Re-Livestock
RESILIENT FARMING SYSTEMS

Milestone 2
Facilitator Training Completed

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Contents

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Project Number:	101059609
Project:	Re-Livestock - Facilitating Innovations for Resilient Livestock Farming Systems
Duration:	60 months
Start date of Project:	1 September 2022
Project management:	CSIC - AGENCIA ESTATAL CONSEJO SUPERIOR DE INVESTIGACIONES CIENTIFICAS
Milestone:	**2**
Due date:	**31 Dec 2022**
Actual submission date:	**06 Feb 2023**
Work package:	**WP1**
Leader:	**UCD - University College Dublin**
Person in charge:	**James Kinsella**

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Executive Summary

The Re-Livestock Project proposes to undertake a process of facilitating co-innovation with multi-actor groups which are developed around each of the 13 case studies of the project. This requires each case study to be supported by a designated facilitator(s) who brings together the multi-actor groups and facilitates their discussions and the emergence of their inputs and recommendations in an iterative process over the lifetime of the Re-Livestock Project. Task 1.1 undertakes training support to the case study facilitators over the life of this work and the first training took place in Madrid on 17-18th January 2023. This first training session was an in-person event to allow the facilitators the opportunity to get to know each other and to begin the process of building a team who will work together and support each other over the duration of project. The training was attended by fourteen case study facilitators, co-ordinated by UCD and contributed to by partners from UREAD, AERES and FiBL.

The training was structured to take the case study facilitators from their current experience of facilitating multi-actor co-innovation processes to a shared and common understanding of the process as it relates to their case studies. From the outset it was recognised that the majority of the facilitators had limited experience of this role, while some had substantial and valuable experience which could be shared with the group. Given the broad range of actors, topics and locations associated with the case studies the training also addressed the need to consider diversity in their role, with inputs by FiBL on gender mainstreaming and UCD on sharing knowledge.

Training was participatory in nature, encouraging the attendees to engage in the discussions and tasks in an effort to share experiences and move collectively towards shared understandings. Important contributions by the trainees were captured throughout the session by using flipcharts while the participants worked together in an open and constructive environment which they had agreed to from the outset.

During the course of the training, questions related to the role of the facilitators in relation to Tasks 1.2 and 1.3 emerged. In response to these questions, the schedule was adjusted to allow more time for these questions to be addressed. Discussion on Task 1.2 was facilitated by UREAD while discussion on Task 1.3 was facilitated by AERES. Emphasis was put on clarifying the next steps for the facilitators. Overall, the training was highly valued by the participants as captured in the end-of-training evaluation with an overall 90% ‘good’ or ‘very good’ rating.

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1. Introductions and Objectives

A rationale for developing our facilitation skills:

- *'We should not assume that because individuals have good communication and interpersonal skills, they will be good facilitators. Our study suggests that even when new facilitators have those skills, they still may need significant help learning how to apply and adapt those skills to support implementation processes'*

Source: Richie et al., (2020). *From Novice to Expert: a qualitative study of implementation facilitation skills* in Implementation Science Communications (2020) 1:25 (Open Access)

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What will we try to do? (objectives)

- To get to know each other and begin to share our experiences of facilitation so that we recognise the depth and breadth of experience in the group
- To better understand the journey that we are embarking on with the case studies' stakeholder forums
- To develop a common understanding of facilitation and the value that it aims to add to the Re-Livestock Project
- To appreciate the challenges associated with multi-actor co-innovation processes

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The role of the facilitator in Re-Livestock?

1. Identify and establish the membership of the **local stakeholder forum** around each case study
2. Organise and bring together the **stakeholder forum** on an annual basis in a process of **co-innovation**
3. Capture the lessons arising from the muti-stakeholder forums and share them with the **research teams of WP2-6**
4. Undertake the roles required under **Task 1.2** (case study data gathering)
5. Undertake the roles required under **Task 1.3** (Reflexive Learning for Innovation Networks)
6. Document and share the lessons from the facilitation process over the journey of Re-Livestock Project

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Multi-actor actor approach, platform and Stakeholder Forums - clarification

- Re-Livestock adopts a **multi-actor approach/ engagement** in its project strategy (9 mentions in proposal)
- A **European Multi-actor Platform** (1) will be developed through Task 1.4 which will bring together actors who can consider the overall Re-Livestock work and provide guidance/inputs – *focus on EU and global policy*
- Each case study (13) will establish **a Stakeholder Forum** that will represent the range of actors who influence adoption of innovations by farmers of the particular case study – *focus on local practice*

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Remind ourselves:

- The overall objective of Re-Livestock is: *to understand and mobilize adoption of innovative practices*

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Re-Livestock website states that:

Work Package 1 will:

- Build and work with local stakeholder forums to guide and support **the co-innovation processes** of the project and ensure that **the voices of all key stakeholders** are captured, in order to ensure that the project results can be readily implemented in practice and exploited.
- Establish a Reflexive Learning for Innovation Network for stakeholders to review project outcomes and processes from WPs 2-7 (Task 1.3).
- Ensure that local/national level learnings are considered at a macro (EU) level, a series of stakeholder consultations through the European multi-actor platform will operate concurrently over the life of the project and continuously draw on the lessons emerging from the local stakeholder forums.

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The facilitators' journey – what does it look like?

- 5 years of Re-Livestock Project (Sept 2022-August 2027)
- Annual stakeholder forum discussions for each case study which are organised, facilitated and documented
- Improving the quality of the process over time through:
  - Sharing experiences amongst the group of facilitators
  - On-going learning (virtual and in-person) through group sessions supplemented by one-to-one mentoring and reflective practice
- Documenting the process to capture what we have learned

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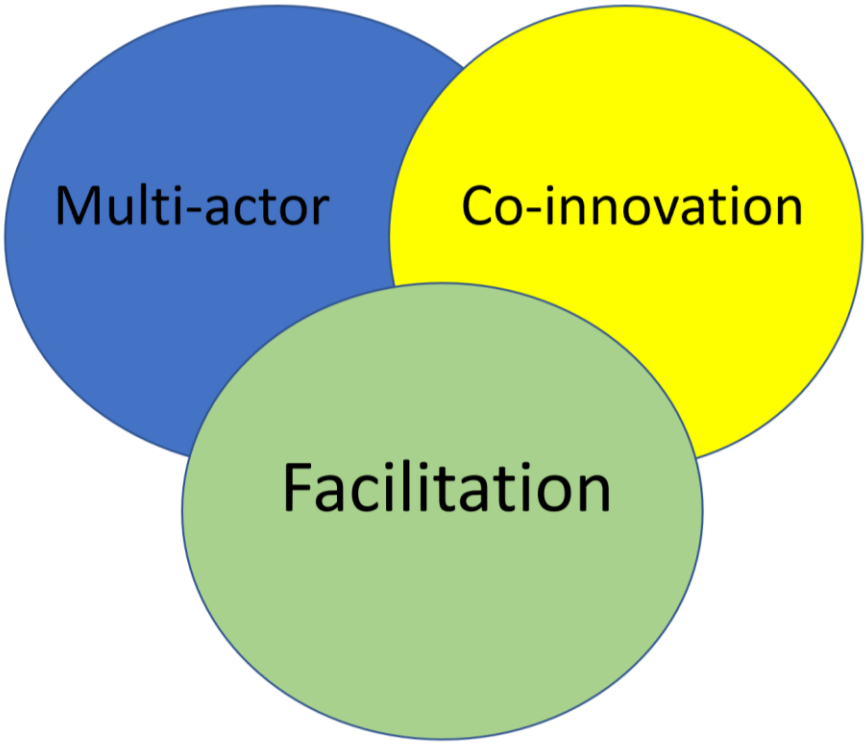
Three concepts to focus on:



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Group Contract

The group agreed to work together with an understanding that:

- *Everyone gets a chance to speak*
- *We keep to schedule*
- *Phones on silent*
- *Listen to each other*
- *Respect each other*
- *Respect confidentiality*
- *Comments are constructive*
- *Positive energy*
- *Speak slowly*

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2. Multi-actor approach

- The European Innovation Partnership for Agriculture (EIP-AGRI) aims to foster a competitive and sustainable agriculture and forestry sector that "*achieves more and better from less*".
  - EIPs brings together innovation actors (farmers, advisors, researchers, businesses, NGOs, etc) and helps to build bridges between research and practice
- The Horizon Europe Programme (2021-27) continues to support multi-actor co-innovation projects in agriculture
  - requires that end users and multipliers of research results such as farmers and farmers' groups, advisors, enterprises and others, are closely involved throughout the whole research project period. It believes that this leads to innovative solutions that are more likely to be applied in the field.

eip-agri
AGRICULTURE & INNOVATION

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Importance to Re-Livestock?

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Overall Objective of Re-Livestock incl.

- 'Strong collaboration with industry stakeholders and partners to identify the innovations and to co-design their validation will ensure relevance and will maximise the adoption of best practices'
- National case studies and stakeholder forums will allow for an engaged co-design of transition pathways

Specific objective: To understand the factors influencing the adoption and efficacy of mitigation and adaptation practices with multi-actor engagement through enabling co-innovation through interactive stakeholders forums

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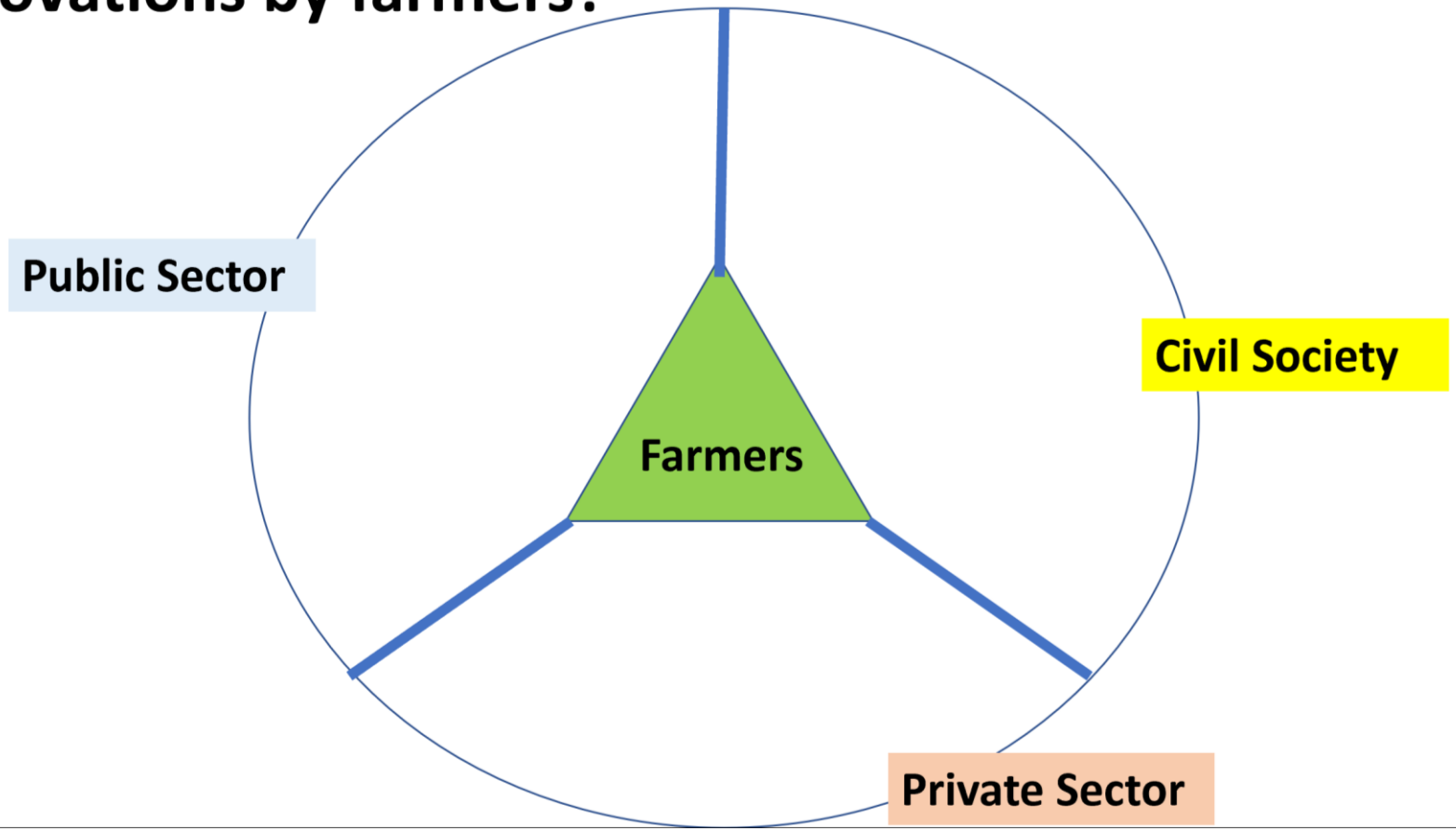
The Groups of Actors who impact adoption of innovations by farmers?



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Public Sector

Public policy institutions

Examples

- Government departments
  - Agriculture
  - Environment
  - Education
- Advisory
- Education (schools and colleges)
- Research institutions

Private Sector

- **For profit sector**

Examples

- Agri-suppliers
- Agri-Processors
- Advisory services (consultants)
- Farm contracting services
- Veterinary services
- Banks and lending institutions

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Civil Society

- *European Commission defines Civil Society Organisations (CSOs) as a wide range of actors, with different roles and mandates, including membership-based, cause-based and service oriented organisations, and among them cooperative enterprises.*

Not for profit, non-governmental organisations *('third sector')*

Examples:

Farmer organisations
Local development organisations
NGOs
CBOs
Co-operatives
Resident associations

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Task

1. **Individually,** list the actors who you believe are relevant to your case study farmers i.e. who influence the adoption of innovations by the farmers

2. **Share** your own case study actors profile with your GBR group and discuss what are the main differences in the perspectives of each category of actors and what are the similarities?

3. Select one person from your group to **feedback to the plenary** on what you have summarised in your groups

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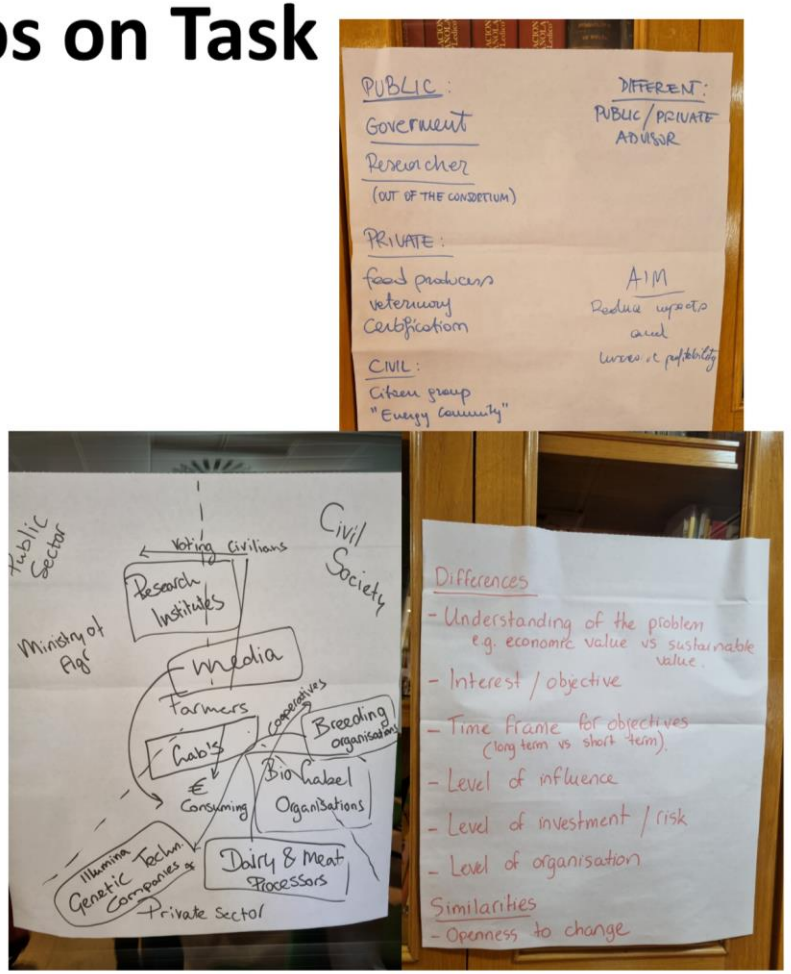
Feedback from the Groups on Task

- Recognises the complexity of the multi-actor forum
- Different perspectives on same issue from different actors – more differences than similarities!
- Key similarity is *'openness to change'* and *'a social license to maintain farming'*
- Overlaps exist between private and civil society as well as public and civil society
- The *everywhere* presence of consumers who exist in public (as voters), civil society (consumer groups) and private (purchasers) sectors



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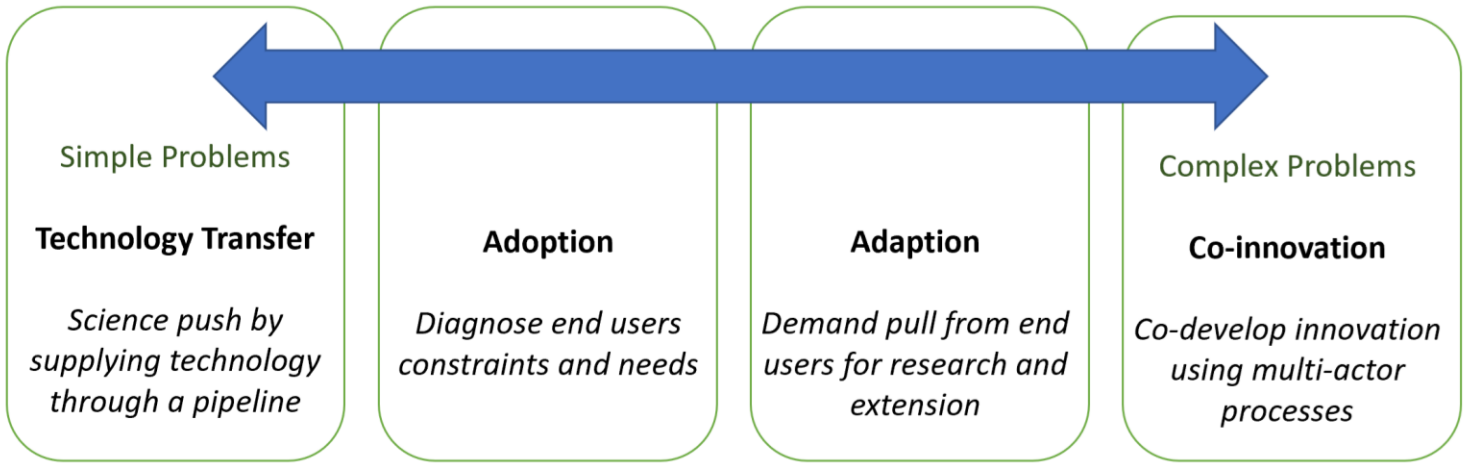
3. Co-innovation processes

Technological innovation approaches



Source: Fielke et al., (2018). *Lessons for co-innovation in agricultural innovation systems: a multiple cases study analysis and a conceptual model* in the Journal of Agricultural Education and Extension, 2018, Vol.24 No.1, 9-27

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The Marshmallow Challenge

Instructions:

- Groups of 3
- Time allowed: 18 minutes
- Materials:
  - 1 Marshmallow (cannot be broken-up)
  - 20 sticks of Spaghetti
  - 1 metre of string
  - 1 metre of masking tape
- Work in your group to build the tallest free standing structure with the whole Marshmallow as the measured high point.

Rules:

- The Whole Marshmallow must be on top – this is the point of measurement
- No need to use all the ingredients
- You can break the Spaghetti, cut the Tape and the String *(scissors provided)*
- Stop at the end of the 18 minutes and move away from your structure
- Structure is measured after the 18 minutes and must be free standing at time of measurement
- **Winner** is the group that builds the tallest free standing structure that supports the marshmallow

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Key lessons from the Marshmallow Challenge?

According to the participants

Co-innovation in practice means:

- Everyone needs to be involved/ to help
- All agree, at some point, on what to do
- Trust the ideas shared
- Combine the ideas
- Be willing to compromise
- Good communications
- Willingness to co-operate/help

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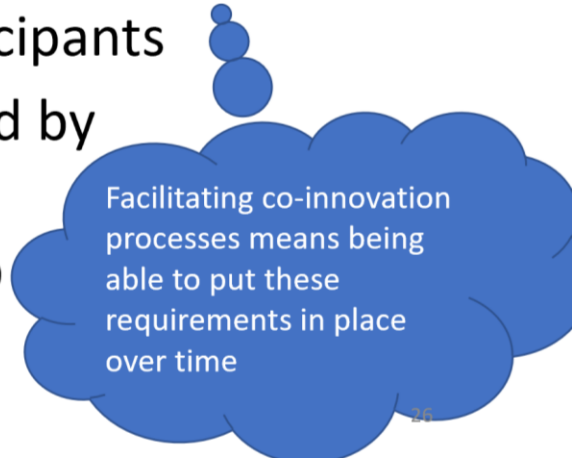
Co-innovation requires:

- **RIGHT PEOPLE**: Participants to have relevant knowledge and experiences to share
- **CLARITY:** Participants to be **clear on the ask and the process**
- **TRUST:** Participants to be **trustful** of the process and open to sharing
- **SHARE:** Knowledge to be shared between participants
- **ACKNOWLEDGEMENT:** Contributions are valued by participants
- **IDENTITY:** Sense of connectedness to the group



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Co-innovation task

The Marshmallow Challenge

- Watch TED Talk – Tom Wujec (2010) https://www.ted.com/talks/tom_wujec_build_a_tower_build_a_team?language=en

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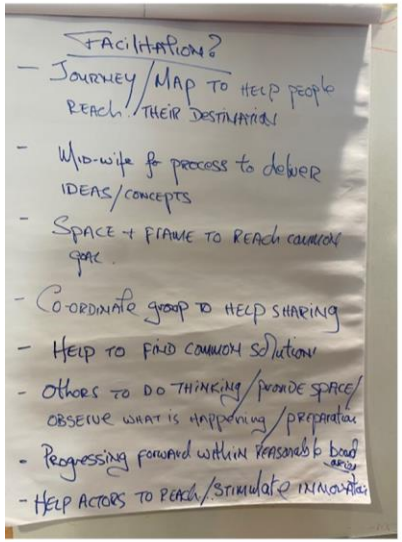
What is facilitation? (pairs contribution to plenary)



- Journey/ map to help people reach their destination
- Mid-wife for a process to deliver ideas
- Providing the space and a framework to reach agreement on a common goal
- Co-ordinating the group to help sharing
- Helping to find a common solution
- Others to do the thinking while you provide the space and observe what is happening
- Progressing forward within reasonable boundaries
- Helping the actors to reach their destination
- Stimulating innovation

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What is facilitation? *(points from Tomás)*

- ***Facilitation*** *- a way of working with people – enables and empowers people to carry out a task or perform an action – facilitator does not perform a task but uses certain skills in a process which allows individuals/group reach their decision/set their goal/learn a skill.*
- ***Facilitation*** *encourages greater participation and responsibility for decisions. Through facilitation, group members come to value/develop their own expertise/skills.*
- ***The facilitator*** *ensures the needs of individuals within the group are recognised, acknowledged and responded to; this is seen as an integral part of the task at hand and not superfluous to it.*
- *Inherent in facilitation are the principles of* ***equality, inclusion, participation and affirmation.***
- ***Facilitation*** *is influenced by principles which support the view that people should be actively involved in determining their own lives and that in this way a more equal society can be created*

There are many definitions of facilitation. Most focus on the fact that it is a way of working with people, to support them, to educate them, to get them to be active in the process

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What is your experience of working with/in groups?

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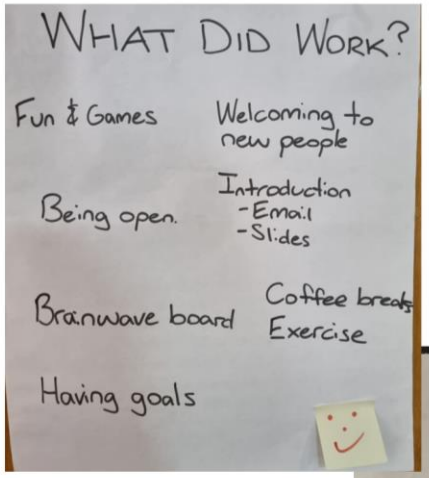
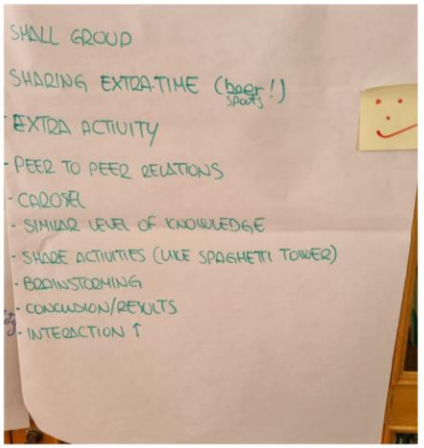
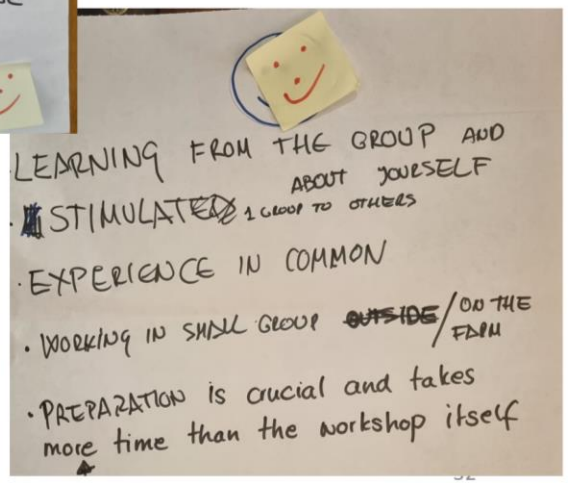
What characterises Good Facilitation?

- Learning from the group and about yourself
- Focusing on experience in common
- Working in small groups
- Good preparation
- Flexibility in the process
- Extra activities (spaghetti challenge)
- Brainstorming
- Interaction
- Fun and games
- Being open (Introduction, email, slides)
- Coffee breaks/exercise
- Having goals







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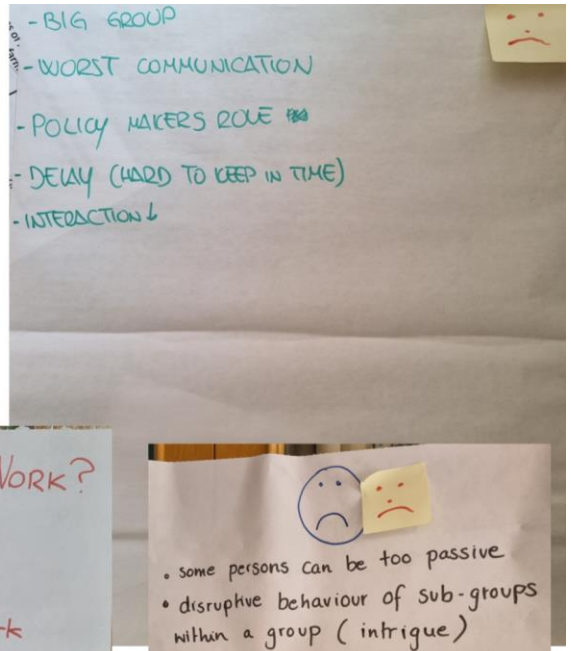
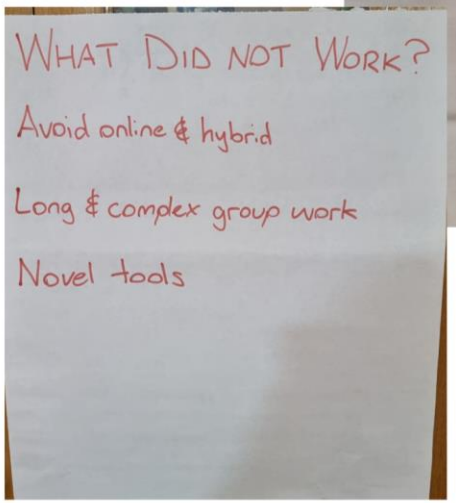
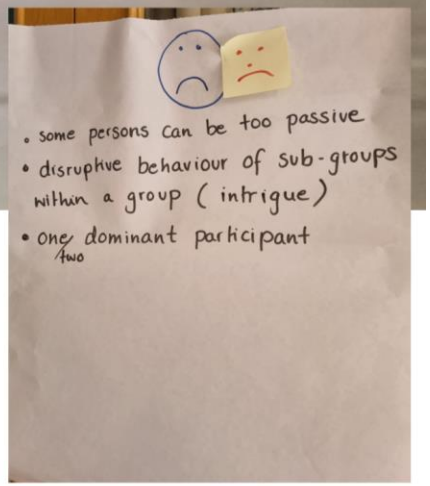
What characterises Poor Facilitation?

- Participants who are too passive
- Disruptive behaviour of sub-groups
- Dominant people within groups
- Big groups
- Poor communication
- Poor timekeeping
- Low interaction
- Online/Hybrid
- Long and complex group work
- Novel tools







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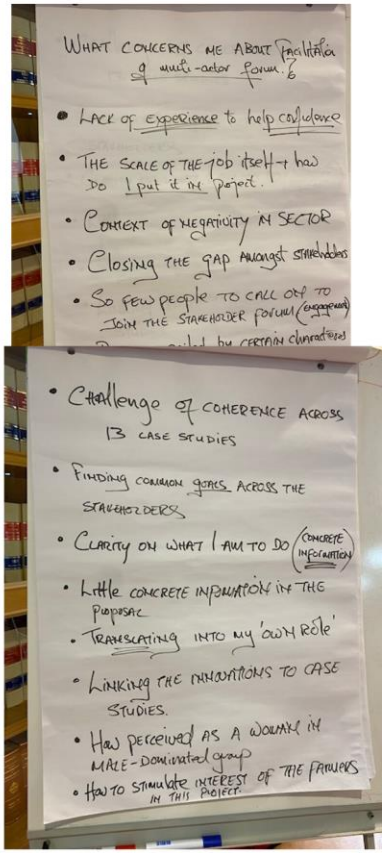
Concerns about facilitation of a stakeholder forum?

- Lack of confidence due to lack of experience
- The scale of the task
- The negative context of livestock farming
- Finding common ground among stakeholders
- So few people to call on for the stakeholder forum
- Being de-railed by certain characters
- My own character (too direct) being unsuitable
- Managing coherence across all the case studies
- Lack of clarity on what I am to do
- Little concrete information in the proposal document about role
- How do I link the innovations to the case study?
- How I will be perceived as a woman in the male-dominated group?
- How do I stimulate the interest of the stakeholders in the forum?



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5. Diversity amongst the actors

a. Gender Mainstreaming

Gender mainstreaming in Re-livestock

We promised to integrate the gender dimension in all research activities.

Making sure we do not replicate the societal bias

Avoid having men as the default generic model for all

Gender task force is here to help you with that

BUT you are the only person who can make a difference in your case study make sure that women have an equal voice in our science and our engagement

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Gender mainstreaming in your case study

What are the different roles and responsibilities of women/girls and men/boys are ascribed to, or imposed upon, them in specific social, cultural, economic and political in European society and more particularly in your case study?

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Roles and responsibilities of women/girls

Women are :

- Care givers, they more often take care of children, the elderly or sick people
- Women are expected to “be kind, nice and helpful” men to be “strong and tough”
- Women more often do (household) unpaid work

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Discrimination occurs when

- As a **consequence** of their roles Women do not get equal access

- As a result of **biases**
  Women who do not have the role that is expected, yet everyone expects they to do so

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The role, the consequences and the bias

Role	Consequences for women having in this role	Bias towards women who do not have this role
Care-taker	Might not be available in the evening Might not be able to leave the house	Women are perceived as less committed (because we wrongly assume they are focusing on care)
Being nice, kind and helpful	Women do not push themselves forward, will give priority to men Women do not speak up during meetings	Women are "less liked" and face more micro-aggression (for example, being cut when they talk)
Unpaid worker	Less time for additional engagement Lower education (because they did not have enough time over their whole life)	Women are perceived as less competent Women get less credit for accomplishments and blame them more for mistakes

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Addressing consequences

Role	Consequences for women having in this role	What can I do before/after the meeting ?	What can I do during the meeting
Care-taker	Might not be available in the evening Might not be able to leave the house …		
Being nice, kind and helpful	Women do not push themselves forward, will give priority to men Women do not speak up during meetings …		
Unpaid worker	Less time for additional engagement Lower education (because they did not have enough time over their whole life) …		

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M 2
Facilitator Training Completed

Addressing the bias

Role	Bias towards women who do not have this role	What can I do before/after the meeting ?	What can I do during the meeting
Care-taker	Women are perceived as less committed (because we wrongly assume they are focusing on care) …		
Being nice, kind and helpful	Women are "less liked" and face more micro-aggression (for example, being cut when they talk) …		
Unpaid worker	Women are perceived as less competent Women get less credit for accomplishments and blame them more for mistakes …		

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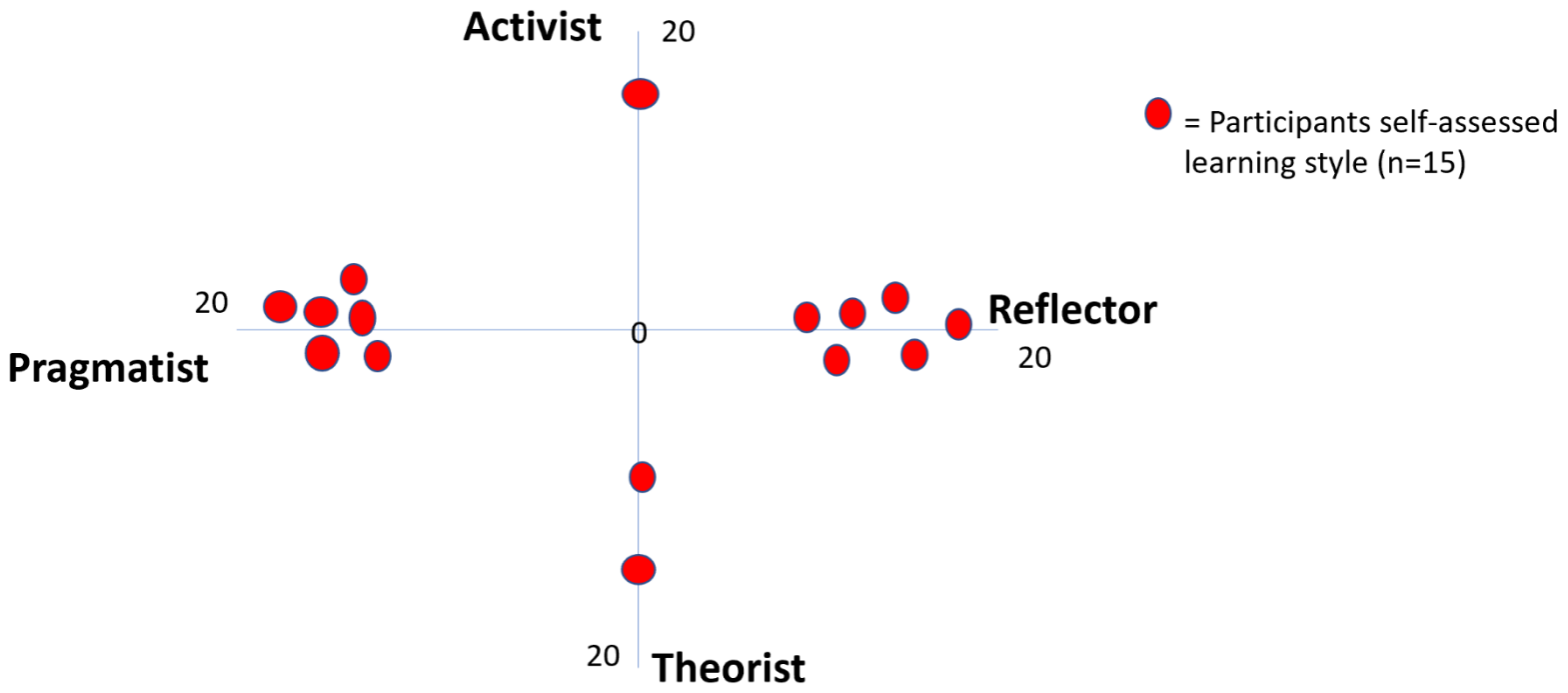
b. Learning Styles

What is your learning style?

(based on Honey and Mumford Learning Style exercise)



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Facilitating effective learning?

- Recognise the different learning styles that exist and what might work best for people
- As a facilitator you may be biased in your choice of knowledge sharing methods based on your own preferences
- Conscious of the need to use range of methods to enable all to be engaged and to share their knowledge/ experience
- Conscious of the use of terms and language which may exclude or intimidate some of the participants!

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6. Identifying the stakeholders

What is an Agricultural Knowledge and Innovation System (AKIS)?

- AKIS is a system that links people and organisations to promote mutual learning, to generate, share, and utilize agriculture-related technology, knowledge, and information
- The AKIS identifies the actors and processes in flows of information and influence in innovation adoption by farmers

Source: European Commission, SCAR AKIS (2019)

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Agricultural Knowledge and Innovation System (AKIS)

- The AKIS can help identify each case study set of actors with farmers (as the *innovation adopters*) at the centre of the process
  - The actors influence the on-farm innovation process which impacts adoption of practices by farmers
- Acknowledge that each farmer will have their own unique AKIS
- To map the AKIS we need to recognise the actors who provide information to farmers and who influence decisions by farmers

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Mapping the Actors?

- In helping to identify the case study stakeholders the project will be led by the farmers themselves who will identify the people and institutions that provide information and influence their decisions on the adoption of the selected areas of research
- This means mapping the Agricultural Knowledge and Information System through engagement with the farmers thus ensuring that the process of forming the stakeholder forums is **farmer-led**

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Collecting the information?

- **Who are the farmers of the case study?**
  - Varies from: 5 pig farmers in Poland (CS.12) to 100 dairy farmers in Netherlands (CS.2) to 800+ sheep/cattle farmers in UK (CS.6)

- **How many farmers to survey?**
  - Reflective of your case study network (population) and differences between farmers (e.g. scale/ age/ gender)
  - Guided by the logistics of bringing the multi-actor group members together (local/regional/national)
- **How best to survey?**
  - E-mail/ Post/ Phone/ WhatsApp/ face-to-face/ other?

- **Re-Livestock Project Informed Consent Form**
  - to accompany the survey

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M 2
Facilitator Training Completed

Steps in identification of the stakeholder forum members (*Mapping the Actors*)

1. Facilitators' Training (17/18 Jan. 2023) in Madrid – introduce the AKIS and get reactions and thoughts on surveying the case study farmers to identify the institutions that they currently engage with
2. By 15th March 2023 – agree the survey of case study farmers for each case study to establish their AKIS on the relevant case study topic
3. By 5th April 2023 – Undertake the survey of farmers and identify the key stakeholders based on survey results
4. By 15th April 2023 – Invite the stakeholders to join the forum with emphasis on the benefits they can derive from being a Re-Livestock Forum member

   Note that: *Other stakeholders may emerge that are not immediately farmer-identified but important and can be invited and included at this point. The forum is not a closed entity and can be added to over time as new actors emerge.*
5. Case Study Stakeholder Forums' members identified/invited (**D.1.1/ M.9**)
6. First round of Stakeholder Forums to take place by August 2024 **(MS.19)**

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AKIS Research in the EU?

- Refer to the i2Connect Project country AKIS profiles - https://i2connect-h2020.eu/resources/akis-country-reports/

- EU Standing Committee on Agricultural Research (SCAR)

https://scar-europe.org/akis-documents

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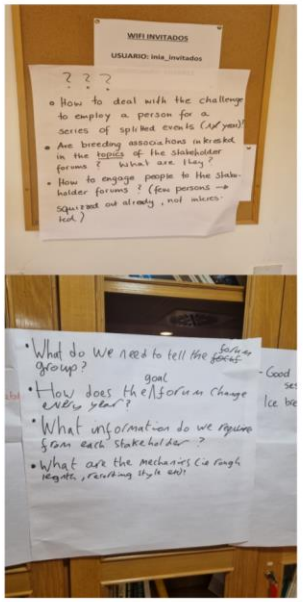
7. Questions arising from facilitators

(*as part of the training session, questions had emerged from Sections 4 and 6 that needed to be documented and where possible addressed in the context of the facilitation training)*

- How to deal with employing someone for a series of specific short-term events?
- Are breeding associations interested in the topics of the stakeholder forums?
- What are the topics of the stakeholder forums?
- How to engage people with the stakeholder forums? (there are only a few people out there and they are already 'squeezed'!)
- What do we need to tell the stakeholder forum?
- How does the goal of the forum change each year?
- What information do we require from each stakeholder?
- What are the mechanics of the stakeholder forum meetings?



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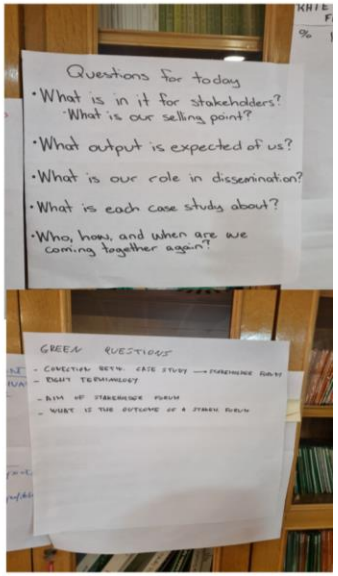
- What is in it for the stakeholders? – what is the selling point?
- What output is expected from us?
- What is our role in dissemination
- What is each case study about?
- Who, how and when are we coming together again?
- What is the connection between the case study and the stakeholder forum?
- What is the aim of the stakeholder forum?
- What is the outcome of the stakeholder forum?



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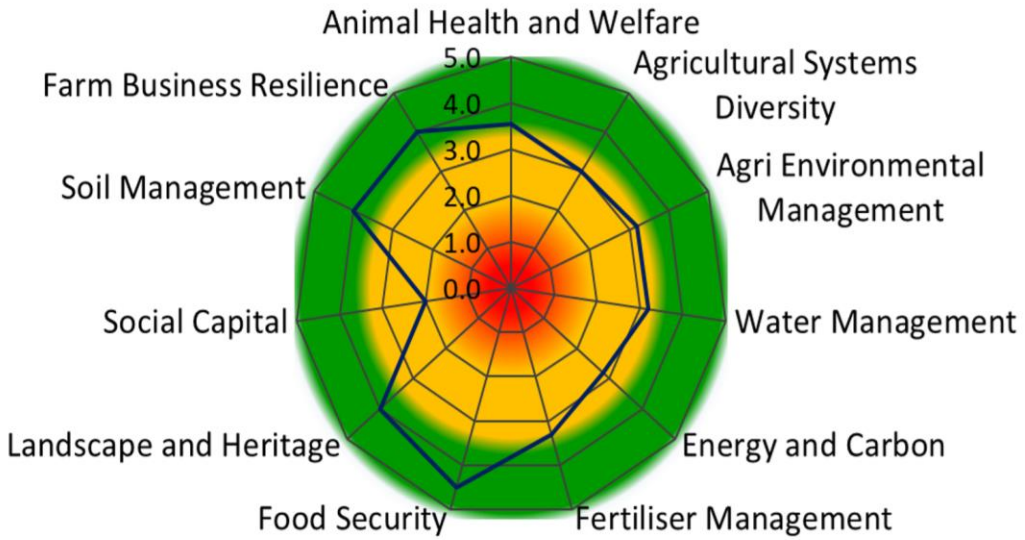
8. Role of the case study Facilitator in task 1.2

See Annex IV: WP1_T1.2_overview_Madrid

- These are the slides presented by Laurence and Jo to the attendees on 18th January 2023



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9. Role of the case study Facilitator in task 1.3

Slides and discussion led by Violanda and Eric (AERES)

Task 1.3

- Start: 1 March 2023
  End: 31 August 2027
- Participants:
  AERES (lead), CSIC, WR, UPV, UREAD, FIBL, SLU, UNIPI, MVARC, ORC, CRV, L&F, PULS, PFLA, PCH, BOKU, UCD, PROVAC, AEANI

AERES UNIVERSITY OF APPLIED SCIENCES

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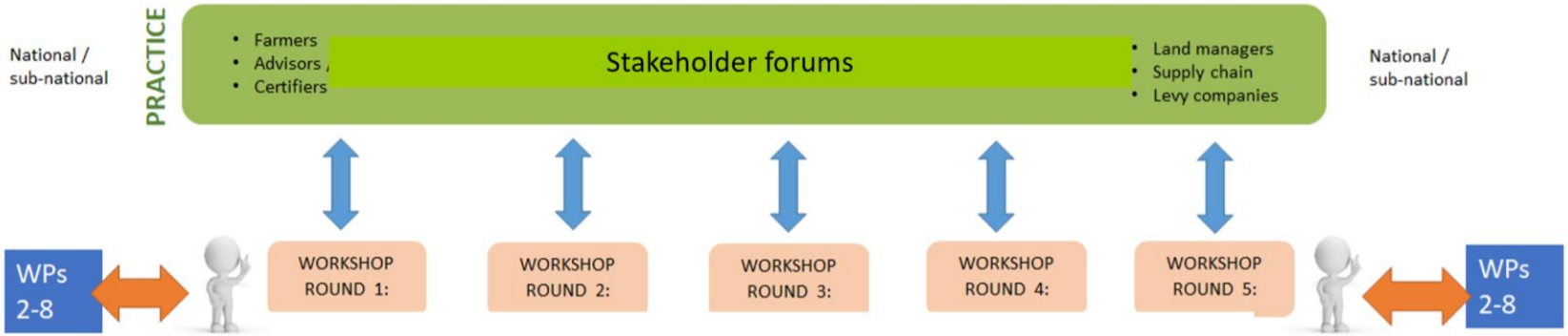
Facilitator Training Completed



Overview of WP 1 milestones

No.	Milestone name	WP	Due M	Means of verification
MS2	Facilitator Training Complete	1	4	Report
MS6	Collection framework for case ctudies complete	1	11	List available
MS19	Initial workshops with local forums complete	1	24	Summary of data
MS36	Remaining workshops forums complete	1	52	Summary of data

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Facilitator Training Completed

Overview of WP 1 deliverables

Deliv. Nº	Deliverable name	WP	Lead	Type*	Dissem. Level*	Delivery months
D1.1	List of Stakeholder Forum Members associated with selected case studies	1	UCD	R	PU	9
D1.2	Data of innovative case studies collected in project database	1	MVARC	R	PU	36
D1.3	Solutions for sustainability transformation and resilience that are acceptable for stakeholders and ready for implementation	1	UREAD	R	PU	54

Stakeholder forum meetings

- Sub-national stakeholder forums, connected with case studies (AKIS)

- With the aim to:
  - Understand the process of change in their food (sub-)system
  - Identify questions for research
  - Identify solutions for sustainability transformation and resilience

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M 2
Facilitator Training Completed

Yearly innovation cycles – Round 1

1. Define the AKIS, map the influence of affected stakeholders within their supply chain(s) and establish stakeholder forums

2. Map and rank:
   - current drivers and barriers relating to resilient livestock production
   - possible solutions

   ➢ to shape interventions for WP 2, 3 and 4 (feeding / breeding / managing)

Proposal: Share outcomes of the first stakeholder forums with each other on the annual project meeting and plan next steps

Yearly innovation cycles – Round 3 and 4

1. Review project outcomes and processes of WP 2 to 7

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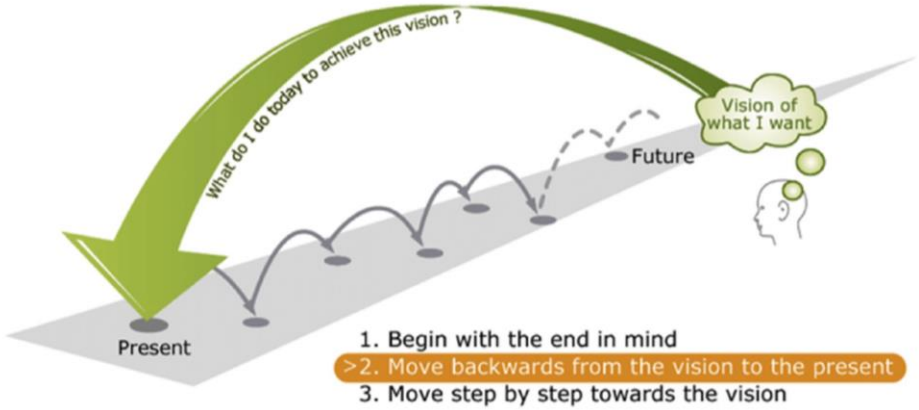
Yearly innovation cycles – Round 2 (suggestion)

1. Feedback and discussions from PG Tool outcomes
2. Back-casting approach for identification of past problems that have been solved effectively

   - ➢ to inform scenario development of WP6 and WP7



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Group task

1. Make 3 groups:
   a) Feeding
   b) Breeding
   c) Managing

2. Discuss steps and high-level planning to prepare for Round 1 (approx. 15 minutes)

3. Brainstorm / define the win/win or selling point for the stakeholders (approx. 10 minutes)

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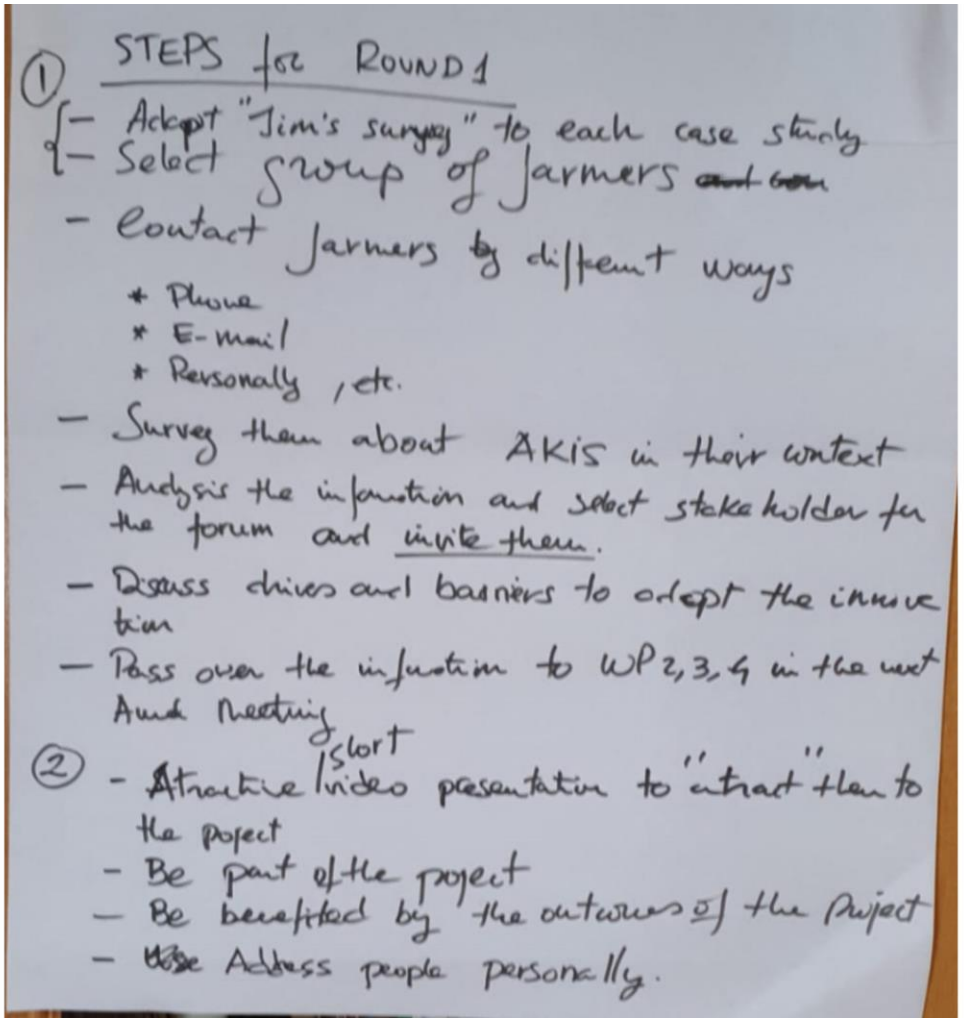
Feeding



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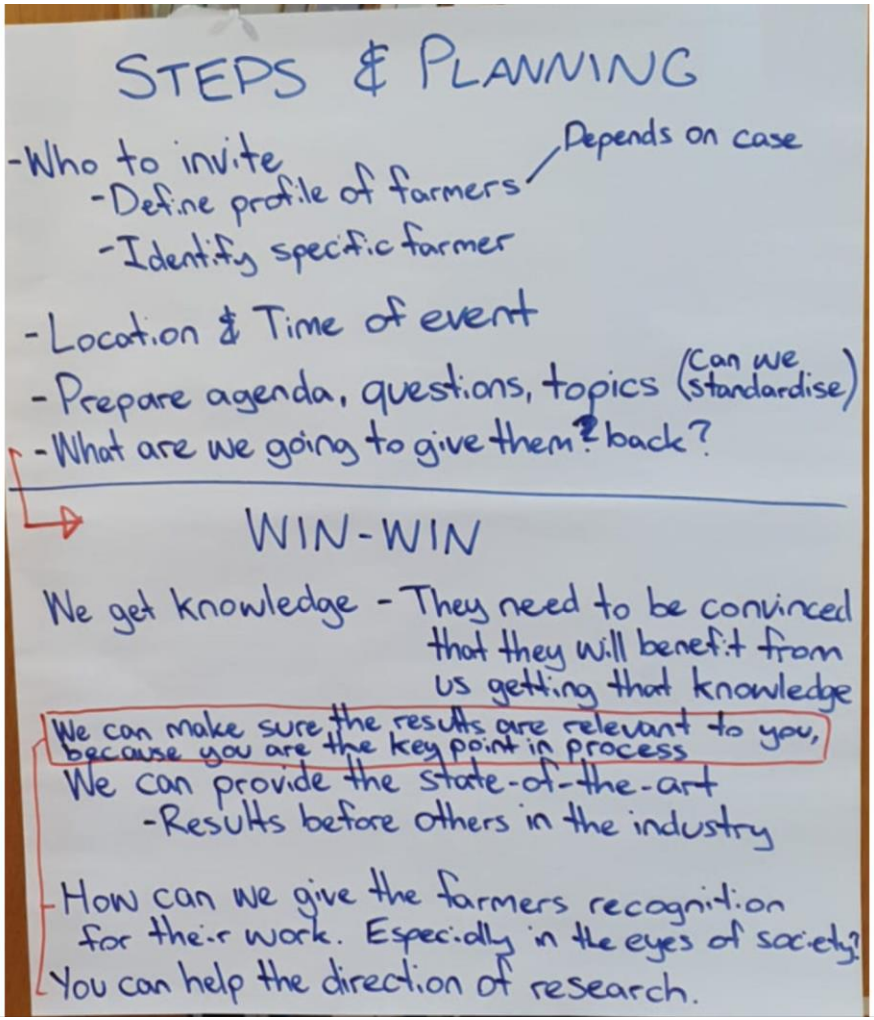
Breeding



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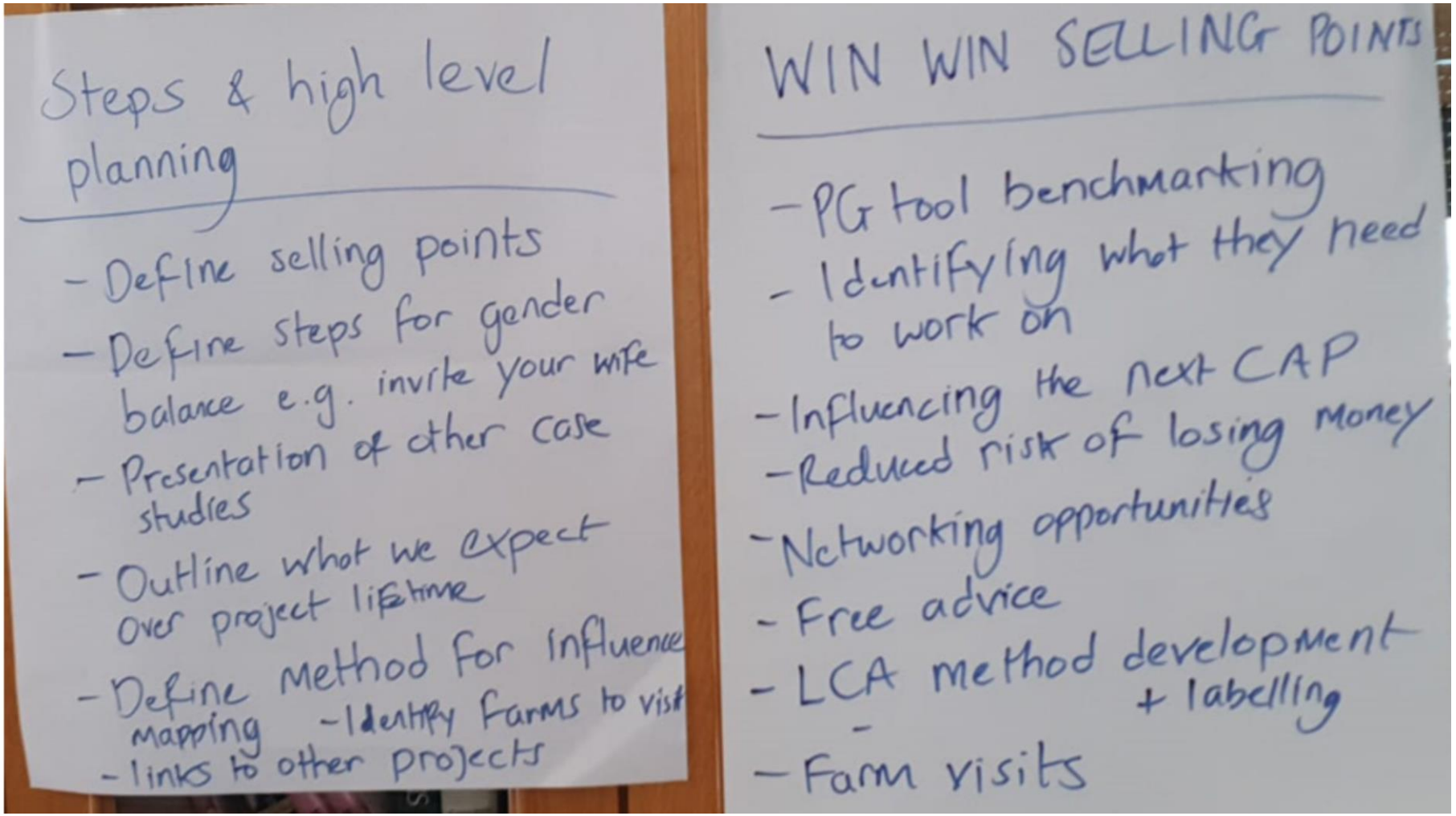

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10. Next steps and evaluation

Task 1.1:	• Some facilitators were unable to attend the Madrid session so an on-line short session will be run for them – this session will be recorded and shared with all – before 25th Feb • Agree farmers' AKIS survey questions and data collection methods by 15th March • Undertake Farmers' Survey to determine their AKIS by 5th April • Invite the stakeholders to join the Stakeholder Forums based on survey analysis by 15th April • List the initial case study Stakeholder Forum membership for May 2023 (D1.1/ M.9)
Task 1.2:	• Review case studies to identify relevance of PGT categories (Apr 2023) • Finalise data requirements in adapted PGT (Jun 2023) • Test adapted PGT data collection (Oct 2023) • Selection of case study farms (Dec 2023) • PGT training sessions (Oct to Dec 2023)
Task 1.3:	• Establish Teams environment with focus on next 6 months • Provide clarity on the questions to answer in Round 1 of the Stakeholder Forums, as well as provide a standard agenda and activities for each facilitator to tailor to their own needs • Support facilitators in how to map the influence of stakeholders • Help to define the concept of resilience

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11. Annex I

Attendance (19)

- Rosa Nieto (CSIC)
- Ignacio Fernandez-Figares (CSIC)
- Elena Sanchis Jiménez (UPV)
- Ignacio Martín García (INIA-CSIC)
- Clara Diaz Martin (INIA-CSIC)
- Cristina Meneses (INIA-CSIC)
- María Rodriguez (PCH)
- Bieber Anna (FiBL)
- Julie Rohde Birk (ICOEL)
- Michael Aldridge (WR)
- Alina Silvi (UNIPI)
- Alberto Mantino (UNIPI)
- Małgorzata Kasprowicz-Potocka (PULS)
- Laurence Smith (UREAD)
- Nicholas Davison (UREAD)
- Violanda de Man (AERES)
- Eric van Dijken (AERES)
- Tomás Russell (UCD)
- Jim Kinsella (UCD)

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12. Annex II

Schedule of Training Session

- In the afternoon of Day 1 the training schedule was adapted (by consensus) to meet the needs and interests of the case study facilitators with respect to getting greater clarity on their role in the Re-Livestock Project.
- Consequently some planned aspects of the training were not undertaken to ensure adequate time for those issues which were of most importance to the facilitators at the time.

Re-Livestock Facilitator Training Session – 17th and 18th January 2023

DAY 1[1] (17th January)

TIME	DUR. (MINS)	CONTENT / ACTIVITY	RESPONSIBLE
09:30	15	**Introduction to session**	Jim
	20	-Getting to know each other	Tomás
	20	-Setting expectations and agreeing our contract	Jim
10.25	40	**Multi-actor approach**	Jim
11.05	25	**Tea/coffee**	
11.30	50	**Co-innovation process**	Jim
12.20	50	**Fundamentals of facilitation**	Tomás
13.10	60	**LUNCH**	
14.10	40	**Fundamentals of facilitation contd..**	Tomás
15.10		**Different people**	
	45	- Gender mainstreaming (on-line)	Catherine
	20	- Sharing knowledge	Jim
16.15	20	**Tea/coffee**	
16.35	45	**Identifying the Stakeholders**	Jim/Tomás
17.20	25	**Reflections on Day 1 and agreement on Day 2**	Jim/Tomás
17.45		**End session**	

DAY 2 (18th January)

TIME	DUR. (MINS)	CONTENT / ACTIVITY	RESPONSIBLE
09.00	30	**Orientation to Day 2 and Questions to consider**	Jim/Tomás
9.30	90	**Discussing the role of the Facilitator in Task 1.2**	Laurence and Jo
11.00	20	**Tea/ coffee**	
11.20	85	**Discussing the role of the Facilitator in Task 1.3**	Violanda and Eric
12.45	20	**Evaluation and Next Steps**	Jim/ Tomás
1pm		**End of Session**	

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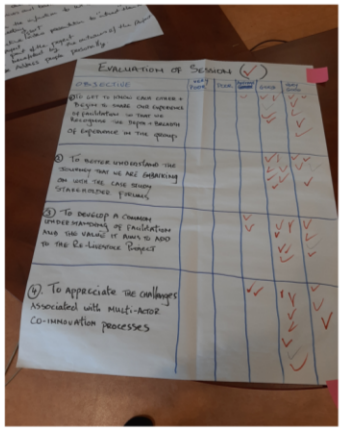
13. Annex III

Evaluation of the Training Session

completed by 12 of the 14 Facilitators who attended

Objectives	Very POOR	POOR	Average	GOOD	Very GOOD
To get to know each other and begin to share our experiences of facilitation so that we recognise the depth and breadth of experience in the group	-	-	1	5	6
To better understand the journey that we are embarking on with the case studies' stakeholder forums	-	-	-	7	5
To develop a common understanding of facilitation and the value that it aims to add to the Re-Livestock Project	-	-	2	6	4
To appreciate the challenges associated with multi-actor co-innovation processes	-	-	2	7	3



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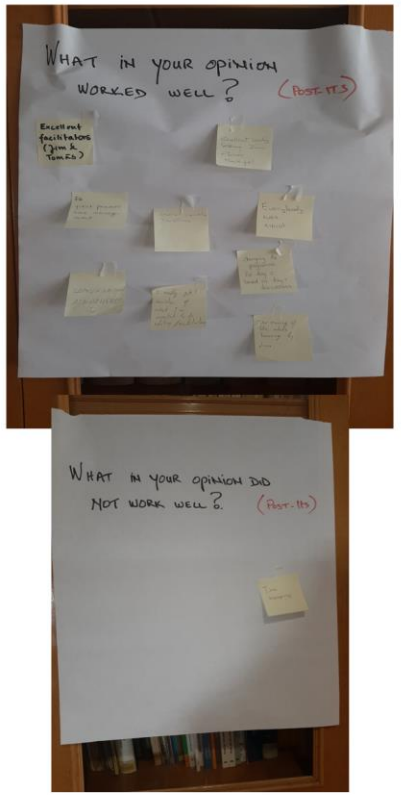
What worked well?

- Practice of facilitation as applied to the training session
- Everybody felt equal
- Flexible time management
- Communication between us
- Great atmosphere
- My understanding of how to facilitate a session
- The running of the session
- Changing the Day 2 programme based on Day 1 discussions



What did not work well?

- Time management

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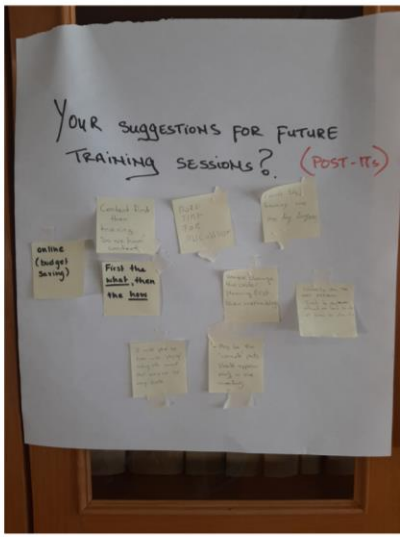
Suggestions for future training:

- First the **what** and then the **how**
- Context first and then training
- More time dealing with people's doubts and concerns
- Change the order – planning first then methodologies
- The 'concrete' parts should be covered earlier in the session
- More time for discussion
- Make the training one day longer
- Run on-line training (it is cost saving)



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14. Annex IV

WP1 T1.2 Overview

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Re-Livestock
RESILIENT FARMING SYSTEMS

WP1: Re-understanding and mobilising adoption through multi-actor engagement

Facilitator Training, Madrid, 17-18th January 2023

WP1 objectives:

-To enable **co-innovation** of **climate change mitigation and adaptation** practices in livestock farming systems through providing interactive **stakeholder forums**.

Task 1.1, 1.3

-To identify and collect data from **case studies of innovation** for detailed investigation in other WPs.

Task 1.2

-To **work with stakeholders** to identify and **understand the processes** of change required within the livestock sector

Task 1.3, 1.4

What are the “Case Studies of Innovation” in Re-Livestock?

What are the “Case Studies” in Re-Livestock?

“**Case studies** are national groups of farmers organised **around a theme of innovation already in practice** within workpackage one. The **thirteen cases** cover pigs, dairy and beef cattle and different production areas in Europe. Individual case studies are led by livestock industry partners/collaborating stakeholders in collaboration with a **facilitator, who will organise workshops and lead discussions to identify current / past problems and solutions around the adoption and implementation of innovations**”

Case study 1: 100% grass-fed cows

Livestock Sector: *dairy cattle*

Country: *Switzerland*

Pilot case description: *Is concentrate-free dairy production economically feasible? Who makes the best use of their grassland-based resources? How the farms visions and strategies to face future challenges (e.g. water shortage)?*

Innovations being applied: *minimization of feed-food competition (feed-no-food)*

Other national stakeholder organisations involved / interested: *Demeter, BioSuisse, Swiss retailers, Feed mills*

Facilitator partner: *FiBL*

Case study 2: Individual animals CH_4 recording

Livestock Sector: Dairy cattle

Country: The Netherlands

Pilot case description: A large population (100 farms with ~ 150 cows each) distributed across the Netherlands is phenotyped for individual methane emission. Network of farmers on 100 farms interested in mitigation options on farm.

Innovations being applied: Large scale and long-term (2+ years per farm) automated recording of individual methane emission via methane sensors (sniffers)

Other national stakeholder organisations involved / interested: CRV, Friesland Campina

Facilitator partner: Wageningen Livestock Research

Case study 3: *Animal welfare and mitigation*

Livestock Sector: Dairy cattle

Country: Italy

Pilot case description: Granducato is a cooperative of dairy cattle farms located in northern Tuscany. The farms apply a disciplinary for the mitigation of GHG emission, the respect of animal welfare and the improvement of nutritional quality of milk. The environmental impact of the supply chain is certified according to the EPD (Environmental product declaration) system.

Innovations being applied: (i) precision feeding practices based on **NIR portable instrument** (POLISPEC) and optimization of ration formulation by using prediction models based on CNCPS system; **(ii)** "on-site" evaluation of methane emissions based on **laser methane detector** (LMm-G); **(iii)** utilisation of the **Classyfarm** checklist for the assessment of animal welfare on the basis of 3 macro-areas: management, farm structures and animal based measures; **iv)** Demonstration activities about the use of feed additives for methane mitigation.

Other national stakeholder organisations involved / interested: Centrale del latte Italia; Newlat company; National breeder association (AIA); Italian Ministry of Agriculture; Tuscany Regional Government; Ferrero Mangimi SpA company (Feed industry).

Facilitator partner: University of Pisa

Case study 4: *Use of agro-industrial by-products*

Livestock Sector: *Dairy and beef cattle*

Country: *Spain*

Pilot case description: *Farms that are routinely using by-products from the agro-industry to feed animals at different stages of production*

Innovations being applied: Continuous *nutritional evaluation of by-products, establishing calendars according to seasonality, preservation methods*

Other national stakeholder organisations involved / interested: *Provacuno, Asoprovac, COVAP, Ministry of Agriculture*

Facilitator partner: *CSIC*

Case study 5: *Compost Bedded Pack (CBP)*

Livestock Sector: *Dairy and beef cattle*

Country: *Spain*

Pilot case description: Several farms are using CBP techniques in Spain in order to improve animal welfare and health.

Innovations being applied: *Compost bedded pack (CBP) is a manure management system in which animals are housed on free-stall systems with straw (or other bedding material) that is mixed with manure and composted. It provides some advantages in terms of animal welfare and health but seems to enhance GHG emissions (mainly N2O). It also provides (according to farmers) a 'cooling effect' if compared to deep bedding, which might provide some interest in terms of adaptation.*

Other national stakeholder organisations involved / interested: *PROVACUNO, DANONE, COVAP*

Facilitator partner: *UPV*

Case study 5: *Compost Bedded Pack (CBP)*

Livestock Sector: *Dairy and beef cattle*

Country: *Spain*

Pilot case description: Several farms are using CBP techniques in Spain in order to improve animal welfare and health.

Innovations being applied: *Compost bedded pack (CBP) is a manure management system in which animals are housed on free-stall systems with straw (or other bedding material) that is mixed with manure and composted. It provides some advantages in terms of animal welfare and health but seems to enhance GHG emissions (mainly N2O). It also provides (according to farmers) a 'cooling effect' if compared to deep bedding, which might provide some interest in terms of adaptation.*

Other national stakeholder organisations involved / interested: *PROVACUNO, DANONE, COVAP*

Facilitator partner: *UPV*

Case study 6: 100% pasture-fed ruminant livestock

Livestock Sector: Sheep and cattle
Country: United Kingdom

Case description: A membership organisation of 800+ farmers in the UK that champions the unique regenerative role of ruminant animals and the grazed habitats they have evolved alongside.

Innovations being applied: mob grazing, mobile abbatoirs, herbal leys in arable systems, community supported agriculture

Other national stakeholder organisations involved / interested: Nature Friendly Farming Network, BASE-UK, WWF, Defra, Natural England, Scottish Government, Welsh Gov, DAERA, Agriculture and Horticulture Development Board

Facilitator partner: Univ. of Reading

Case study 7: Dual-purpose cattle/Beef cattle in Low Input Systems

Livestock Sector: *beef calves /dairy cattle*

Country: Spain/*Switzerland*

Pilot case description: *dairy productions seems to be more affected by heat stress than beef production. Is this the case in low input systems?*

Innovations being applied: *Selection as a tool to balance beef-dairy production/heat tolerance via simulation.*

Other national stakeholder organisations involved / interested: *Avileña Negra Ibérica Breed Association, Swissherdbook,*
Facilitator partner: CSIC-INIA/*FiBL*

Case study 8: Dual-purpose cattle:

Livestock Sector: *dairy cattle*

Country: *Switzerland*

Pilot case description: *one of the main questions is which systems can produce both dairy and meat, while achieving advantages in terms of resource and emission efficiency in thermo-tolerant farms?*

Innovations being applied: *coupled production of meat and dairy out of one breed, label marketing, enhanced longevity of cows*

Other national stakeholder organisations involved / interested: *Swissherdbook, Demeter, BioSuisse, Swiss retailers*

Facilitator partner: *FiBL*

Case study 9: Crossbreeding in dairy cattle herds

Livestock Sector: Dairy cattle
Country: Sweden

Pilot case description: A group of dairy farmers practicing cross-breeding Holstein with locally adapted breeds to improve reproduction and health in dairy cows, and using sex-sorted and beef-semen to increase production of meat and hence reduce impact per unit of produce.

Innovations being applied: Crossbreeding which is unusual in Sweden but with identified large potential (Brastrup-Clasen 2021)

Other national stakeholder organisations involved / interested: Växa, SimHerd, and potentially Aarhus University and SEGES

Facilitator partner: Swedish University of Agricultural Sciences

Case study 10: *Slurry management in pig farms to reduce GHG*

Livestock Sector: *Pig*

Country: *Spain*

Pilot case description: *Pig farmers in Spain are requested to reduce emissions along the slurry management chain and some of them are already promoting slurry management changes.* Most of them are reporting management techniques throughout Ecogan, a tool that calculate emissions based on management practices.

Innovations being applied: *Solid/liquid separation, tank and lagoon covering, use of additives, etc.*

Other national stakeholder organisations involved / interested: *Unió de Llauradors*

Facilitator partner: *UPV*

Case study 11: Implementation of trees in pastoral systems

Livestock Sector: Pigs and dairy cattle
Country: Denmark

Case description: A group of organic livestock farmers interested in integration of trees with livestock. Animal welfare, biodiversity and carbon sequestration are key drivers of adoption. The network was established by Organic Denmark.

Innovations being applied: Agroforestry is still in its very early stage in Denmark. A main activity is therefore to discuss choice of trees and spatial design according to climate, soil type, topography etc.

Other national stakeholder organisations involved / interested: Centre For Free-range livestock, Friland A/S, Thise Dairy, The Danish Agricultural Agency, The Danish Environmental Protection Agency

Facilitator partner: Aarhus University

Case study 12: Substituting soy with local legumes

Livestock Sector: Pigs
Country: Poland

Case description: Non-associated pig breeders using local sources of protein in the nutrition of primitive and commercial breeds of pigs. Selected breeders are also producers of both feed raw materials and compound feed. Some of them also process and sell pork and finished products with special quality labels

Innovations being applied: use of local legumes, organic production, welfare +, native breeds

Other national stakeholder organisations involved/ interested: POLSUS, Polish Government, PAS, Agricultural Advisory Centers, National Rural Network

Facilitator partner: Poznan University of Life Sciences

Case study 13: PLF & heat stress management

Livestock Sector: Pigs
Country: Spain

Case description: A network of intensive white pig farms, with a high level of technification and different characteristics (genetics, nutrition, management, ...) interested in assessing the impact of extreme temperatures on their production and in existing improvement systems.

Innovations being applied: management software, automatic feeders, environmental sensors

Other national stakeholder organisations involved / interested: ANPROGAPOR (National Association of Pig Producers), INTERPORC, Spanish Ministry of Agriculture and Spanish Ministry of Ecological Transition.

Facilitator partner: CSIC

Two key roles for the thirteen Case Studies:

1. Provide a basis for **Multi-actor engagement** with Stakeholder forms at national / sub-national level

2. Support **the overall aim** of Re-Livestock:

   "To understand the **factors** influencing the **adoption** and **efficacy** of **mitigation** and **adaptation** practices"

Role of the Case Studies in Supporting the Multi-actor process in WP1

Farmer centred stakeholder forums organised around case studies (T1.1, 1.3)

WP 2-8

Facilitators lead workshops

WORKSHOP ROUND 1

WORKSHOP ROUND 2

WORKSHOP ROUND 3

WORKSHOP ROUND 4

WORKSHOP ROUND 5

Facilitators lead workshops

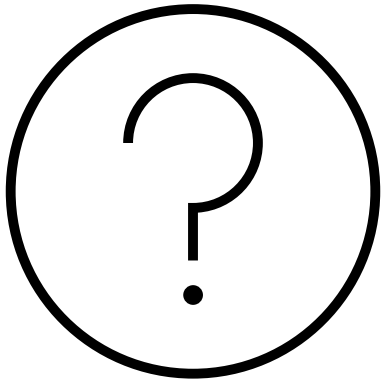
WP 2-8

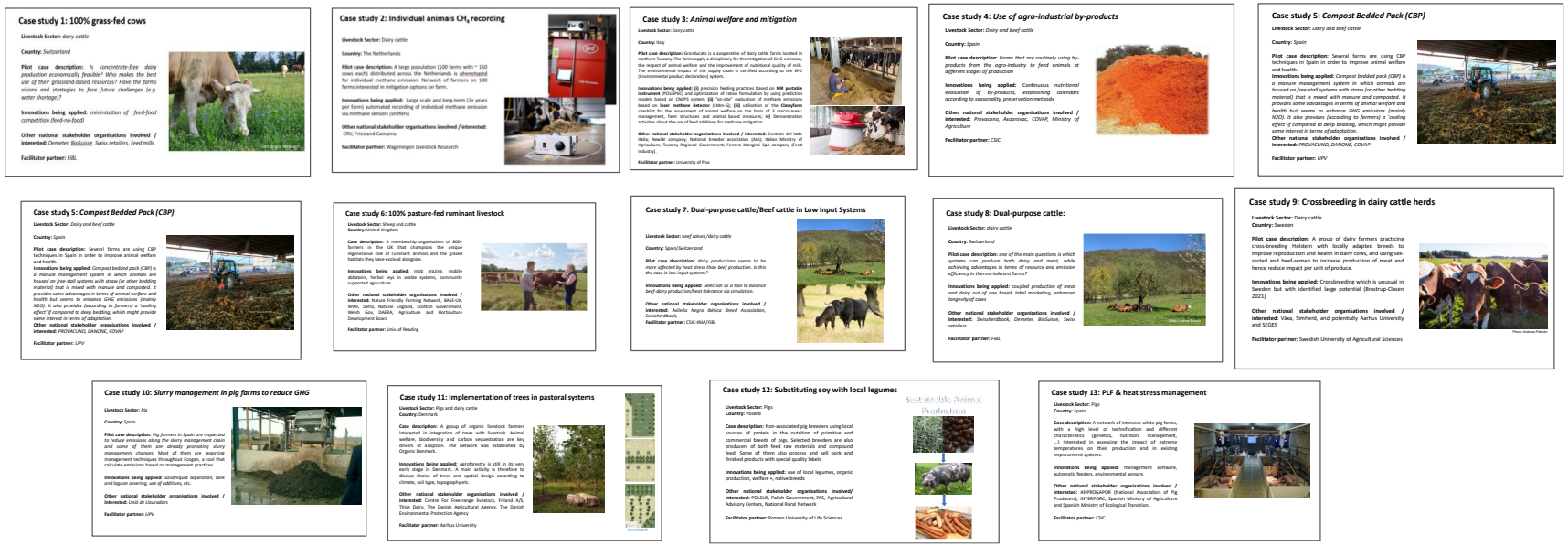
In addition…..

Case Studies will allow us to "understand the factors influencing the adoption and efficacy of mitigation and adaptation practices"

This will be achieved by learning about their mitigation and adaptation potential, *alongside* their wider characteristics and impacts

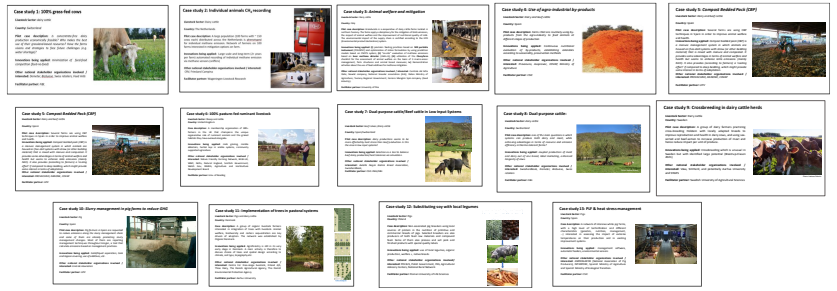
Why is it important to understand the wider characteristics and impacts of these innovative farms?





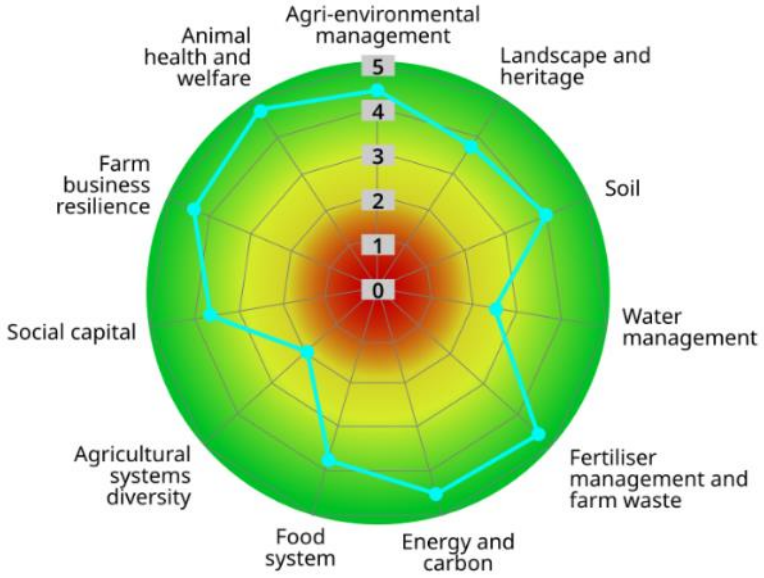
Why is it important to understand the wider characteristics and impacts of these innovative farms?

- To understand the factors that might influence the development and adoption of innovation
- To reveal trade-offs / synergies across sustainability criteria (environmental, economic, social)
- To develop better guidance to practitioners and policy makers
- To help engage farmers by placing the results in the right context (e.g. regarding economic performance)
- To inform future research topics in European livestock sector



Learning from innovative practitioners: case study data collection in WP1, Task 1.2:

- Public Goods tool-bases assessment and data collection to learn about the **characteristics** and **impacts** of the innovative practitioners
- Facilitator / industry partners responsible for **organising data collection**



Public Goods Tool (PG tool): radar diagram from results page

What is the PG Tool?

Background

A tool developed in 2011 at the Organic Research Centre to help farmers develop their farm business and practises

- Developed with input from Defra, farmers and Agricultural Advisors
- Further developed by ORC over the years

What is It

An Excel file containing a number of questions clustered within public good topics

Identifies strengths, weaknesses and trade-offs across multiple ‘spurs’

What is the PG Tool?

- Multi criteria, analysis based assessment
- Comprehensive data collection framework

Key characteristics of the tool:

- Immediate results
- Mixture of quantitative and qualitative indicators
- Simple programming in Excel-spreadsheet
  - Non weighted averages

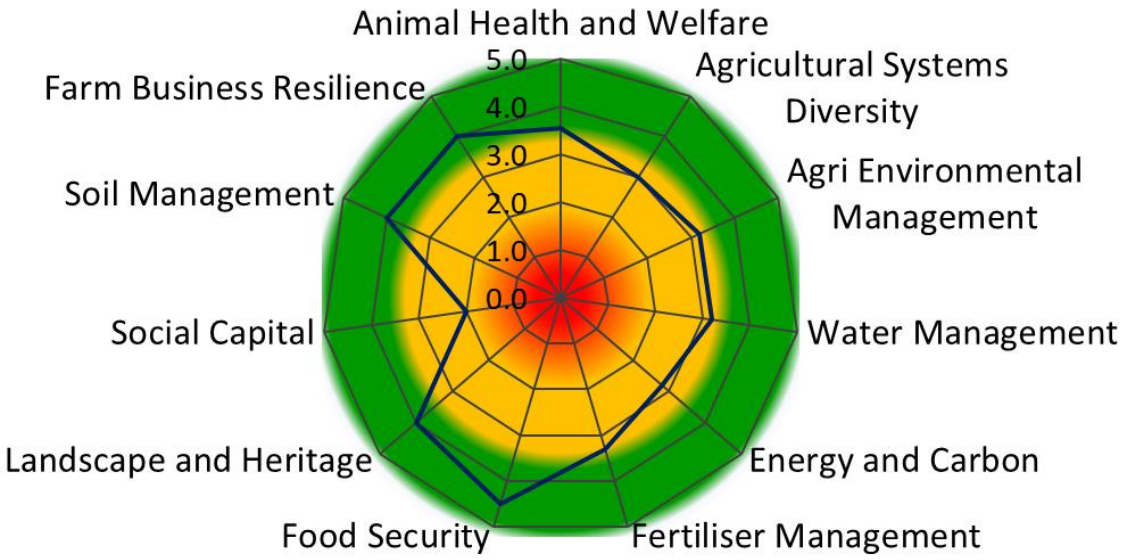
What is looked at?

- Public Good delivery across 11 ‘spurs’

Farm Business Resilience	Agri-environmental Management	Agricultural Systems Diversity
Animal Health and Welfare	Soil Management	Social Capital
Landscape and Heritage	Fertiliser Management	Food System
Water Management	Energy and Carbon	

How does it work?

- Farmers answer questions associated with the 11 spurs
- Each answer is ranked on a **1-5 scale**, cumulatively generating an overall average
for each spur
- The results are presented in a radar diagram



PG Tool ‘spurs’ by Sustainability Domain

Environmental	Social	Economic
• Agricultural Systems Diversity • Agri-Environmental Management • Animal Health and welfare management • Energy and Carbon • Fertiliser Management • Soil Management • Landscape and Heritage Features • Water Management	• Social Capital	• Farm Business Resilience • Food System

Questions are both Quantitative

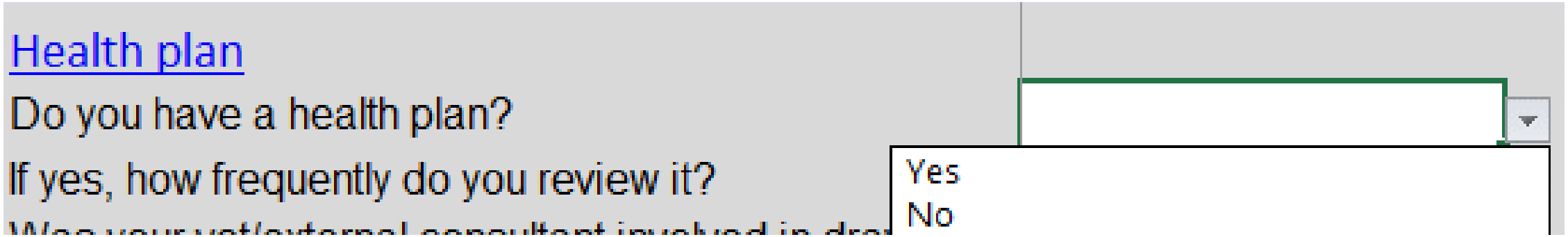
Livestock Numbers
- Sheep
  - Ewes
  - Lambs
  - Rams
- Cattle
- Etc…

Land use values
- Hectares or acres
- Cropping
- Pastures
- Etc…

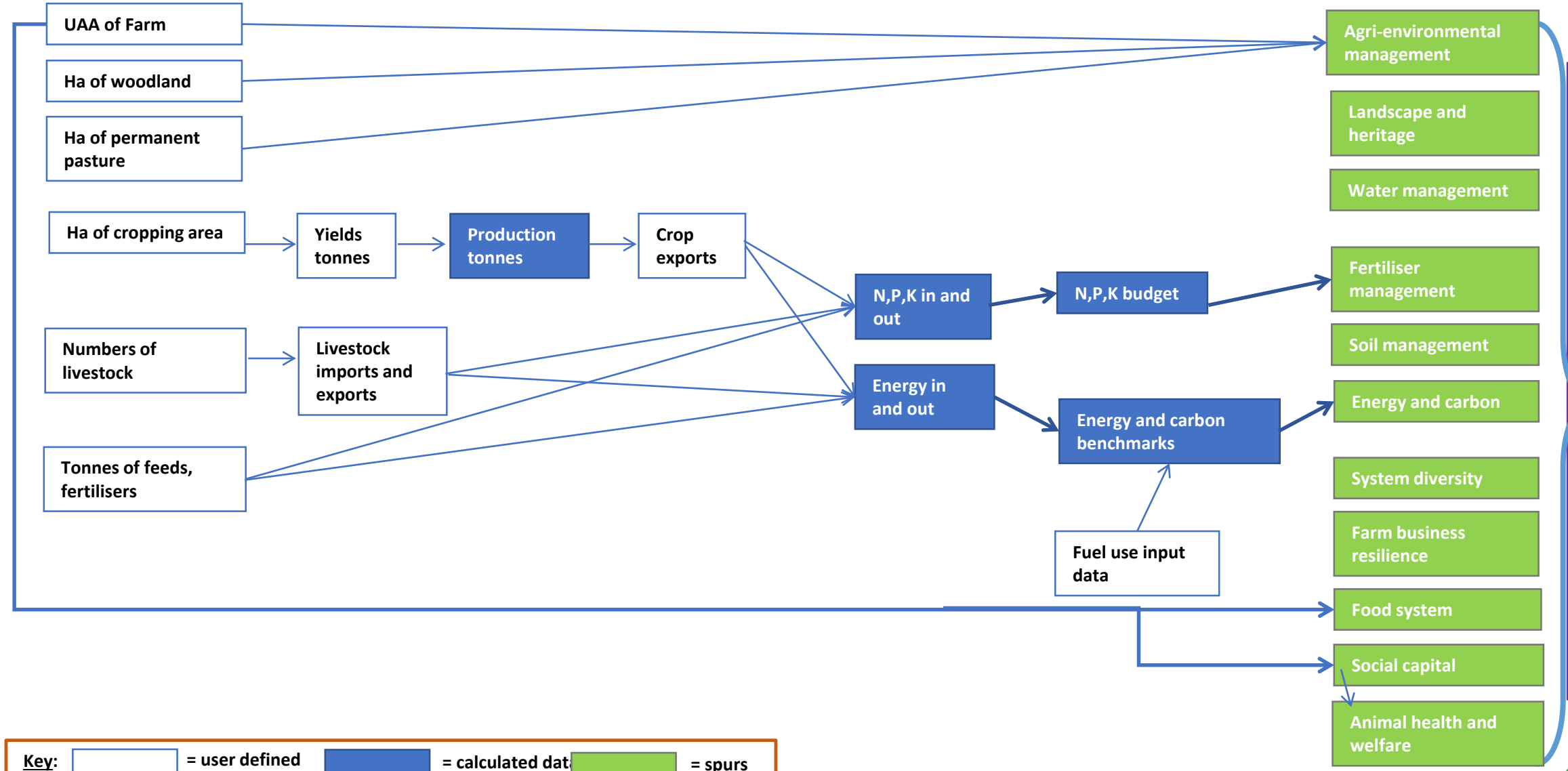
Fuel Use
- Red Diesel
- Petrol
- Etc…

And Qualitative

- Question responses



Current data requirements of the Public Goods Tool

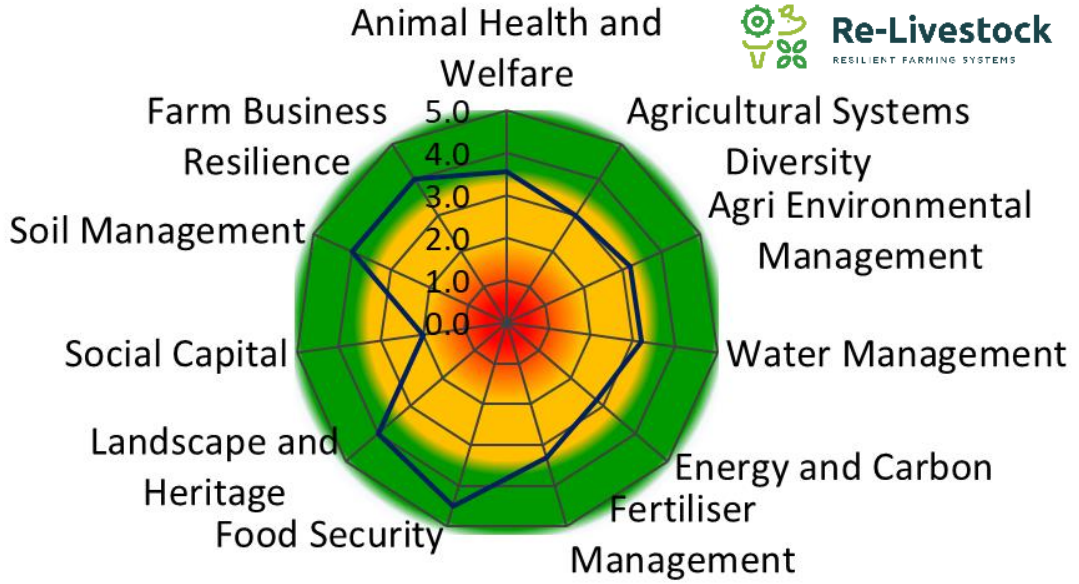


Key: = user defined data = calculated dat = spurs

* Calculated parameters use standard data derived from research reports, management handbooks, Government statistics etc.

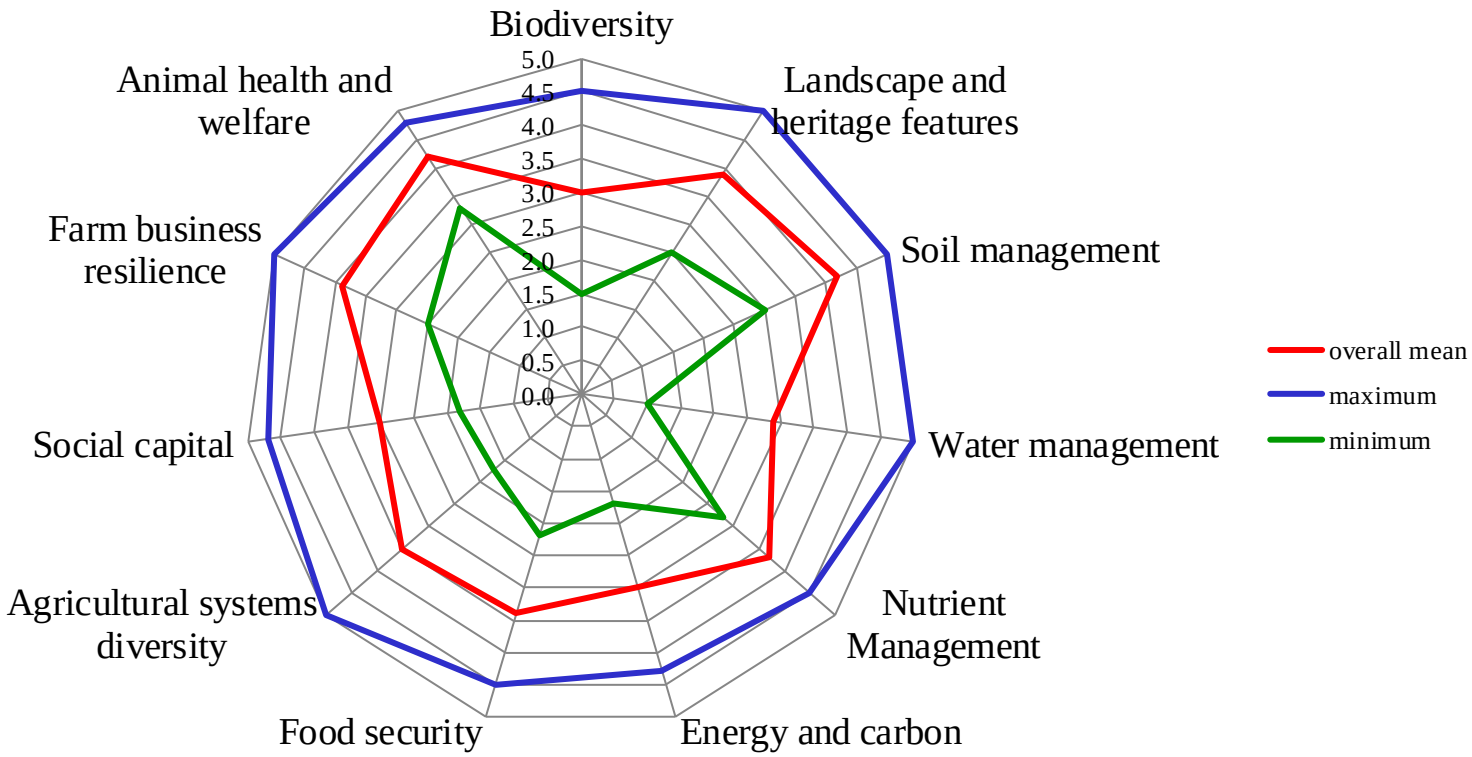
PG Tool – results

- Scores provide an indication of current performance
  - 1 = poor performance
  - 5 = very good performance
- Scores are based upon industry recommen and benchmarks values
- Provides a holistic overview of the farm business
- Spur scores can be considered together (holistically)
- Identify interrelated practices that enhance or hinder each other



Some examples of PG tool' application in recent projects

Public Goods Tool:
Results from Defra funded pilot project (40 organic farms)

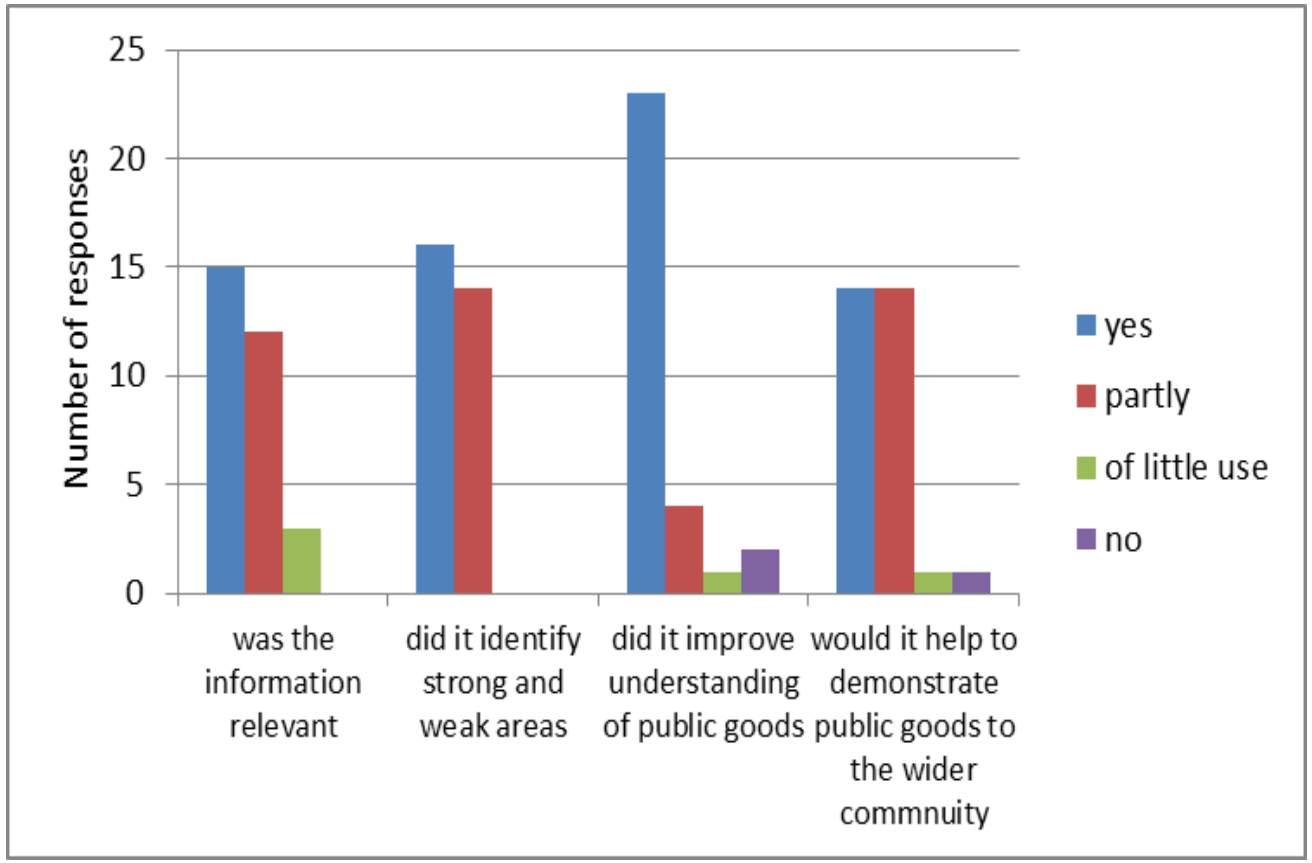


Farmer feedback

The majority felt that the information was relevant and that the tool identified strong and weaker areas of public goods provision.

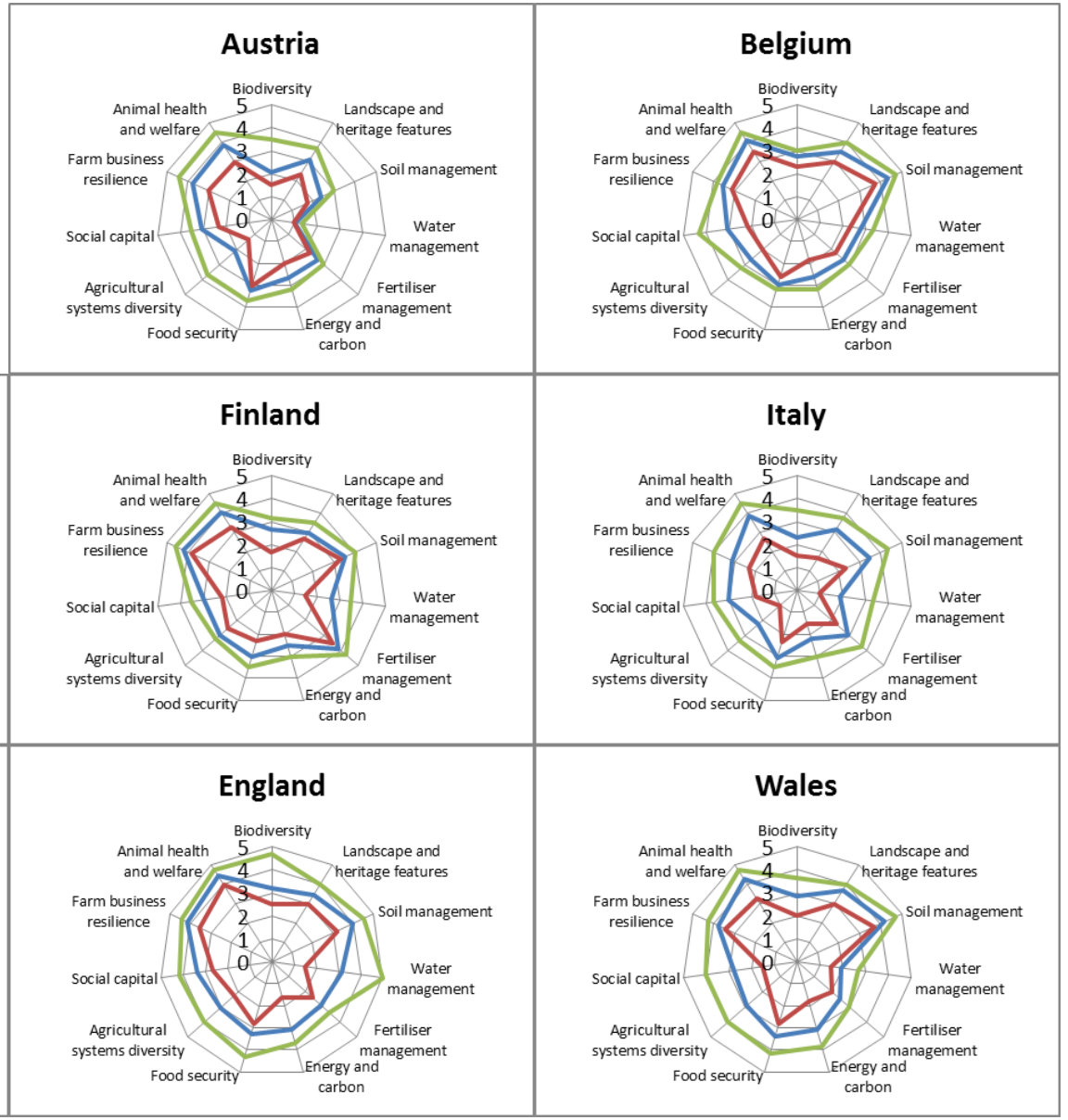
Median score for their understanding of public goods before the assessment was 4 and after the assessment was 8

83% of the farmers would recommend the PG tool to other farmers and 67% said that they thought it should become web-based

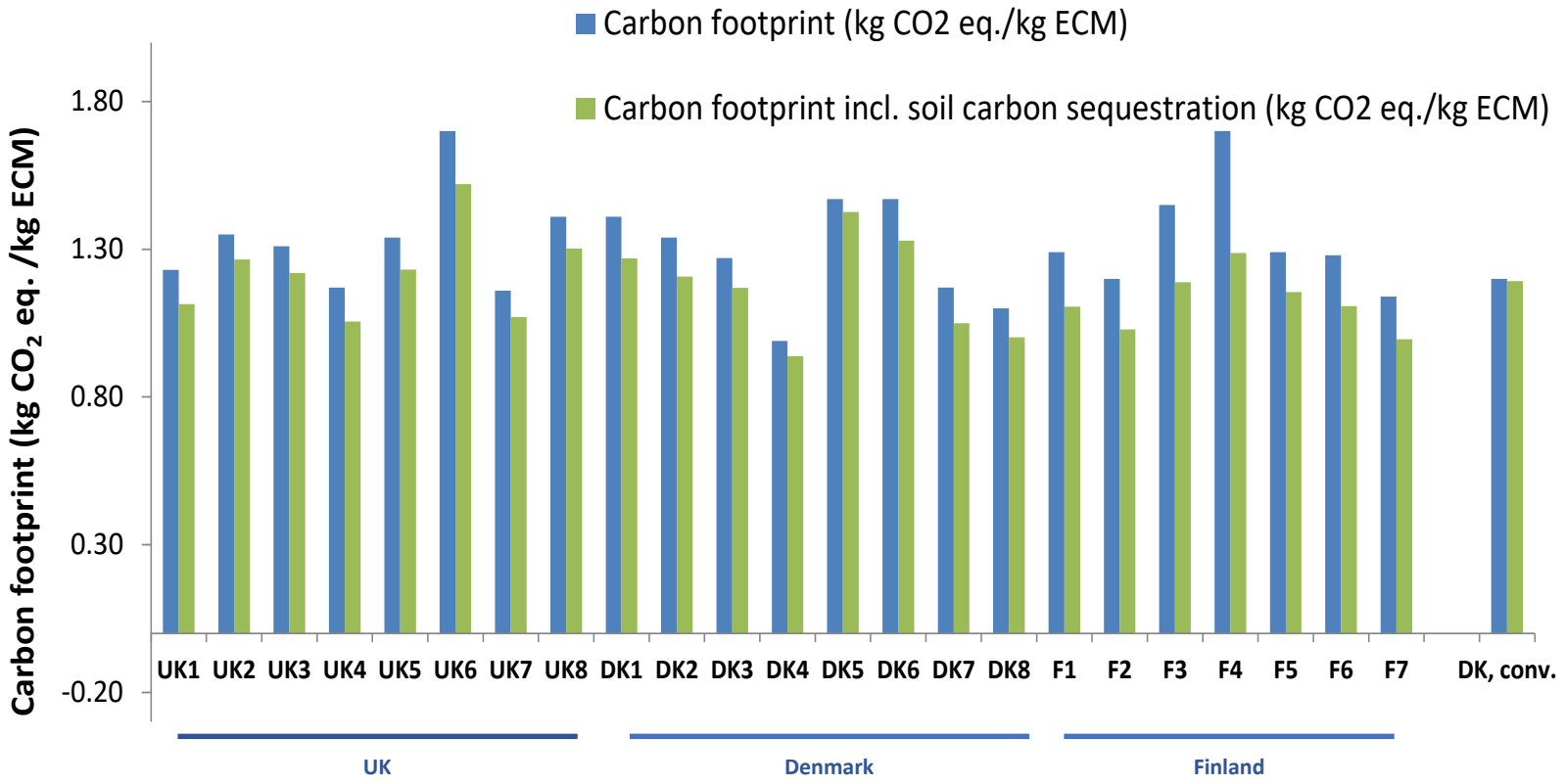


FP7 project: SOLID assessment results

72 organic and low input dairy cow farms assessed across Europe



Life Cycle Assessment using PG tool data



Source: Knudsen et al. (2016)

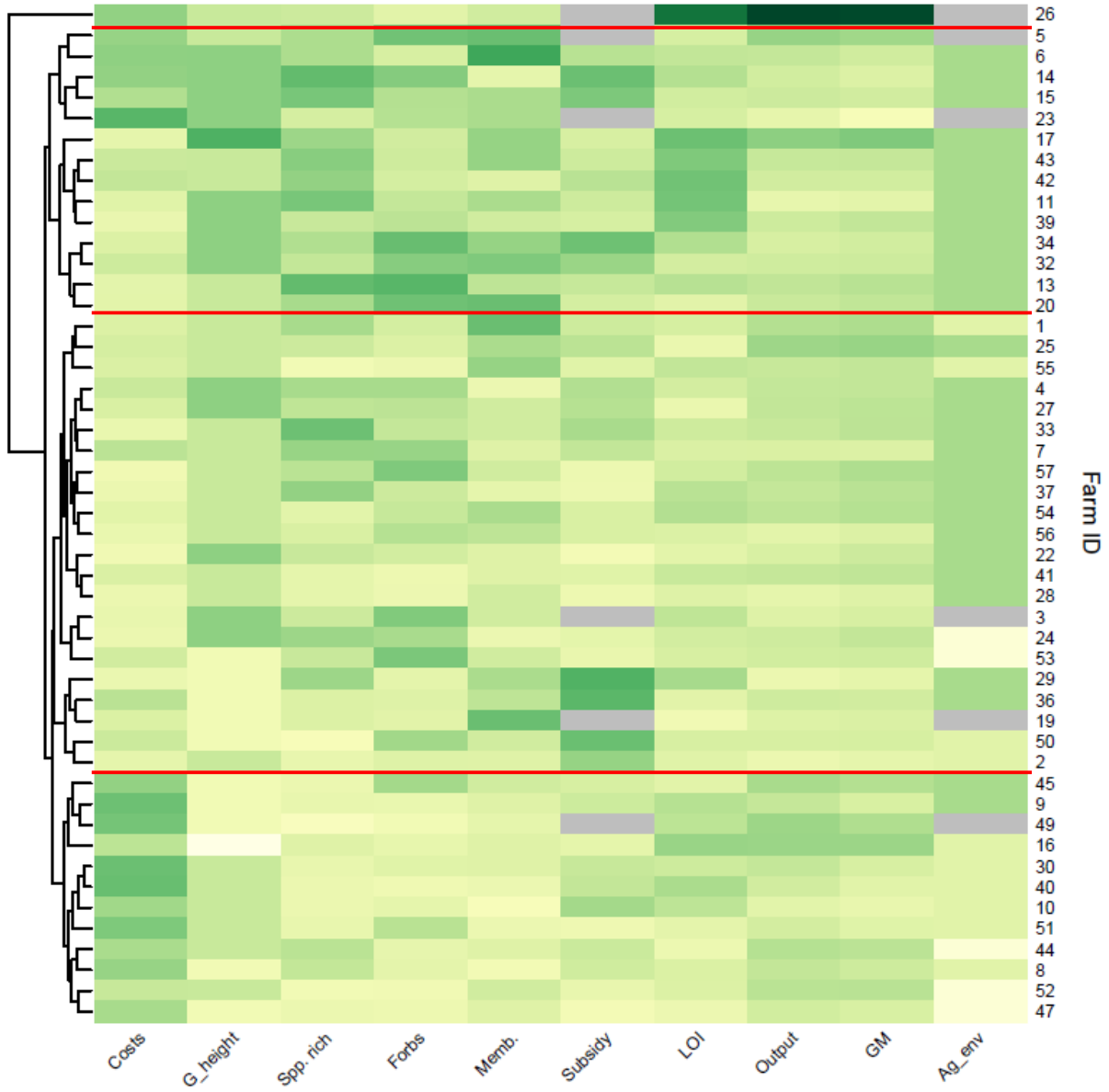
Trade-offs and synergies: exploring interactions

Cluster (i) – farms with highest values for association membership and environmental indicators

Cluster (ii) – farms with highly variable performance for environmental indicators and medium membership years

Cluster (iii) – farms with lowest environmental performance and highest costs and lowest membership years

Heat map of PG tool data



Norton et al. 2022 https://doi.org/10.3389/fsufs.2022.1012691

SEEGSLIP

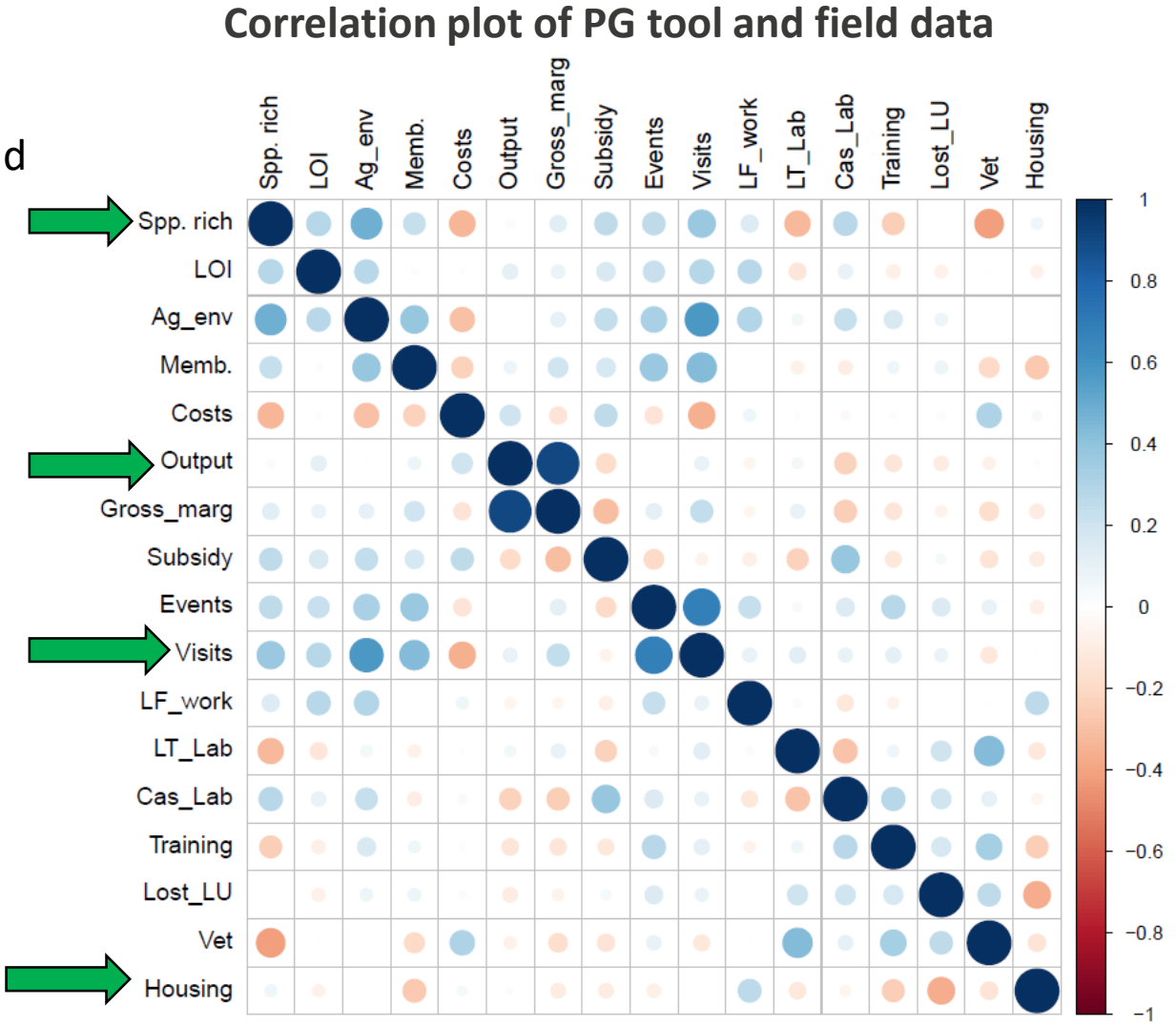
Trade-offs and synergies: exploring interactions through PG tool data

As species richness increased total costs and farm spend on veterinary medicines and vet fees decreased (R -0.33, P<0.05, R −0.42, P <0.01)

Total income from livestock was highly correlated with the total gross margin (R 0.91, P<0.01)

Level of participation in agri-environment schemes (Ag_env) was positively correlated with the number of visitors (Visits, R 0.57, P<0.01)

As housing condition increased lost livestock decreased (Lost LU, R -0.36, P<0.05)



Adapted from: Norton et al. 2022 https://doi.org/10.3389/fsufs.2022.1012691

PG Tool – conducting the assessment

Structure: On farm interview, between an experienced researcher and farmer / client

Duration: 4-6 hours
(including 30 min farm tour)

Goal: Promote discussion around sustainability and what works for an individual business AND provide data to the research team(s) in Re-Livestock

Why use the PG tool in Re-Livestock?

- To characterize and assess the mitigation and adaptation potential of each case study, and the associated characteristics (e.g. farm size, staffing levels)

- To understand trade-offs and synergies across sustainability domains (environmental, economic, social)

- To inform policy and practice

- To benefit the farmers through a comprehensive sustainability assessment that promotes discussion and enables identification of areas for improvement

WP1 Task 1.2 will lead the PG tool adaptation and application process

Task 1.2 Data collection for characterization and rapid assessment of innovative case studies

Aim: coordinate data collection from a subset of case study farms to characterize and monitor the performance of the mitigation and adaptation potential of each study site/innovation

1. Develop data collection framework

Review PG Tool versions, agree on questions to use as base-line and list data requirements (MVARC, UoR)	Jan 23
Review case studies to identify relevance of PGT categories (UoR and CS partners)	Jan-Apr 23
Negotiate with T5.3, 5.4 and 5.5 about additional or revised data points (MVARC, UoR)	Feb-Apr 23
Finalise data requirements list (Milestone 6 M11 (Jul 23) MVARC, UoR)	Apr-Jun 23
Develop and test data collection platform online and excel version (MVARC, ORC, UoR)	Jan-Oct 23
Finalise data collection platform and share with partners (MVARC)	Oct 23

Point of clarification: for some case studies, the facilitator partner is also responsible for collecting data, but for others, the data collection is carried out by the industry partner

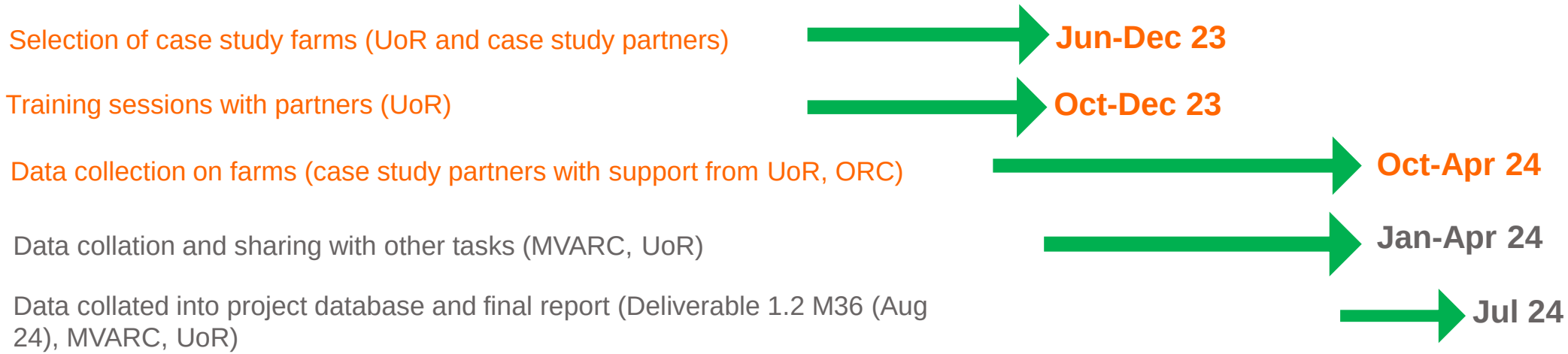
Budget for case studies / no. of farms	**CSIC-INIA**	**WR**	**FIBL**	**AU**	**UPV**	**SLU**	**PULS**	**PFLA**	**OD /L&F**	**UNIPI**	**PCH**
No. of case study farms **TO VISIT**	30	15	30	15	30	10	5	15	15	15	15
Travel to case study farms	€ 6,000	€ 3,000	€ 6,000	€ 3,000	€ 6,000	€ 3,000	€ 6,000	€ 6,000	€ 3,000	€ 6,000	€ 6,000
Payment to case study farmers	€ 6,600	€ 3,300	€ 6,600	€ 3,300	€ 6,600	€ 2,200	€ 1,100	€ 3,300	€ 3,300	€ 3,300	€ 3,300
Focus group hosting / organisation	€ 5,000	€ 5,000	€ 5,000	€ 2,500	€ 5,000	€ 5,000	€ 2,500	€ 2,500	€ 2,500	€ 2,500	€ 2,500

Task 1.2 Data collection for characterization and rapid assessment of innovative case studies

Re-Livestock
RESILIENT FARMING SYSTEMS

Aim: coordinate data collection from a subset of case study farms to characterize and monitor the performance of the mitigation and adaptation potential of each study site/innovation

2. Data collection



Soil management	Soil analysis
	Soil management
	Winter grazing
	Erosion
Agri-environmental management	Intensity
	Agri-environmental participation
	Rare species
	Conservation plan
	3rd party endorsement
	Habitat
	Herbicide and other pesticide use
Landscape and Heritage Features	Historic features
	Landscape features
	Management of boundaries
	Genetic heritage
Water management	Measures to minimise water pollution and maximise water efficiency
	Flood defence and runoff prevention
	Water audit and management plan
	Water harvesting
	Irrigation
NPK budget	NPK
Animal health & welfare	Staff resources
	Health plan
	Animal health
	Ability to perform natural behaviours
	Housing
	Biosecurity

Energy and carbon	Own fuel use
	Contract labour hours
	Total energy use of each enterprise
	Energy ratio for each enterprise
	Energy saving options
	Greenhouse gases
	Land use change
	Renewable energy
Food security	Total productivity
	Local food
	3rd party endorsement
	Food quality certification
	Production of fresh produce
Agricultural systems diversity	Rotational and varietal diversity
	Livestock diversity
	Marketing outlets
	On farm processing
Social capital	Employment
	Skills and knowledge
	Community engagement
	Corporate social responsibility initiatives and accreditation
	Public access
	Human health issues
Farm business resilience	Financial viability
	Farm resilience

Activity for Case Study facilitators

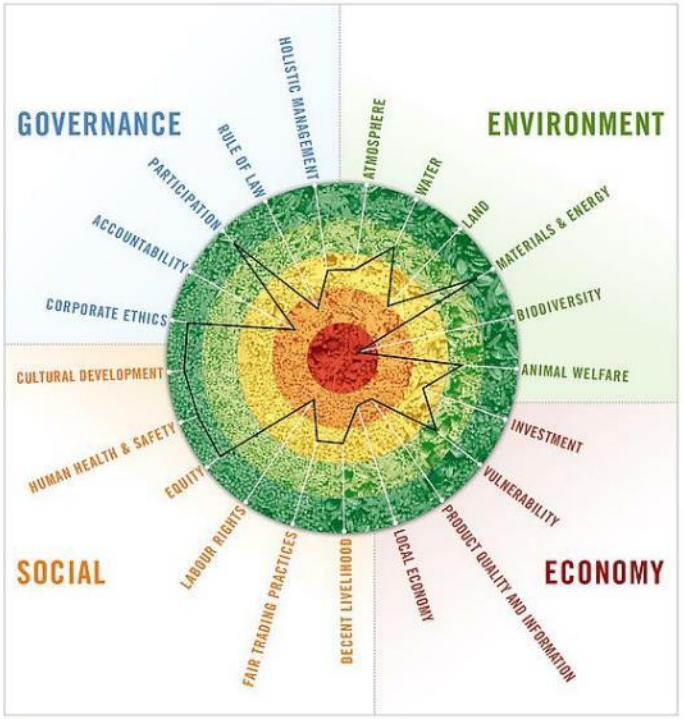
What data are you able to/would you need to collect to describe the innovation and the mitigation/adaptation potential of your case study?

20 minutes

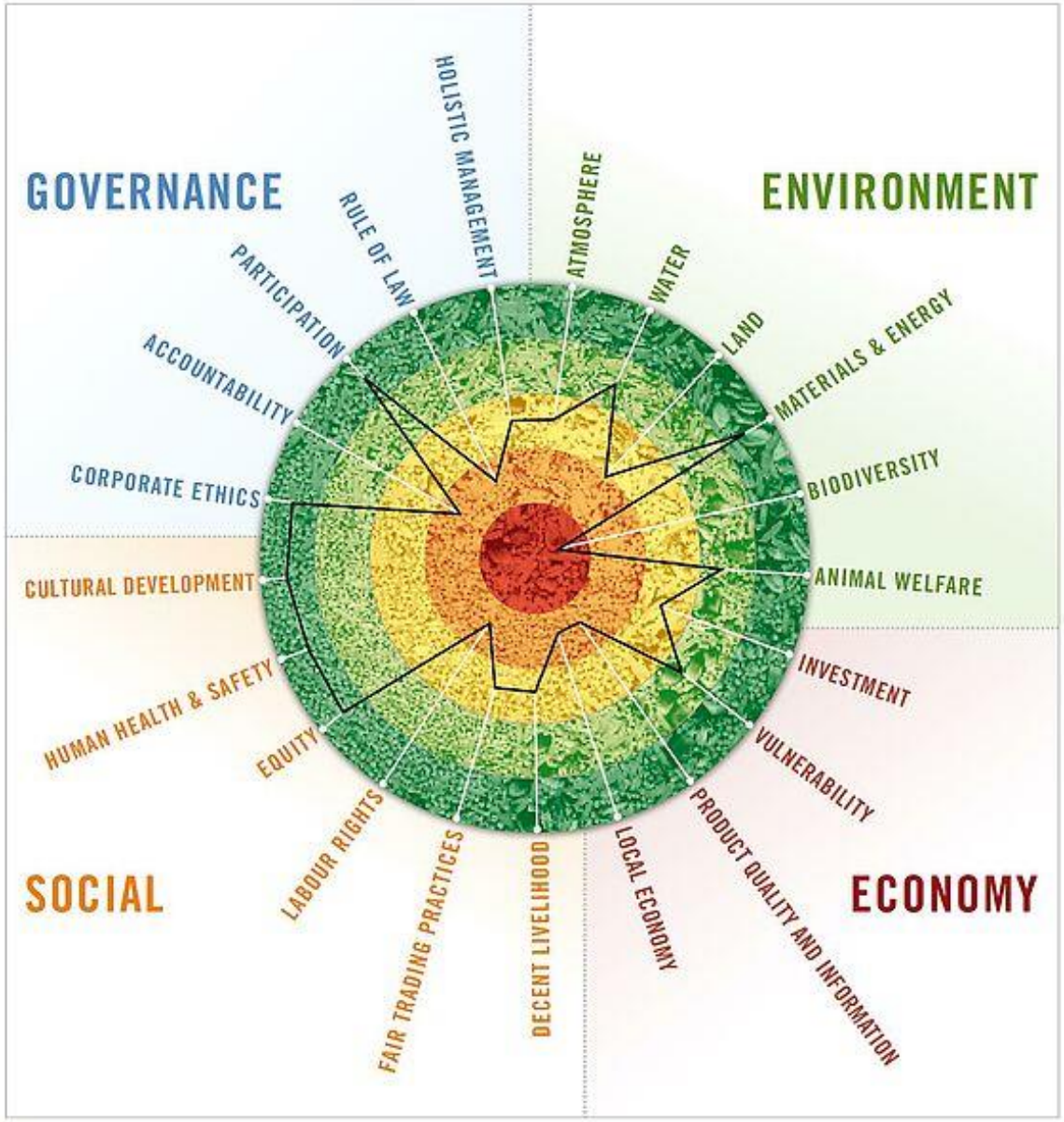
Post-it notes

Post against relevant SAFA dimension:

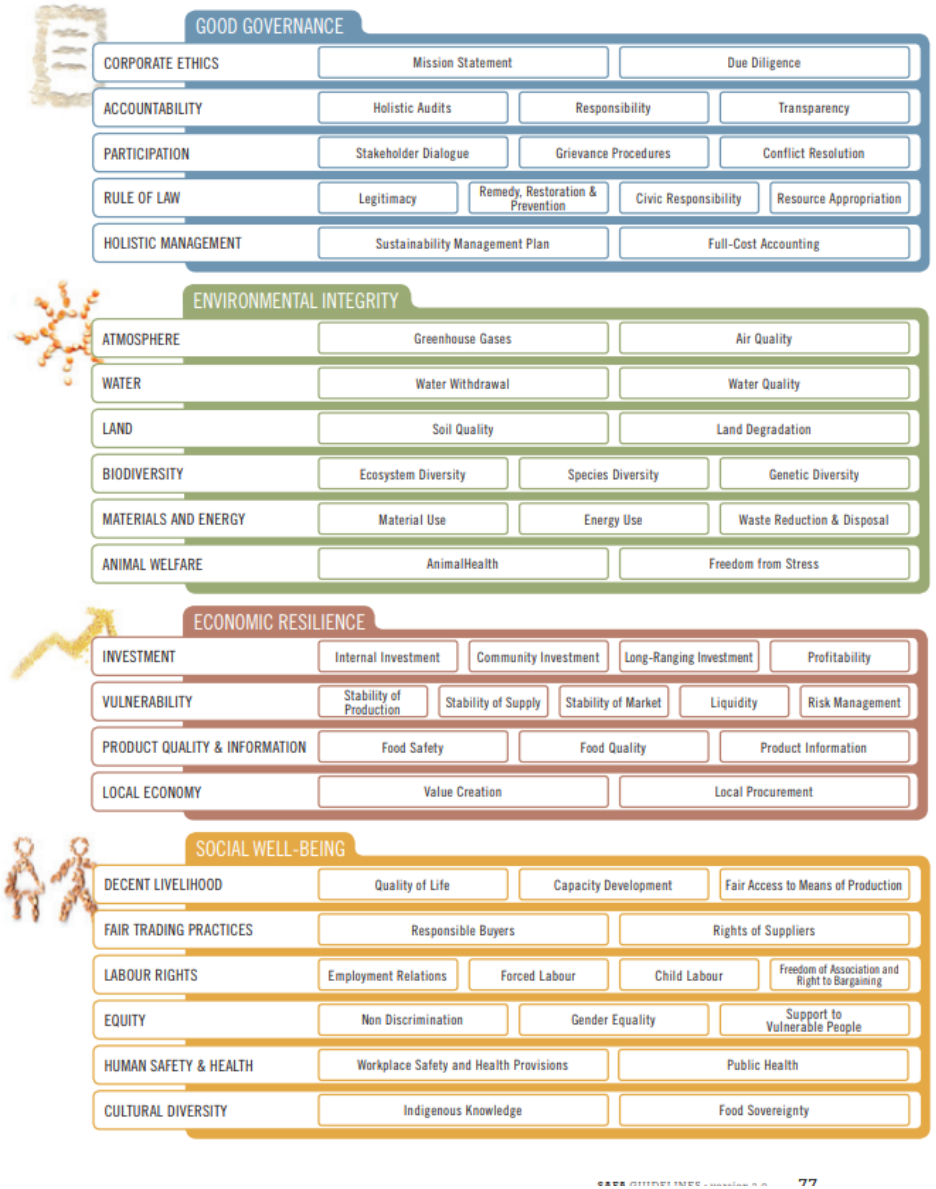
- Governance
- Social
- Economy
- Environment



FAO SAFA domains and themes



FAO SAFA domains and themes



Re-Livestock Case Study List:

Case No.	Case name	Country
1	100% grass-fed cows	Switzerland
2	Individual animals Methane recording	Netherlands
3	Animal welfare and mitigation	Italy
4	Use of agro-industrial by-products	Spain
5	Compost bedded pack	Spain
6	100% pasture-fed ruminant livestock	United Kingdom
7	Dual-purpose dairy cattle in low input systems	Spain
8	Dual-purpose dairy cattle in low input systems	Switzerland
9	Cross breeding in dairy herds	Sweden
10	Slurry management in pig farms to reduce GHG	Spain
11	Implementation of trees in pastoral systems	Denmark
12	Substituting soy with local legumes	Poland
13	PLF and heat stress management	Spain

Thank-you

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RESILIENT FARMING SYSTEMS

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