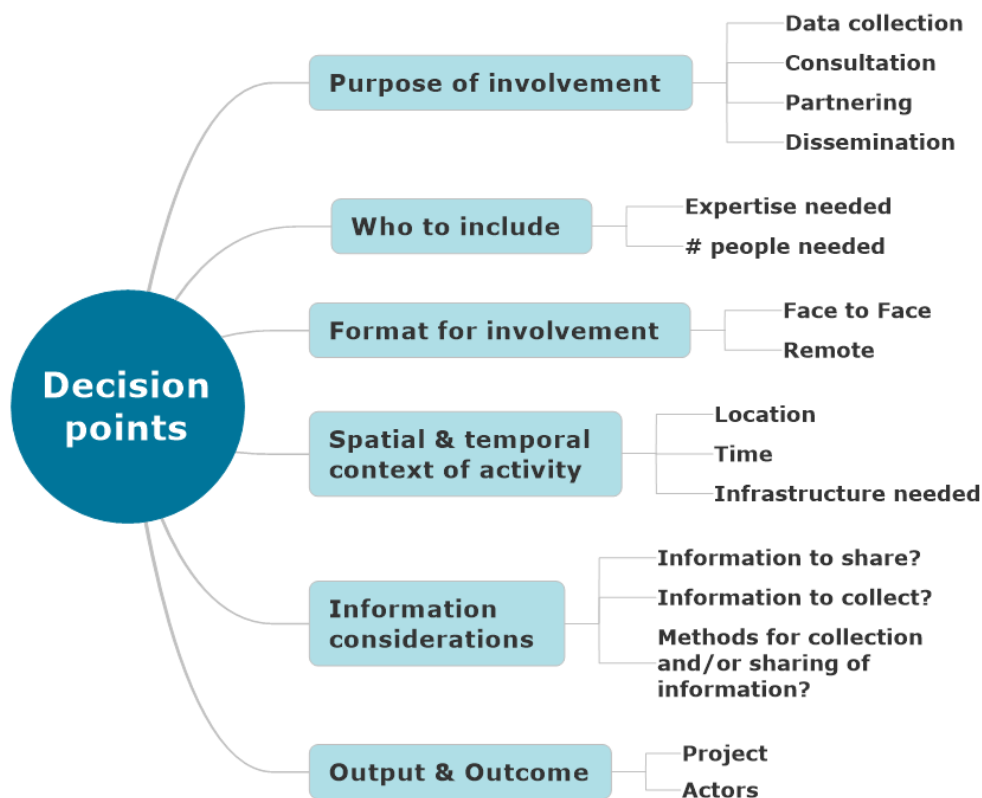


Figure 4. Decision points for stakeholder involvement in UNISECO project activities.

4.1.1. Purpose for involvement

Four different types or categories of involvement will occur across UNISECO’s activities. Figure 5 illustrates the way in which the various contributions from MAP members fit with these categories. It is important to understand the type of involvement being incorporated into a particular activity. It is possible that an activity will include several type(s) of involvement, e.g. collecting information (i.e. data collection) and co-constructing solutions (i.e. partnering). The type(s) of desired involvement for any given activity can be understood by examining the aim of the activity (Tables 1 and 2, Section 3.2), such as seeking stakeholder knowledge about drivers and barriers for the transition to AEFS (e.g. Activity 3.3.4).

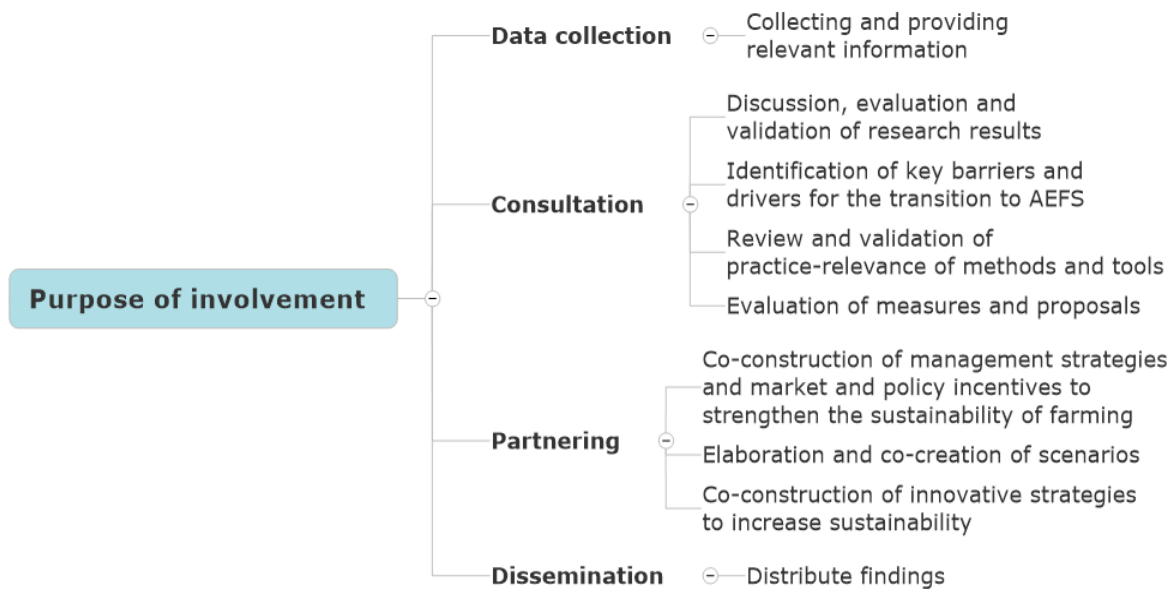


Figure 5. Four ways through which MAPs will be involved with example contributions to be made by actors.

Select a mechanism for engagement that matches the purpose of the project activity. In most instances this has been specified in the Grant Agreement (No. 773901), and Project Management Plan (D1.1; Schwarz *et al.*, 2018) and further elaborated in Tables 1 and 2. Where there is flexibility in the choice of mechanism, but it is unclear as to the purpose of an activity or why a particular method for engagement has been selected, advice should be sought from the Task leader, activity leader or someone within WP1 or WP7.

Importantly, within each activity there should be strong consideration of how actors will benefit from the activity. Such benefits will be reflected in the outputs and outcomes that have been identified for all activities for both the UNISECO project itself as well as the actors (Tables 6 and 7). There may be other, more context specific, benefits, for example at the case study scale.

In addition to reviewing Tables 1 and 2, consider the following:

- Set clear goals for the activity;
- Identify benefits for involvement; and,
- Communicate goals to participants and highlight their benefits from the engagement.

4.1.2. Who to include

Tables 3 and 4 provide guidance on both the type of actor group that is considered most relevant to the activity and the number of individuals to include (minimum and maximum). Figure 6 illustrates the broad set of issues associated with the UNISECO activities with respect to the type of actors to include. For example, when considering expertise, it is critical to consider the range of expertise that exists, e.g. ‘practical’ expertise (e.g. farmers and other practitioners) and regulatory (e.g. public administrators) and scientific (e.g. scientists).

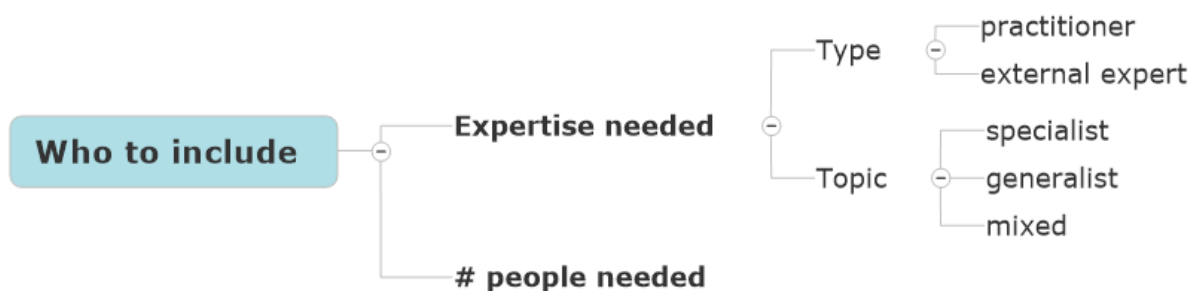


Figure 6. Decision points with regard to which actor groups and individuals to include in an activity.

Based on these considerations, the following set of guiding questions can be used to facilitate refinement of who to invite to participate from a particular actor group:

- What are the objectives of the activity? Another way of thinking about this question is ‘what are the intended outputs and outcomes of the activity’?
- Who has the relevant knowledge, experience, and insight to contribute? The ‘who’ might change over time.
- Who is particularly well connected and could play a crucial role when it comes to networking and mediating (e.g. between actors with different stances)?
- Who might be able to provide the richest insight and information possible?
- Who is available to contribute?
- What are the benefits of involvement for the MAP member or other individual?
- How can the involvement benefit actors (e.g. farms) and what incentive can be provided to them?

4.1.3. Format for Involvement

Decisions need to be made about whether engagement will be face-to-face or at a distance (referred to as ‘remote’). For example, interviews can be done in person (e.g. a farmer’s home) or remotely (e.g. by phone). Often, decisions will be driven by the purpose of the activity, the proposed method (e.g. focus group), and the time constraints of both potential participants and the ‘lead time’ for the partner(s) who is to implement the activity. For example, if an intended purpose of an activity is to develop a shared understanding across different sectors of policy mechanisms to support AEFS, then a face-to-face group-based type of contact might be more appropriate than individual face-to-face interviews or via a remote mechanism such as an online survey.

The choice of the type of contact might also be driven by the number of actors to be included or the topic to be discussed. If there are only a few individuals of relevance, and the topic would benefit from deliberation as a group, consider using a focus group, a discussion session incorporated into an existing meeting (e.g. UNISECO project meeting), or the use of an appropriate tool (e.g. Webex) that enables people to be seen and heard even when located in geographically dispersed locations. If a topic is particularly contentious or would benefit from detailed, in-depth discussion, a one-to-one format conducted either remotely or in-person might enable views to be shared more fully.

Figure 7 provides a visual summary of these decision points. See Section 4.2 for additional considerations with respect to activities that have been structured for face-to-face interaction, and Sub-section 4.1.5 for issues relating to the type of information that might be required for these different formats for contact.

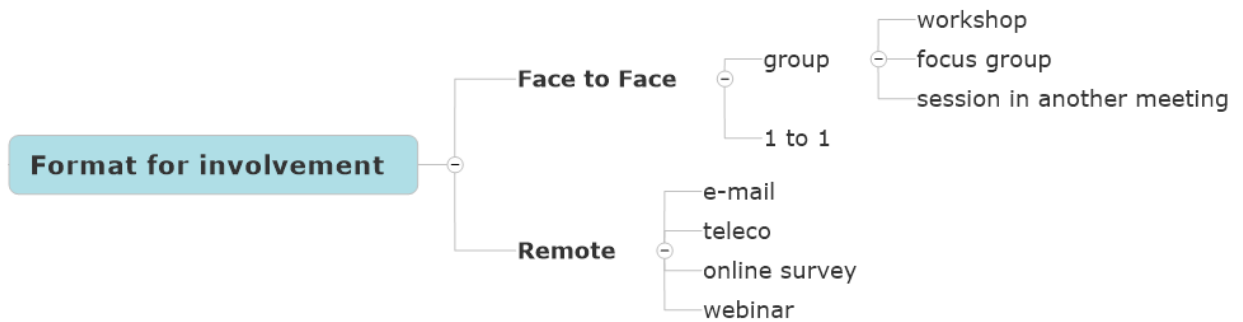


Figure 7. Decision topics to consider with regard to format for involvement in UNISECO activities.

4.1.4. Spatial and Temporal context of activity location

Figure 8 visually highlights the issues for consideration in terms of where and when an activity might take place as well as a non-exhaustive list of ‘infrastructure’ related topics to think through for implementation. Alongside these decisions, factor in the time and budget that might be necessary to arrange an activity; for example, how far in advance does a venue need to be booked? What extra cost might be incurred to obtain necessary ‘infrastructure’ or to cover the cost of attendance?

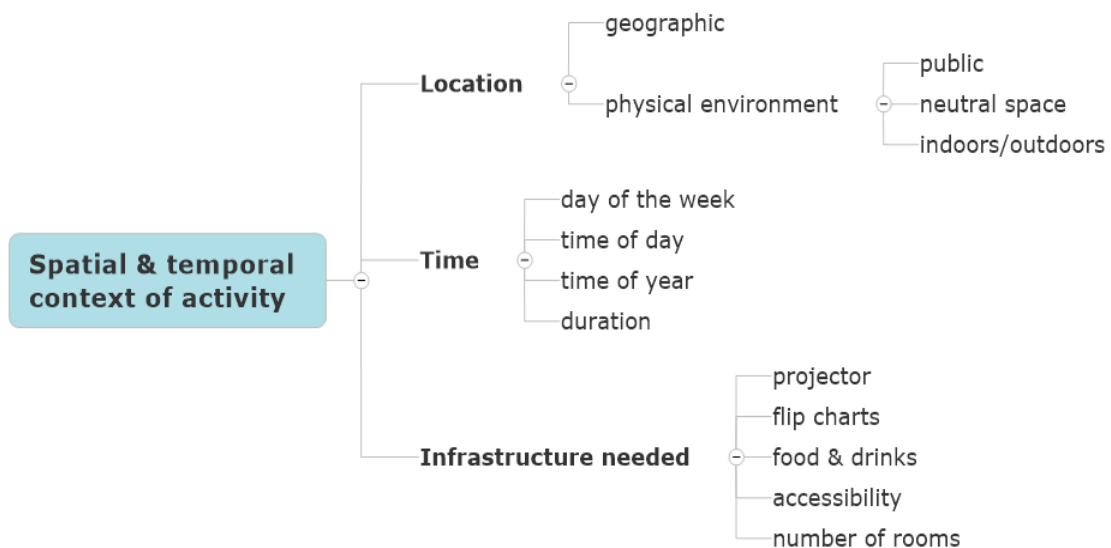


Figure 8. Decision considerations in relation to geographic location and timing of UNISECO activities that seek to involve actors.

Location includes not only where, geographically an activity occurs, for example in close proximity to, or equidistant from where the majority of attendees might be travelling from or easily accessible by public transport, but also considerations of the physical venue in which the activity is to be held. For example, conducting a face-to-face interview in a familiar setting (e.g. an individual’s office) can help address risk (e.g. adheres to health and safety requirements), increase comfort (e.g. the location is set out in a way suitable to the interviewer); holding a workshop in a location that is not affiliated with any of the attendees (e.g. a local community hall, a hotel, a country’s or region’s EU representation and office) can help reassure attendees that no one particular ‘agenda’ is considered more important than another. Using ‘neutral’ spaces are useful ways to ‘set the tone’ of an activity as one where all ‘voices’ are welcomed which may help facilitate open discussion.

The selection of a location could also be determined by the availability of certain infrastructure (food/coffee

break, projector, flip charts) and accessibility (e.g. for people in wheelchairs). Additionally, it is critical to consider timing for meetings and interaction, seasonal as well as time of day and week may impact attendance. For example, the weeks just prior to a holiday period may be a time when fewer people are available due to commitments being met before going on leave.

4.1.5. Information considerations

The flow and content of information can play a critical role in facilitating meaningful engagement with actors and the possibility for co-construction of new knowledge. Figure 9 structures the informational considerations relating to the UNISECO activities by use of three key questions, each of which is discussed in further detail in this sub-section. As a general principle, information should be thought of in terms of the UNISECO project, the activity, and the participants. It will be important that partners have a generally good knowledge of different steps and interactions/integration of results between the WPs within UNISECO. Crucially, do not underestimate the amount of time it takes to prepare and distribute materials that can facilitate engagement.

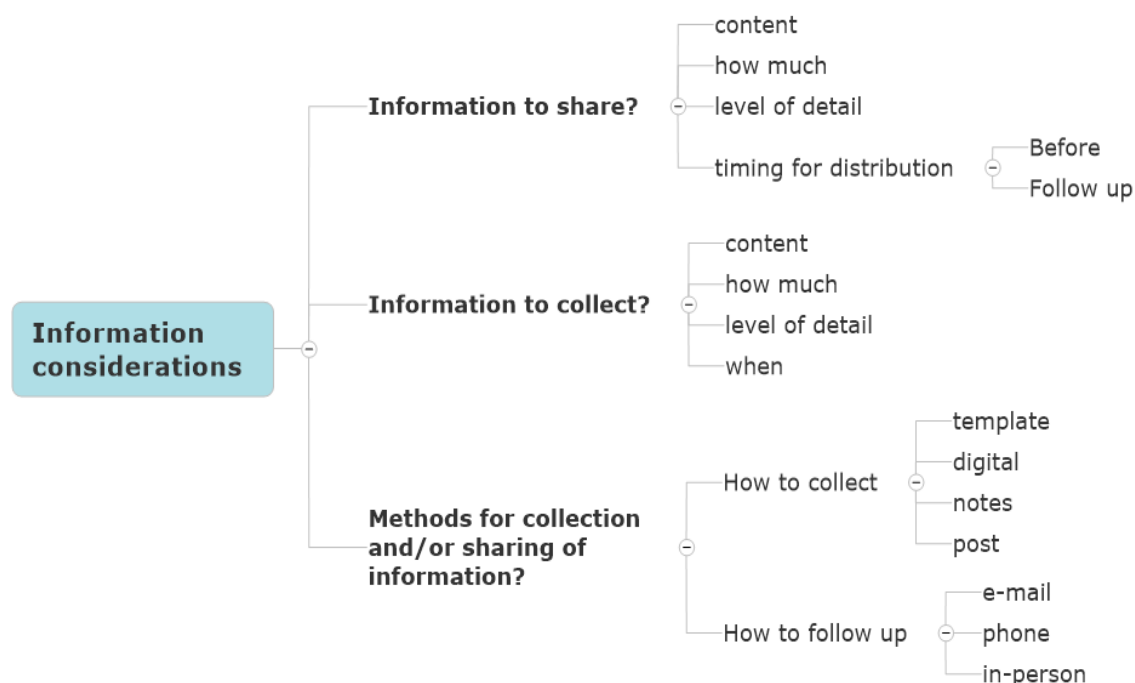


Figure 9. Issues in relation to informational needs in relation to facilitating engagement and co-construction of knowledge within UNISECO activities.

Information to share? Relevant issues to think through include ‘what’, ‘how much’, ‘what level of detail’ and ‘when’. As a general rule, all activities should be placed within the context of the UNISECO project, e.g. what the project is about and how the activity ‘fits’ within the broader project in terms of its contribution. Several documents have already been developed that provide a general description of the project which can be adapted (see Deliverables D7.1; Budniok *et al.*, 2018; and D9.4; Miller *et al.*, 2018a, e.g. Participant Information Sheet) as needed. The Tables and Figures within this deliverable provide insight to individual activities and their relationships. Given the multiple opportunities for involvement that the MAP members have over the course of the UNISECO project, it is likely that more background information about the project will be required for early activities; by the time of later activities, actors who have contributed to multiple activities may have a greater familiarity with the project thus less background information will be required. However, it should be kept in mind that at any given point in time there may be an individual (or several) in an

activity who have contributed less frequently thus a project-related overview should be provided within each ‘moment of engagement’.

Additional ‘project-related’ information to consider incorporating includes: i) what will happen next regarding information that has been generated at the activity? ii) what other opportunities are there are for involvement in UNISECO? and iii) when these will happen? This type of information will help actors further understand the goal and effort of their contribution. It might also be motivation to be involved in other activities.

With regard to the activity itself, do actors need to read and review material before contributing or is their involvement an ‘on the spot’ reaction to material provided as part of the activity? Consider what level of preparation is needed and plan accordingly, both in terms of material developed (e.g. a pre-workshop template to complete prior to meeting to discuss policy drivers) and the time it will take to prepare such material. Additionally, actors will be experts in their own right, e.g. of a particular policy process or farming practice. Their area of expertise may differ from that of the individual who is running the activity. It is thus important to think about how much information needs to be provided so that they can understand the situation and contribute meaningfully whilst not being overwhelmed, either by a level of detail or ‘technical jargon’. Similarly, is there information that actors can provide which would be useful in advance or at an activity to facilitate fruitful discussion at a workshop? In addition, it is important to ensure that the researcher carrying out the engagement (e.g. interviews with farmers) is familiar with the specifics of the topic and issues of discussion and analysis (e.g. specific production systems and farm management issues), and understands the wider context (e.g. the socio-economic and political case study context of a farm).

Given our interest in involving individuals from the MAPs in multiple activities over the duration of the project, at a minimum, follow up with a timely ‘thank you’ immediately after the activity. Consider whether there is scope to provide a summary of a workshop or synthesis of findings, or whether there is scope to involve the participants in the interpretation of findings. Be clear about when participants will receive outputs from a workshop (e.g. workshop report) or when findings will be available.

Information to collect? A similar set of issues are relevant for the collection of information, i.e. ‘what’, ‘how much’, ‘what level of detail’ and ‘when’. With regard to the UNISECO project, there will be evaluative information to collect; for example, about the exchange (e.g. input for improvement of engagement methods in the future) and an assessment of whether outputs and outcomes were achieved (e.g. validation of collected data (see Section 4.3 and D7.3, Smyrniotopoulou *et al.*, in preparation). Information to be collected in relation to the activity will vary by activity. As a general principle, focus on that which is core and essential rather than succumbing to the temptation to collect details that are not necessary for achieving the purpose intended. Sometimes ‘less can be more’ with regard to creating spaces for co-learning and co-creation of knowledge. If considerable detail is required, are there opportunities to source information over multiple stages of engagement? Always adhere to the approaches to which UNISECO has committed of the ethics relating to the collection of personal data (D9.1; Miller and Schwarz, 2018).

What methods to use for collection / sharing and processing of information? Options include an audio recorder, notes on a flip chart, Post-it notes, and notetaking done longhand in a researcher’s notebook or on a laptop. What will be required to process information collected to make it useable for analysis? For example, if an interview is audio recorded, does it need to be transcribed in advance of analysis or will you analyse while listening back to the recording? (do you require ethical clearance and written consent by the participant for such a recording?). If you are sharing information in advance, how will this be provided, for example, if you are sending information by email, do all participants have email access? Will the files be sized to be able to be transmitted by email? Is there any sensitive information that should not be transferred by email? Consider GDPR guidelines for the holding and sharing of personal data (e.g. participants names being shared with one another prior to event; for more information on the protection of personal data see Deliverable D9.1, Miller and



Schwarz, 2018).

4.1.6. Intended outputs and outcomes

As illustrated in Figure 4, UNISECO-related activities are intending to have outputs and outcomes that are relevant for the project itself and for participants. For the purposes of UNISECO, outputs are considered short term and relatively immediate, e.g. the ‘thing’ that is created immediately at the end of the activity. Outcomes are a mid-term result; it is the ‘thing’ (e.g. change, achievement) that occurred as a result of the activity which could be several months or longer after the time the activity took place. The outputs and outcomes might be process-related (e.g. willingness to participate in subsequent activities) or tangible (e.g. a co-constructed handbook). These will be valuable for the monitoring and evaluation element of UNISECO, and for the development of clear goals of and expectations from the activity as well as for individuals who take part in the activity. As noted elsewhere, allow enough time and resource to develop clear outputs and outcomes and to incorporate monitoring and evaluation into the activities.

Tables 5 and 6 provide an initial set of outputs and outcomes for each activity associated with the EU-level MAP (Table 5) and the Case Study MAPs (Table 6). These will be refined by the lead partner for each activity and or Task as part of the implementation process and development of any guidance and training.

Table 5. Preliminary set of outputs and outcomes for activities in which EU-level MAP members will be involved. Activities structured by timepoint in the project.

Activity ID	Output: UNISECO, Actor	Outcome: UNISECO, Actor
2.2.9	UNISECO: Comments on AEFS typology. Actors: Increased awareness of UNISECO project.	UNISECO: Revised AEFS typology. Actors: Increased engagement with UNISECO project.
2.3.5	UNISECO: Comments on case study selection. Actors: Increased awareness of UNISECO project.	UNISECO: Revised and agreed case study selection with good coverage of key AEFS characteristics and the diversity of EU farming. Actors: Increased engagement with UNISECO project.
4.3.4	UNISECO: Input to first scenario development for use in modelling of upscaling of farm level innovations, with a focus on scenarios that are interesting and relevant to stakeholders. Actors: Contributed to normative decisions that influence scenario(s) for use in modelling analysis.	UNISECO: Improved understanding of scenarios of future EU farming systems to investigate which are of interest and relevance to stakeholders, and what variables are important to include. Actors: Improved understanding of what UNISECO modelling frameworks can deliver; engagement in, and influence of, scenarios that will be investigated i.e. sense of ownership of scenarios. Willingness to participate in 2 nd workshop.

6.1.6	<p>UNISECO: Input to prototype development and planning.</p> <p>Actors: Contributed to design and functions of the spatially explicit online tool.</p>	<p>UNISECO: Prototype tool with practice and policy relevant key functions. Improved understanding of required key functions for different target groups.</p> <p>Actors: Increased engagement with UNISECO project and better understanding of the use and benefits of UNISECO results.</p>
6.5.5	<p>UNISECO: Revised content, validation of format and topics for briefs.</p> <p>Actors: Better understanding of interlinkages of interim findings from UNISECO; Contributed to identification of relevant topics for different target groups.</p>	<p>UNISECO and Actors: A set of co-developed briefs for distribution to target groups.</p>
4.3.6	<p>UNISECO: Input for revisions to develop final set of scenarios.</p> <p>Actors: Contributed to fine-tuning scenario(s) for use in modelling analysis.</p>	<p>UNISECO and Actors: A set of well-grounded scenarios useful for stakeholders in policy development and advocacy that outline outcomes from different futures of EU agriculture.</p>
6.3.6	<p>UNISECO: Revised content for and validation of structure and function of spatially explicit online tool.</p> <p>Actors: Contributed to final version of spatially explicit online tool.</p>	<p>UNISECO: Final tool available on the AKH for use by target groups.</p> <p>Actors: Ability to use tool in practice for advice on sustainability impacts of agro-ecological farming at farm and territorial level.</p>
2.4.3	<p>UNISECO: Revisions identified for SES framework for sustainability assessment of farming systems.</p> <p>Actors: Shared knowledge and experience to improve SES framework.</p>	<p>UNISECO: Propose a stakeholder-informed and validated theoretical and methodological SES framework for sustainability assessment of farming systems available for use by others.</p> <p>Actors: Access to SES framework for sustainability assessment of farming system.</p>
6.2.5	<p>UNISECO: Revisions identified for the synthesis of sustainability assessment of AEFS.</p> <p>Actors: Contributed to final sustainability assessment.</p>	<p>UNISECO: Synthesis of the integrated sustainability assessment of AEFS at farm and territorial level.</p> <p>Actors: Ability to use the sustainability assessment.</p>
6.4.6	<p>UNISECO: Revised content for and validation of structure and function of handbook.</p> <p>Actors: Contributed to final version of handbook. Obtain guidance on use of the handbook.</p>	<p>UNISECO: Final handbook distributed to relevant individuals.</p> <p>Actors: Ability to use the handbook in practice.</p>

6.5.8	<p>UNISECO: Revised content, validation of format and topics for briefs based on end-of-project findings.</p> <p>Actors: Increased understanding of UNISECO findings; Contribution to identification of relevant topics for different target groups.</p>	<p>UNISECO and Actors: A set of co-developed briefs about end-of-project findings for distribution to target groups.</p>
8.3.5, 8.3.7	<p>UNISECO: Material for Agro-ecological Knowledge Hub (AKH), communication media.</p> <p>Actors: Unique opportunity to support research topic and communicate messages to a wide range of target audiences.</p>	<p>UNISECO: Reach a wide array of target audiences through high quality implementation of UNISECO communication-dissemination strategy.</p> <p>Actors: Raise profile of UNISECO project and further interest amongst target audiences.</p>

Table 6. Preliminary set of output and outcomes for activities in which Case Study MAP members will be involved. Activities structured by timepoint in the project.

Activity ID	Output: UNISECO, Actors	Outcome: UNISECO, Actors
3.2.5	<p>UNISECO: Acquire information for new indicators.</p> <p>Actors: Contributed to normative decisions that influence DST application within case study setting.</p>	<p>UNISECO: New indicators for DST application.</p> <p>Actors: Capacity expanded for use of DSTs.</p>
3.1.5	<p>UNISECO: Data about the farming systems and factors of systems transition.</p> <p>Actors: Availability of aggregate data/information on the farming system as a source of learning.</p>	<p>UNISECO: Insight into the dynamics and factors of successful transition from conventional farming systems to Agro-ecological Farming Systems (AEFS) as an input to the preparation of recommendations</p> <p>Actors: Insights of participants to roles of different actors in transition to AEFS</p>
5.2.6	<p>UNISECO: Input for development of overview of governance structure in each case study. Increased understanding of complexity and diversity of roles and views in relation to agro-ecological transition pathways.</p> <p>Actors: Increased understanding of their role in the networks, their relationships with other actors, and any missing links/actors and challenges to be faced regarding local governance. Development of a shared understanding in relation to agro-ecological challenge(s) of the area.</p>	<p>UNISECO: Overview of governance structures involved in addressing (agro-ecological) challenge(s) in each case study, and more generally the role of different actors in shaping the agro-ecological transition.</p> <p>Actors: Improved understanding of each other's networks and views which could facilitate the design and implementation of (collective) actions to bring about desired changes.</p>

3.2.8	<p>UNISECO: Data available to assess the environmental, social and economic performance of conventional and agro-ecological farms in each case study.</p> <p>Actors: Contributed to an encompassing performance assessment of their own farms.</p>	<p>UNISECO: Performance assessments of selected case study farms as a basis to assess trade-offs of the co-constructed management strategies and incentives in Task 3.4.</p> <p>Actors: Improved understanding of the sustainability performance of their farms.</p>
3.2.10	<p>UNISECO: Better contextualisation / validation of DST results to inform WP4 modelling.</p> <p>Actors: Contributed to normative decisions that influence modelling analysis.</p>	<p>UNISECO: Information on which types of sensitivity analysis to do in the models.</p> <p>Actors: “Ownership” of modelling exercises, in particular regarding how to explore uncertainty.</p>
5.3.6	<p>UNISECO: Input on how existing market/policy instruments are used, what innovative approaches have been tried, and what drives innovation.</p> <p>Actors: Contributed to development of deeper understanding of governance context of the case study.</p>	<p>UNISECO: Synthesis of understanding of policy factors enhancing or limiting conversion to AEFS at local scale.</p> <p>Actors: Receive feedback on the results from workshop.</p>
3.3.4	<p>UNISECO: Evidence base of economic, social and ecological drivers and barriers for involvement and cooperation of value chain actors in AEFS.</p> <p>Actors: Opportunity to share, learn and gain experience on cooperation in AEFS and to shape future management strategies.</p>	<p>UNISECO: Improved understanding of drivers and barriers of AEFS.</p> <p>Actors: Improved understanding of drivers and barriers to more sustainable farming systems.</p>
3.3.5	<p>UNISECO: Farm systems studies from which to develop future management strategies.</p> <p>Actors: Opportunity to shape future management strategies.</p>	<p>UNISECO: Improved understanding of strategies of agro-ecological farming. Findings feed into Task 5.4 (Activity 5.4.5).</p> <p>Actors: Co-developed set of future management strategies addressing those barriers and promoting collective actions in AEFS.</p>
5.4.5	<p>UNISECO: Completed templates from Multi-Attribute Assessment exercise for use as data for input into multi-criteria assessment analysis.</p> <p>Actors: Identification of the criteria to assess innovative market and policy incentives which were adapted most (given the case study context).</p>	<p>UNISECO: A set of innovative market and policy incentives. An analysis of the impact of these incentives on performance of agro-ecological systems. Results feed into Activity 3.5.3 and 3.5.4 along with the story maps co-constructed in WP6.</p> <p>Actors: Learning from the comparison of MAA results amongst different case study MAPs could be useful for stakeholders.</p>

3.4.5	<p>UNISECO: Obtain data to run the DSTs. Opportunity to observe social learning among farmers / advisors.</p> <p>Actors: Interactions with other similar farmers/advisors; quantification of climate and water footprint of their farms (and see what the farms of peers are like); gain understanding of which activities / components of their business have the largest / smallest climate and water footprint. This will allow participants to explore alternative practices to reduce these footprints.</p>	<p>UNISECO: Develop a richer understanding of real-world constraints and opportunities for transition to agro-ecological farming to inform whole project as it develops.</p> <p>Actors: Gain better understanding of what works and where for AEFS; be able to implement more AE techniques on their own farm, with a quantified assessment of likely environmental, economic and wider socio-economic outcomes.</p>
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4.2. Facilitating Full Participation and Contribution to Co-construction

This sub-section considers ways to engage with actors to facilitate full participation and contribution to co-construction opportunities. These could be considered as a set of ‘rules of engagement’. As conveners and coordinators of the project activities which will often include actors from a wide range of areas and with different knowledges, **it is our responsibility to create settings that are ‘supportive’ of co-learning and co-construction across multiple knowledges**. The development of such ‘climates’ for fruitful discussion and exchange depends on both ‘hard’ (e.g. venue for an activity) and ‘soft’ (e.g. facilitation skills) infrastructure.

4.2.1. General Principles for Engagement

Table 7 contains a set of principles to inform the implementation of activities that involve actors from the EU-level and Case Study MAPs and, more broadly, the UNISECO transdisciplinary process as a whole. The principles will inform the operation and management of the MAP, providing a reference to which to refer if problems arise.

Table 7. Principles for engagement across disciplinary and sector boundaries within the UNISECO project with particularly application to implementation of the MAPs.

Principle	Description
Respect	Multi-Actor Platforms have the explicit aim of bringing together what could be considered as divergent or disparate voices in order to share knowledge in all its forms. Respect one another and treat each other with decency regardless of differences of opinion.
Sharing	Actors are invited to join Multi-Actor Platforms because they have been recognised as having a relevant contribution to make. Encourage opinions to be shared and let everyone know their contribution is valued.
Listening	Respect that each person has a contribution to make to the topic of the activity, and listen to the opinions of each another. A facilitator will intervene in situations where people are speaking over one another.
Attention	Being part of a Multi-Actor Platform is a participatory process. When the MAP meets, give full attention to the topic being addressed. In so far as possible, be “in the moment” and limit distractions from mobile phones, emails, etc.

Teamwork	Some participatory methods which will be used in facilitating the group will require teamwork. Participate in activities in a meaningful and ‘whole-hearted’ way.
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The UNISECO project team respect and value the commitments which will be made by the members of the MAPs. The information sheet provided to prospective members of the MAPs sets out the aims of co-construction of knowledge, participation (e.g. pseudoanonymity and confidentiality) the expectations of individuals who are part of the ‘pool of actors’ associated with each MAP and associated rights (Deliverable D9.4, Ethics: Human Requirements; Miller *et al.*, 2018a). Rights to outputs and issues of intellectual property are governed by Article 26 of the Grant Agreement (No. 773901).

In line with the UNISECO Principles set out in Table 5, the project team recognise that members may make contributions which lead to the development of a specific output (e.g. scientific paper). The guideline applied will be that where an idea, concept or finding has been developed by an individual or a group, the origin of that idea/concept/finding will be appropriately acknowledged in relevant publications. Or, if the relevant researcher or research team believe the contribution to be sufficiently significant then individuals may be invited to participate in the exploitation of intellectual property in the form of co-authorship of a scientific output (e.g. paper or report).

As members of a MAP, they will have access to draft materials (e.g. advance copies of reports on which to comment). Rights of use of such materials will be considered on a case-by-case basis to ensure the creation of impact and uptake of findings without compromising the integrity of the project or rights of beneficiaries.

It is recognised that when bringing together individuals with different perspectives, experiences and roles that there can be differences of opinion and potential ‘power’ dynamics present. There are, for example, competing claims and views over whom should have agency in the enactment of governance that determines the state of the farming system (or its transition). It is feasible that conflicting opinions might inhibit constructive discussion or that some individuals could ‘dominate the airspace’ such that their views prevail. For some actors it could be one of the few times they were ‘in the same room’ with members of the other actor groups which may create a ‘sense of uncertainty’ or uncertain dynamic. This can be particularly true during focus groups and workshops.

While the principles outlined in Table 5 are one way toward addressing such situations by ‘setting the tone’ for the activity, some specific ‘tips’ for **managing the human dynamics associated with participatory processes** are provided below:

- Ensure the actors know who is going to be involved in the MAP and whom they are therefore going to work with so that there are no surprises (e.g. farmer knowing that nature conservation people are going to be there)
- Be alert to what is said and to body language (e.g. someone sitting back in their chair could indicate lack of engagement) and behaviour patterns (e.g. side conversations between individuals during a focus group discussion)
- Include approaches that allow individuals to think on their own before sharing, such as ‘think-pair-share’ whereby every participant takes a few minutes for thinking about their own opinion or suggestion before sharing with another person and then to plenary
- Start conversations by asking different people to ‘start off’ a discussion so as to avoid the same person(s) speaking first
- Decide the rules in cases of totally opposing assessments
 - Option 1. Report all assessments
 - Option 2. Seek consensus by asking opposite opinions to present their case and then ask for a second round of assessment.
 - Option 3. Seek consensus by synthesis made by the facilitator

4.2.2. Implementation ‘Tips’

This sub-section provides several ‘checklists’ of issues questions to consider for various types of engagement methods. Insight has been drawn from sources such as books on research design and methods (e.g. Robson and McCartan, 2016), guidance from other European projects (e.g. SPIRAL), organisations that seek to involve citizens in decision making (e.g. INVOLVE) and expertise gained through experience.

Generic considerations for any engagement activity

- Remember to thank people for participating
- Review the purpose of workshop, focus group, interview in terms of the contribution it makes to UNISECO
- Explain the purpose and use of results to participants, highlight data protection issues and make sure consent is obtained from each participant as needed (using the UNISECO consent forms available on the extranet; for further guidance see D9.4, Ethics: Human Requirements; Miller *et al.*, 2018a)
- Set clear goals in relation to intended output and outcome
- Set clear goals for working together and communicate these (see Table 5)
- Ensure fair participation of all attendees in any group-focused activity; if participants are not allowed opportunities and time to contribute by others who tend to monopolise the time, then the UNISECO partner will need to intervene
- Set the tone for the activity
- Remain neutral and practice ‘active’ listening
- Incorporate a variety of ways in which people can engage with the topic, e.g. plenary discussion, paired problem solving, small group work, and role play, all of which should inform the aim and intended output and outcome for the activity
- Select the time keeper to keep things on track (e.g. a participant, the meeting chair, the facilitator)
- There may be cases where there is a need for an expert who can be consulted by participants e.g. technical issues concerning farming practices or policy measures implemented/available. If there is no expertise on that within the team, then it should be sought
- When an evaluation is taking place, UNISECO should be impartial
- Appoint someone to take notes, write up the report.

Venue Selection Consideration [These are relevant for group-focused activities. It is worth reviewing them for implementation of a face-to-face interview.]

- For group-focused activities, try to use a ‘neutral’ location, e.g. town, building, i.e. a location that is not associated with any one stakeholder group. Examples include: social or cultural centre, town hall, hotel meeting room. A neutral space can help reduce potential influence of power dynamics among stakeholders.
- Find a location that is conveniently located for participants, e.g. for a workshop, select a place that is equidistant for most stakeholders; for a face-to-face interview, consider their office or farm.
- Ensure compliance with all regulations on health and safety, in line with the UNISECO Deliverable D9.3, Ethics: Ethics Position Questionnaire, Health and Safety; Miller *et al.*, 2018b), contacting the named individual responsible for health and safety if appropriate.
- As relevant, ensure the method / tool (e.g. DST) will operate in the venue.
- ‘Hard’ (practical) issues to consider include:
 - Internet connection, wifi, projector, screen, and other technological facilities to facilitate



- presentations, information searches, etc.
- Movability of furniture, e.g. can the configuration of the table and chairs be modified to facilitate small group work in addition to plenary discussion
- Size of room, e.g. it is spacious enough to allow for both plenary and small group working
- Can you 'tack' things to the wall, e.g. post-it notes, flipchart paper
- 'Tools' for participatory engagement that can help the dynamics of the interaction, e.g. flip chart stands and paper, Post-it notes, voice recorder, picture camera, markers, sticky dots, coloured paper, etc.
- Access to and placement for refreshments such as tea, coffee, snack, lunch (consider sourcing, e.g. local, ecolabel)
- Check any dietary requirement for participants (e.g. vegan, vegetarian, gluten free).
- Handouts, printouts – are these needed? The recommendation is to bring what you need rather than rely on availability of a printer on site
- 'Soft' issues to consider include:
 - Aesthetics of the room and views
 - Lighting, e.g. natural light, brightness
 - If relying on screens for display of information, ensure lighting is appropriate
 - Noise, both the acoustics of the room as well as noise from external to the room. This has implications for not only interaction during the activity but also for quality of recording of meetings if voice recorder is being used.

Question Development and Implementation

- How 'open' or 'closed' do you want questions to be?
 - Open-ended questions allow participants to provide their opinion rather than responding to a 'yes' or 'no' question (e.g. 'what are your thoughts on X')
 - Use closed-ended or directed questions to steer the discussion in a specific direction
- Start with neutral questions to facilitate initial discussion and an atmosphere of respect
- Limit the content of each question to a single idea; this avoids confusion
- Avoid 'leading' questions, i.e. questions which suggest a particular answer
- Do not assume answers; if you are not clear about a response, ask for clarification
- Try to get all participants to answer the questions, even introducing rounds.

Specific Methods

- Focus Groups
 - 6 to 8 people is a manageable number; as many as 10 to 12 is feasible
 - Determine if you want to have single or mixed sector stakeholders; plan accordingly
 - If you have resources, have two people involved in running the focus group, one to facilitate and one to take notes and think about logistics. This second person can also be useful for observing group dynamics within the group.
- Workshops
 - 10 to 30 people allows for good small group breakout sessions. Fewer people is more like a focus group. More people may feel like a small conference
 - Consider whether the stakeholder attending should be mixed or single (this would be informed by the purpose of the activity)
 - If you have sufficient resources, have two or more people available to run the workshop. This is particularly useful if you are incorporating small group activities so that there can be a facilitator with each small group



- For small group work, designate who will take notes, and who will report back to plenary
- Be very clear on the goal of the workshop and the role of the participants, and communicate this clearly
- Plan the workshop in detail, in particular plenary and small-group sessions (e.g. who will be in each group, etc.).
- Interviews
 - Develop a ‘check list’ (often called an ‘interview schedule’) of questions to be asked during the interview
 - Be very familiar with the interview schedule. This will facilitate a conversational style
 - Start with a set of neutral questions.

4.3. Processes and Mechanisms for Feedback and Evaluation

UNISECO is committed to a genuine transdisciplinary process, reflected in the composition of the consortium comprising stakeholder and scientific partners, and the emphasis on multi-actor engagement, with the two levels of MAPs (EU and case studies) playing a central role to structure such involvement. Throughout the activities of the UNISECO project there are multiple opportunities for shared and co-constructed learning that can help build citizen and other partner capacity for collaborative working. An important dimension for the evaluative component to UNISECO will be to understand how this occurred, i.e. to evaluate the processes through which UNISECO sought to foster meaningful and constructive multi-actor engagement, as well as to understand whether it occurred. This approach reflects the generally accepted knowledge that evaluation after a project has completed is insufficient and the increasing emphasis on process evaluations, i.e. ongoing assessment during the research process.

Regular reviews of the multi-actor involvement (including reasons for, and hesitation to) and the effectiveness of the activities involving the MAPs will be undertaken by members of the MAPs and UNISECO project partners. Regular reviews of the transdisciplinary approach will be done at project meetings, together with the updates on the multi-actor involvement. While methods and metrics for the evaluation of both the processes and outcomes of transdisciplinary research are still emerging, there is a general sense that both qualitative and quantitative evidence is useful. Methods might include self-assessment via a post-activity feedback survey, brief interviews, reflective discussions at project meetings to identify and learn from successful, and less successful, experiences. As necessary, this ongoing feedback will be used to adapt the approach if and when required. Experiences in the transdisciplinary research of UNISECO will be exchanged with other EU projects and through active dissemination to the scientific community (international conferences, Open Access journals). Further details for the evaluation framework will be provided in D7.3 (Report on assessment of transdisciplinary tools and methods; Smyrniotopoulou *et al.*, in preparation). Further details on the dissemination and communication plan is provided in D8.1 (Communication, Dissemination and Impact Strategy and Plan; Balázs *et al.*, 2018).

4.4. Selected Resources

The following WWW sites provide good sources of additional information and guidance relevant to the purpose, planning and running of MAPs.

- www.designkit.org/methods
- https://ec.europa.eu/eip/agriculture/sites/agri-eip/files/eip-agri_brochure_multi-actor_projects_2017_en_web.pdf
- www.invo.org.uk/
- Briefing notes for researchers (INVOLVE) www.invo.org.uk/wp-



content/uploads/2014/11/9938_INVOLVE_Briefing_Notes_WEB.pdf

- Spiral project handbook (Young *et al.*, 2013) www.spiral-project.eu/sites/default/files/The-SPIRAL-handbook-website.pdf
- Synthesis report SPIRAL (Young *et al.*, 2013) www.spiral-project.eu/sites/default/files/Synthesis-Report_web.pdf

5. CONCLUSIONS

The UNISECO project is a transdisciplinary research project addressing ‘wicked problems’ that combine environmental, economic and social challenges. Alongside the need to develop robust, integrative science that ‘cuts across’ disciplines, is the concomitant need for processes and guidance that facilitate involvement of actors from non-academic organisations in the development of new knowledge. The guidance in this report aims to ensure good practice for the development and implementation of activities that seek to include actors from across sectors and practice to inform the project’s research and dissemination activities. While the guidance has been compiled for research within the context of the EU H2020 Multi-Actor Approach for involvement of actors from non-academic organisations in EU agricultural research and innovation, the principles and suggested practices can be considered transferable to other research and settings.

6. ACKNOWLEDGEMENTS

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APPENDIX 1. MAP ENGAGEMENT ACTIVITY TEMPLATE

UNISECO MAP Engagement Template

Clarification Questions for WP7 Transdisciplinarity Framework

As part of the guidance for transdisciplinarity, the following questions are provided to facilitate the development of a more detailed description of what you want to do, and how you plan to design the interaction and engagement with actors. These questions are to foster greater understanding across the project of our engagement with actors and will inform the final UNISECO Guide to Transdisciplinarity for Partners (D7.2).

Please consider the following questions in as much details as possible.

Purpose for Engagement

1. What is (are) the purpose(s) of this activity for: (i) UNISECO, and (ii) MAP members. For example, to acquire information/data, to build capacity/empower others through training, to co-create a solution with practitioner(s)?

People / Participants

2. Please specify the type of individual actors (i.e. specific target group(s)) you want to involve in the activity (e.g. farms, advisors, etc.). The more specific you can be, the more likely the interaction will be useful for both UNISECO and MAP members.
3. Please provide a range for the number of people you want to involve in the activity (minimum and maximum number of people you plan to participate in the activity).

Process / Approach / Method

4. Please specify the method/tool you want to use, or will be most appropriate, for your purpose (e.g. focus group, interviews, workshop).
5. Please specify whether a specific procedure/format/structure needs to be followed exactly by partners, or whether partners can modify and be flexible how they do the activity.
6. Please specify whether partners need to be trained before they can undertake the specific activity.

Practicalities

7. Please specify if there is a requirement for a particular venue/location at which the activity should take place (e.g. at the farm, conference room, etc.).

Outputs and Outcome

8. Please specify the intended Outputs and Outcome for: (i) the UNISECO project, and (ii) MAP members.

Outputs: short-term time frame (e.g. directly as a result of the activity)

Outcomes: mid-term time frame; it is the 'thing' (e.g. change, achievement) that occurred as a result of the activity. For example: Project Outcome – increased awareness of the project.



APPENDIX 2. MAP ENGAGEMENT ACTIVITY 2.2.9 AND 2.3.5 – EU-LEVEL MAP EARLY PROJECT EXAMPLE

UNISECO MAP Engagement Tasks 2.2 & 2.3

Clarification Questions for WP7 Transdisciplinarity Framework

As part of the guidance for transdisciplinarity, the following questions are provided to facilitate the development of a more detailed description of what you want to do, and how you plan to design the interaction and engagement with actors. These questions are to foster greater understanding across the project of our engagement with actors and will inform the final UNISECO Guide to Transdisciplinarity for Partners (D7.2).

Please consider the following questions in as much details as possible with respect to the following UNISECO Tasks and Activities:

Task	Activity	Task Contact Person	Description	Lead Partner(s)	Start and End Date ^a
Task 2.2	2.2.9	Inge Aalders	Consultation with EU-level MAPs on farming systems and agro-ecological approaches, inventory and typology	Task Leader HUT	1 Nov-31 Dec 2018 1 Dec 2018 to 31 Jan 2019
Task 2.3	2.3.5	Jaroslav Prazan	Complete identification of case studies (involving EU-level MAP) and synthesise case study inventory	Task Leader UZEI	1 Nov-31 Dec 2018 1 Dec 2018 to 31 Jan 2019

^a original timescale for implementation modified due to availability of EU-level MAP; strikethrough indicates original dates

Purpose for Engagement

1. What is (are) the purpose(s) for this activity for (i) UNISECO and (ii) MAP members. For example, to acquire information/data, to build capacity/empower others through training, to co-create a solution with practitioner?

Activity 2.2.9

- i) Purpose for UNISECO: The purpose of the engagement is to review with key actors at EU-level whether the proposed Agro-Ecological Farming Systems (AEFS) typology effectively captures the more sustainable farming practices and systems in the EU. The developed AEFS typology should be logical and provide a meaningful link to the typologies used in other projects. The aim of the activity is to engage the EU-level MAP members, and use their expertise, in the process of finalising the typology, to simplify the complexity of the UNISECO project in a clear, robust and flexible way.
- ii) Purpose for EU-level MAP members: With the EU-level MAP, we want to explore whether the proposed typology can be effective in capturing information about sustainable farming practices and systems in EU.

Activity 2.3.5

- (i) Purpose for UNISECO: A substantial part of the UNISECO research is based on case studies – one case study per partner country. Therefore, the purpose of the engagement is to evaluate the robustness of the selection process for the case studies and to validate whether the case studies cover the EU situation in a balanced way.. The intended



outcome is to have good coverage of key characteristics of AEFS across the case studies, reflecting the diversity of the situation in Europe. The basis for the case study selection process should be well documented and justified. The case study selection is being co-constructed, after using consultations within partner countries.

- (ii) Purpose for EU-level MAP members: Based upon the suggestions of EU-level MAP members, there is an opportunity for a final assessment of the research needs, the opinions of local actors, and to modify decisions on the final selection of case studies. This process will raise awareness of UNISECO among members of the EU-level MAP, and provides an opportunity for them to start to engage with the project.

People / Participants

2. Please specify the type of individual actors (i.e. specific target group(s)) you want to involve in the activity (e.g. farmers, advisors, etc.). The more specific you can be, the more likely the interaction will be useful for both UNISECO and MAP members.

Actors with a good practical knowledge and experience of AEFS practices and farming systems in Europe. They should be capable of: i) reviewing, modifying and helping to finalise the AEFS typology; and ii) assessing the proposed set of case studies (one per partner country) regarding coverage in terms of key characteristics of AEFS and the diversity of farming within the EU.

3. Please provide a range for the number of people you want to involve in the activity (minimum and maximum number of people you plan to participate in the activity).

We have agreed that, given the short timescale, approximately 5 people would be sufficient for this consultation.

Process / Approach / Method

4. Please specify the method/tool you want to use, or will be most appropriate, for your purpose (e.g. focus group, interviews, workshop).

A workshop format was the preferred option for this activity with MAP members. However, due to the tight schedule, we modified the preferred format to a written review approach. Two separate summary documents were prepared, one describing the AEFS typology, one describing the case studies. These were circulated along with three review questions via email to EU-level MAP members. These individuals were asked to review the documents and respond to the three review questions. Additional e-mail exchange occurred as needed. We have taken advantage of an opportunity provided by a project-related seminar with EC-level actors who were not part of the UNISECO EU-level MAP. An interactive discussion session was incorporated into the seminar through which participation by attendees provided additional input.

5. Please specify whether a specific procedure/format/structure needs to be followed exactly by partners, or whether partners can modify and be flexible how they do the activity.

The original plan was to hold a one-off workshop with members of the EU-level MAP, meaning that partners did not require to run workshops. This plan has been changed to a written consultation and email exchanges with EU-level MAP members, providing summative information sheets about both the typology and case study selection accompanied by a few, open questions to which actors were asked to respond.

6. Please specify whether partners need to be trained before they can undertake the specific activity.

No needs identified.

Practicalities

7. Please specify if there is a requirement for a particular venue/location at which the activity



should take place (e.g. at the farm, conference room, etc.).

Given the change in the format we no longer require a meeting room which could accommodate interactive activities ('Post-its' or mindmaps) to modify the draft typology and add examples of agro-ecological practices or the data projector that would have help with discussion of the case study selection process.

Outputs and Outcome

8. Please specify the intended outcome for: (i) the UNISECO project, and (ii) MAP members.

Activity 2.2.9 – Typology

Output:

UNISECO: comments on the AEFS typology

Actors: increased awareness of the UNISECO project

Outcome:

UNISECO: revised AEFS typology

Actors: increased engagement with the UNISECO project

Activity 2.3.5 – Case study selection

Output:

UNISECO: comments on the AEFS typology

Actors: increased awareness of the UNISECO project

Outcome:

UNISECO: revised and agreed case study selection with good coverage of key AEFS characteristics and the diversity of EU farming

Actors: increased engagement with the UNISECO project



APPENDIX 3. EU MAP ACTIVITIES COMBINED

Activity	Timing ^a	Aim	Type of Participant	Number of Participants	Method & Anticipated Commitment
2.2.9	Q4 2018 to Q1 2019	Review and input to proposed UNISECO AEFS typology as to whether the proposed typology effectively captures the more sustainable farming practices and systems in the EU	Good practical knowledge and experience of AEFS practices and farming systems in Europe	5 people minimum	Review summary materials and respond to 3 review questions Contribute to discussion at project seminar
2.3.5	Q4 2018 to Q1 2019	Evaluate robustness of selection process for case studies and to validate whether the case studies cover the EU situation in a balanced way	Good practical knowledge and experience of AEFS practices and farming systems in Europe	5 people minimum	Review summary materials and respond to 3 review questions Contribute to discussion at project seminar
4.3.4	Q1 2019 to Q2 2019	Co-development of scenario at EU level for exploration of future option space for implementation of different farm level innovations in AEFS	Food system actors, e.g. different types of farmer organisations, retailers, food industry, consumer and animal welfare organisations, environmental NGO	10 to 15 people	Review background material Attend half-day workshop
6.1.6	Q1 2019	Consultation on prototype plans to gather ideas for the design and functions of the spatially explicit interactive online tool/story maps	Individuals with a stake in agro-ecological farming and sustainability assessment	10 to 15 people	Review background material Attend interactive workshop session
6.5.5	Q4 2019	Co-construction of briefs from interim emergent findings as to structure, language and relevance of topic for audience	Policy makers and practitioners	5 to 10 people	Attend interactive session in project meeting Provide reviews of draft briefs



Activity	Timing ^a	Aim	Type of Participant	Number of Participants	Method & Anticipated Commitment
4.3.6	Q3 2019 to Q1 2020	Co-review and refine scenario development at EU level	Preferably same individuals who attended first workshop (Activity 4.3.4)	10 to 15 people	Review background material Attend half-day workshop
6.3.6	Q1 2020 to Q2 2020	Validate spatially explicit interactive online tool	Individuals with a stake in agro-ecological farming and sustainability assessment	10 to 15 people	Review background material Interactive session at project meeting
2.4.3	Q4 2020	Discuss and evaluate the advantages, limits, difficulties in applying the SES framework for sustainability assessment of farming systems	Individuals selected based on skills, interest and availability	10 to 15 people	Review background material Attend half-day workshop or Interactive session at project meeting
6.2.5	Q4 2020	Validate sustainability assessment for AEFS	Individuals with a stake in agro-ecological farming and sustainability assessment	10 to 15 people	Review background material Attend half-day workshop or Interactive session at project meeting
6.4.6	Q1 2021	Consult on content, structure and function for handbook providing guidelines for planning, assessing and (potentially) carrying out sustainability enhancing agro-ecological practices	Individuals with a stake in sustainability assessment (e.g. EC, organisations and representatives of advisors, extension agents, farms, other land managers, consumers and food and drink industry, environmental and animal welfare organisation)	15 to 20 people	Review draft handbook Attend Interactive session in project meeting

Activity	Timing ^a	Aim	Type of Participant	Number of Participants	Method & Anticipated Commitment
6.5.8	Q1 2021	Co-construction of briefs from end-of-project findings as to structure, language and relevance of topic for audience	Policy makers and practitioners	5 to 10 people	Attend interactive session in project meeting Provide reviews of draft briefs
8.3.5 & 8.3.7	All Qs	Collect material for Acro-ecological Knowledge Hub (AKH), project website and other communications channels (including social media)	Anyone in EU-level MAP, SRG, PAG or other EU-level stakeholder (e.g. EU COM officers including EIP-AGRI) who has taken part in a UNISECO research activity	10 to 40 in total (including those done with case study participants)	Provide 1 to 3 min interview/testimonial; Review edited version for comment, modification, publication. For example, multiple short segments might be compiled for a longer synoptic video about the project

^a Q=Quarter.



APPENDIX 4. CASE STUDY MAP ACTIVITIES AND FARM-LEVEL ASSESSMENT COMBINED

Activity	Timing ^a	Aim	Type of Participant ^b	Number of Participants	Method & Anticipated Commitment
3.2.5	Q4 2018 to Q1 2019	Review and input to a set of case study-specific indicators for use in assessment of socio-economic performance of farms	Case Study MAPs (e.g. administration members, extension officers) and selected farms	3 to 5 people	Attend 1 hr Interview or Webinar
3.1.5	Q1 2019 to Q2 2019	Provide information about the Socio-Ecological System (SES) defined in the case studies (e.g. resource management, outputs of production, actors, interactions between actors, rules agreed and their enforcement, governance, change of arrangements over time)	Multiple stakeholder groups e.g. farms, advisors, local community members/consumers, processors, government representatives, NGOs, retailers, cooperative members at case study level and individuals involved in the wider policy arena	5 to 10 farms plus 5 to 10 other relevant actors	Attend 1 to 3 hr interview or attend half-day workshop
3.2.8	Q1 2019 to Q2 2019	Collect data from farms in the case study with the Decision Support Tools (DSTs) and explain and validate assessment with participating farms	Farms selected for social, environmental and economic performance assessment	8 to 12 farms	Preliminary preparation Host one day farm visit from researcher Half-day workshop



Activity	Timing ^a	Aim	Type of Participant ^b	Number of Participants	Method & Anticipated Commitment
5.2.6	Q1 2019 to Q2 2019	Collect information on key networks in place in each case study, as well as on their potential role of co-managing the market and policy incentives in place. Particular attention will be paid to transaction costs, conflicts, collaboration, partnerships and networks, studying how different actors influence policy agendas and shape contexts in which the decision-making process is developed	Farmers associations, farming advisory services, environmental NGOs, local administrations, leaders of initiatives under study (e.g. cooperatives, nature conservation agencies, local association, certification bodies, food system actors); drawn from Case Study MAPs, possibly involving some new participants	Option 1: minimum 8 people Option 2: minimum 5 (interview + workshop) + 5 (workshop)	Preliminary preparation Option 1: 1.5 hr interview Option 2: 1.5 hr interview + 1-day workshop, Or 1-day workshop
3.2.10	Q2 2019	Review and verify results of the analysis of DSTs to explore key parameters of uncertainty to assure broad coverage of potential impacts and performance	Case Study MAPs and selected farms	3 to 5 people	1 hr interview or 1 to 2 hr group discussion
5.3.6	Q3 2019 to Q4 2019	Collect information and co-create solutions in order to assess the main strengths and weakness of the policy framework and market mechanisms currently in place; i) how existing market and policy instruments are used in different SES; ii) which innovative approaches have been implemented or experimented; iii) which are the main drivers for policy innovation and the degree to which these are replicable in different situations	Local / regional representatives from minimum 5 key groups: public, production, industry, end-users, experts. Additional groups to consider: distributors, NGOs, trainers/educators, universities / technical centres, certification bodies	10 to 15 people per workshop	Review background material Attend half-day small group discussion or workshop

Activity	Timing ^a	Aim	Type of Participant ^b	Number of Participants	Method & Anticipated Commitment
3.3.4	Q3 2019 to Q4 2019	Acquire information about drivers and barriers enhancing or hindering implementation of agro-ecological practices	Key actors from across the value chain; selection informed by case study context and findings from Tasks 3.1 and 5.2	5 to 15 people	Attend 1 hr interview or Attend half-day workshop
3.3.5	Q3 2019 to Q4 2019	Co-create management strategy solutions with the key actors and stakeholders of the case study AEFs	Different value chain actors. e.g. farms or farming representatives, producer groups, rural women's associations, advisors, processors, regional marketing initiatives, regional ministry or government offices, communal policy actors, public administrations and authorities, nature protection associations, local interest groups, consumer associations, other land managers (forest, peat, energy and construction) and scientists	Approximately 10 (8 to 12) per focus group or Approximately 15 (13 to 20) per workshop	Review advance material Attend two 2 to 3 hr focus groups or Attend half-day workshop



Activity	Timing ^a	Aim	Type of Participant ^b	Number of Participants	Method & Anticipated Commitment
5.4.5	Q1 2020 to Q2 2020	Assess the degree of applicability of innovative market and policy incentives designed to promote the innovative management strategies developed through Task 3.3	Farmers, consultants, processors, retailers, consumer's associations, certification bodies, policy makers with both national and case study level perspective (from Case Study MAP and possibly with some new participants)	About 10 (7 to 13) at both levels, i.e. Approximately 20 in total	Attend 1 hr interview or Complete written consultation or Attend 2-hr focus group
3.4.5	Q2 2020	Collect information on, and empower users to, better understand environmental, economic and wider socio-economic impacts of farming practices to explore possible alternative practices and the impacts of these alternatives	Farmers and advisors who applied the DSTs to their farm	10 to 12 (including workshop facilitators)	Attend half to 1-day workshop
8.3.5 & 8.3.7	All Qs	Collect material for the Agro-ecological Knowledge Hub, project website and other communications channels (including social media)	Anyone in Case Study MAP or other case study stakeholder who has taken part in a UNISECO research activity	10 to 40 in total (including those done with EU-level MAPs, SRG, PAG)	Provide 1 to 3 min interview/testimonial; Review edited version for comment, modification, publication. For example, multiple short segments might be compiled for a longer synoptic video about the project

^a Q=Quarter. For further detail on time within the quarter, see D1.1, Project Management Plan (Schwarz *et al.*, 2018). ^b Unless specified, we use the term 'farm' to encompass farmers and farm household



APPENDIX 5. LIST OF CASE STUDY CONTACTS

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