



Experiences from the first round of RID Pilots

Deliverable D2.4

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1 Executive Summary

AGROMIX project aims to drive the transition towards resilient farming, efficient land use management, and more sustainable agricultural value chains in Europe. In order to achieve the widescale implementation of viable mixed farming and agroforestry (MF/AF) systems, we require new agricultural systems to be designed and existing systems to be developed. Therefore, WP2 develops a participative co-design approach to design tailor-made systems for specific contexts. The approach will be tested in **12 co-design pilots** supported by knowledge and tools from other WPs. The agreed naming for these incorporated projects within AGROMIX is 'co-design pilots'. In this report the naming is sometimes shortened to 'pilots'.

The 12 co-design pilots are located in regions with different agro-climatic conditions, land use, management and socio-economic contexts and vary in size or type of production system, and are representative of a wide range of farming systems in Europe. The participative co-design approach is being conducted in two overlapping rounds of six pilots. The first round started at the beginning of the project and is finalising its the co-design trajectories in the first half of 2023, and will focus on supporting implementation of (elements) of the co-design results. The second round has now started its own redesign process with a revised design approach based on the experience of the first-round co-design pilots.

This report contains 6 fact sheets showing the current state of affairs of the first round of co-design pilots. Each fact sheet starts with an introduction followed by a Learning History, and ends with lessons learned and the pilot's future perspectives. The Learning History method is used as a tool to support reflection on activities and learning processes. It consists of a timeline of the co-design pilot with important events and outcomes in terms of (i) changes in mindset, (ii) adding new actors to the co-design pilot network, (iii) improved relationships in the co-design pilot network, (iv) identification of needs, opportunities or priorities, (v) finding agronomic solutions, (vi) or other. It's not a rigid framework, but has an open structure where the co-design pilot teams could enter the most important events and what they considered relevant to achieve their goals.

The first 6 co-design pilots are (1) Stadtbauernhof Saarbrücken (German pilot by IfaS), (2) Blue Pig Farm (French pilot by ITAB), (3) PHAE (Belgian pilot by ILVO), (4) Swiss Agroforestry Network (Swiss pilot by ZHAW), (5) Cheese Valley (Italian dry Mediterranean pilot by SSSA) and (6) Winthagen (Dutch pilot by WR).

The first three co-design pilots are each individual farms. Stadtbauernhof Saarbrücken is a small-scale CSA farm in full development. It currently grows vegetables, and the redesign process focuses on adding an orchard for free-range chickens, and all the bottlenecks involved. PHAE, is a larger arable farm without direct sales to consumers. The focus here is on growing innovative and ancient cereals, with clover in the rotation as a nitrogen engine. Steps have already been taken in the past towards an agroecological cropping system, but there are still many future steps possible towards more mixedness on the farm, additional tree components and a more closed nutrient cycle. Finally, the Blue Pig Farm is a mixed farm combining pig farming and feed production. Trees have already been planted since 2018, but the need for a more systemic vision around alternative fodder crops, the valorisation of outdoor pig meat and the use of trees made this



an exciting case for AGROMIX. These three pilots were similar yet complementary. The various networking opportunities allowed knowledge and ideas to be exchanged.

The other three pilots have networks, value chains and regions within their system boundaries and face therefore other challenges. The Swiss Agroforestry Network is a community of 140 landowners who receive advice and knowledge sharing from consultants. The network is keen to expand and is considering how a fusion of similar, parallel initiatives could lead to a national network to further promote agroforestry. Cheese Valley is about making the value chain of Pecorino Toscano PDO in Tuscany more sustainable through mixed farming and agroforestry. Several environmental challenges have already urged a few pioneers into action, but there is clearly a greater need for know-how, networking opportunities and viable prospects for farmers in the region. Finally, there is Winthagen, a region in the south of the Netherlands where changing weather conditions and years of intensive agriculture (with all its drawbacks) have led to problems with flooding and erosion. Here, the aim is to redesign the region together with the various stakeholders. The biggest challenge is to get everyone to work in the same direction.

The factsheets reveal that everyone found the co-design approach very valuable in looking at the big picture through systems analysis and bringing together a relevant group of stakeholders in guided discussions. In addition, long-term stakeholder involvement in the co-design pilots increased engagement and goodwill. For the co-design pilots that were not limited to one farm, the way of working was less evident, but still valued overall. We will pay particular attention to this in the second round. For example, through feedback sessions with the first-round pilot teams on the problems encountered by the second-round pilot teams. The tools proposed by WP4 were considered useful for learning and implementation. Due to some delays, partly caused by COVID-19, the process started a bit slower than originally planned. Live meetings, which were particularly important to bring stakeholders together interactively, had to be postponed. As a result, the pilots will be carrying out some final steps in the coming months, and some tools from WP4, such as the participatory mapping activity, will still have to take place on most pilots. As the project continues, this will not be a problem. On the other hand, two years, the duration of each round, is considered short anyway to achieve effective change on the ground, which sometimes created some uncertainty about the outcomes and use of the process. However, the Learning History method provides a good overview that shows that a lot has happened, and seeds have been planted among the different stakeholders that will undoubtedly have an impact within the pilot, the AGROMIX project and beyond.

New project or research ideas have emerged from some of the trajectories, adding to the legacy of AGROMIX. Some co-design pilots are wondering how to continue the process after AGROMIX. This is something that gets a growing attention in the last two years of AGROMIX. The variety of trajectories creates a lot of diversity, but this provides readers with a wide range of possible scenarios, where elements can be chosen to suit their own specific situation and promote the shift towards more resilient and efficient land use in Europe.



2 Expected impact

To support the development of mixed and agroforestry (MF and AF) farming systems in Europe, WP2 *Systems design and synergies* develops a participatory design approach based on the Reflexive Interactive Design (RID). RID aims to interactively design system innovations in complex and controversial contexts and to reform existing ‘mainstream’ agricultural systems (Bos & Groot Koerkamp, 2009). Innovations generated by RID are not necessarily technical ‘fixes’ to unsustainable practices. Rather, RID aims at redesigning to reduce the number of trade-offs between conflicting needs and to circumvent social and technical constraints for sustainable development (Bos, 2010; Bos et al., 2009).

The approach, developed under Task 2.1 *Participative design platform* is implemented in 12 co-design pilots and supported by the knowledge and tools provided by other WPs. The implementation of the methodology fits under Task 2.2 *Participative design pilots*. This means that tasks 2.1 and 2.2 are highly interrelated and continuously feedback to each other.

As a final outcome of Task 2.2, all individual pilots will provide a comprehensive description of the pilot and the co-design process: starting situation, steps taken in the design process, (types of) actors involved, (planned) system changes, vision for the future, other outcomes. This will lead to D2.2 *Catalogue and evaluation of mixed and agroforestry system designs: description of objectives, design choices, challenges, solutions and evaluation of system performance* due by M48 of the project.

In the meantime, the co-design pilot teams of the first round present their current intermediate state in **6 fact sheets**, which are gathered in this report. Together with the presentation of the design process of the second-round co-design pilots and the analysis of the LHs across the pilots of both rounds, they will form D2.2 and will inspire and empower farmers and stakeholders to innovate and transform towards a more sustainable and resilient agricultural system.

The work and the effect of the co-design pilots contribute to a wide range of the AGROMIX Expected Outcomes (EO) and Expected Impacts (EI) (Table 2.1).

Table 2.1. Expected Outcomes (EO) linked to co-design pilots' contributions and their Expected Impacts (EI).

Expected Outcomes	Work done in the co-design pilots (related to EI from call)
1. Harmonise existing knowledge and understanding of environmental and socio-economic synergies in MF/AF systems to achieve greater climate resilience of the farming sector.	System and stakeholder analysis with stakeholders in the co-design pilots. Exchange of experiences and information between different co-design pilots. Literature reviews conducted by some pilots (I1, I2)
3. Develop a participative design platform for all WPs to access 83 study sites for their research activities.	The first round of 6 co-design pilots have completed activities to test the participative design method and are part of the case study catalogue. (I1, I2)
4. Maximise synergies between actors within and outside the Consortium by engaging with networks and initiatives across Europe.	The co-design pilots have connected actors with a focus on local and regional actors. Most pilots are part of a bigger network and/or organized open field days for networking and knowledge sharing (I2, I5)
8. Increase knowledge among farmers of key aspects of MF/AF systems.	In the redesign, farmers are included in the process as stakeholders. Tools provided by WP4, such as the sustainability and resilience analysis provided clear insights into the impact of certain measures on the whole. Next to the select group included here, a broader group is reached through knowledge exchange via open field days and network activities. (I1, I2, I3, I4, I5)
9. Spread the adoption of sustainable practices for the transition to more resilient mixed and agroforestry systems.	The first round pilots contributed with an EIP Practice Abstract. In addition, the <i>lessons learned</i> provide useful insights into what works and what does not work to bring about change towards more sustainable practices. Under the motto "seeing is believing", these examples, together with open field days, offer tools for the adoption of sustainable agricultural practices (I2, I5)
11. Improve knowledge of existing business models and governance arrangements.	Part of the system analysis and re-design process of some pilot teams (I2)
15. Identify potential for transition to foster the adoption of more diversified farming and engage with local stakeholders to draft action plans.	Core of the work in the co-design pilots (I1, I2, I5)
16. Empower farmers and stakeholders to innovate, taking different knowledge to evaluate and develop new practices.	Core of the work in the co-design pilots (I1, I2, I5)

Impacts from the call

- I1. Deliver effective solutions for ensuring the highest level of implementation [...] in heterogeneous landscapes.
- I2. Unlock and improve viability and replicability [...] and propose different transition scenarios [...].
- I3. Reduce the environmental impact of farming and contribute towards mitigation and adaptation to climate change.
- I4. Provide ecosystem services through integrated and small-scale land management.
- I5. Foster synergies between agricultural production, climate change mitigation and adaptation.



3 Fact sheets

3.1 Stadtbauernhof Saarbrücken – German pilot (IfaS)

3.1.1 Introduction

Stadtbauernhof Saarbrücken eV was founded in 2015 and it is located nearby the city of Saarbrücken, in the area of Saarbrücken Almet (Saarland State, DE). The pilot is a 2-hectare organic farm characterised by:

- 0.6 hectares are used for bio-intensive vegetable production
- 0.5 hectares are under development for fruit and poultry farming

Currently the farm has a bio-intensive vegetable production (incl. herbs, edible flowers) as well as a stock of fruit trees and bushes currently being built up to serve as a free-range area for poultry farming. Moreover, in the farm, educational programs with schools, kindergarten groups and adults (ranging from tree pruning courses to agricultural policy discussions) are also organised. The farm runs a community-supported agriculture (CSA), bringing together members to collect their products from the farm weekly harvest. In total, it supplies around 100 families in the area, but it also sells products to the local restaurants. The pilot is member of the “Netzwerk Solidarische Landwirtschaft”, an association that represents the interests of over 300 community supported agriculture farms in Germany. This allows the pilot to exchange knowledge and experience with other members being part of a quite developed network at national level.



Figure 3.1.1. Stadtbauernhof Saarbrücken pilot farm (photo: Jörg Böhmer)

The pilot aims to:

- Set up a food production system that respects the environment and natural life cycles as well as ensuring high-quality products
- Introduce and showcase alternative, sustainable production techniques
- Create a multi-functional place where the social aspects play a key role, establishing educational, culinary and social activities to promote sustainable food production

The pilot farm is managed by Jörg Böhmer, also working as Deputy Head of the Biomass and Cultural Landscape Development Department at IfaS ([Institut für angewandtes Stoffstrommanagement](#)), and his wife.

3.1.2 Pilot Learning History

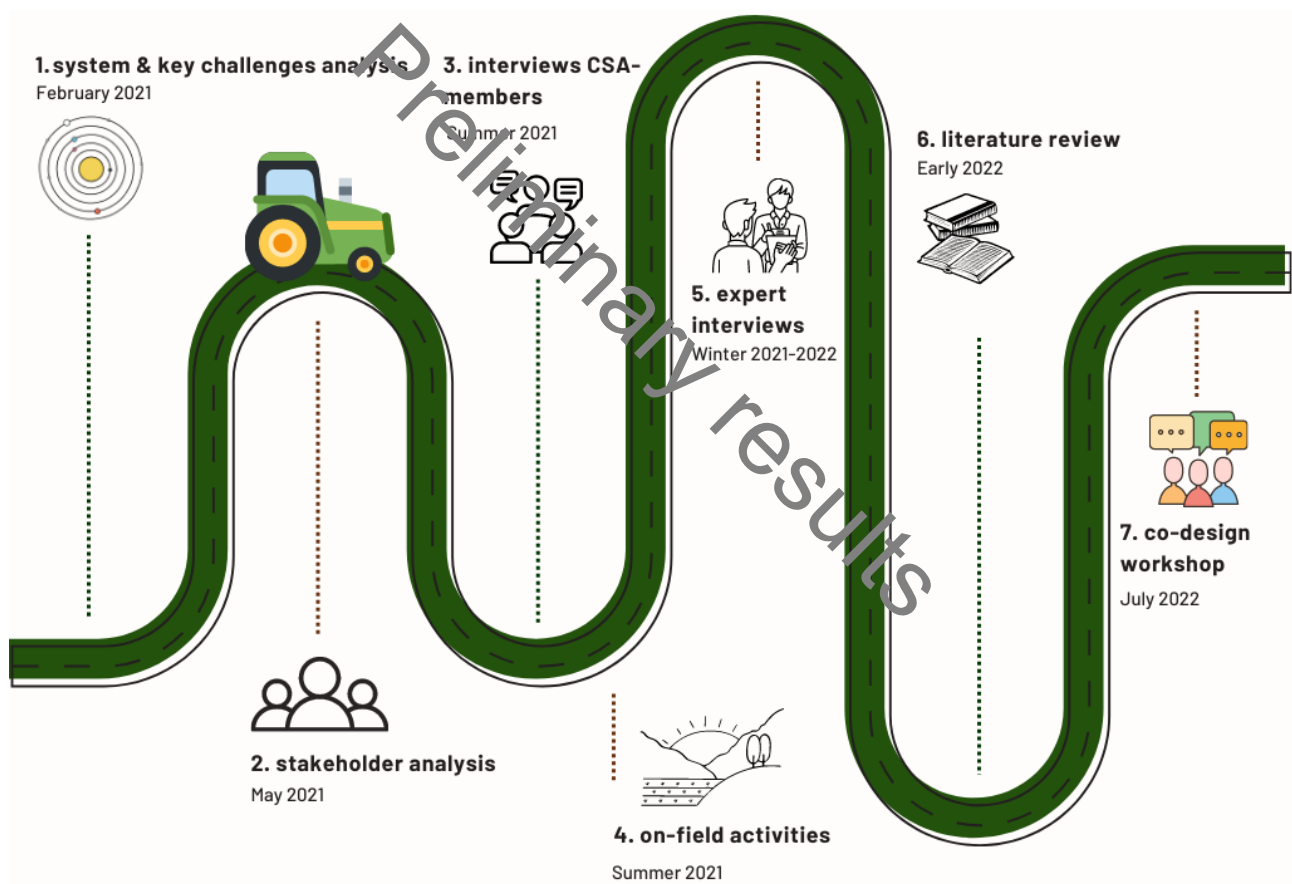


Figure 3.1.2. Pilot Learning History of Stadtbauernhof Saarbrücken.

3.1.2.1 System analysis & key challenges

Within the AGROMIX framework, the German pilot Ambassador (Zaira Ambu) and Facilitator (Jörg Böhmer) have worked on the development of the pilot system analysis (Figure 3.1.3) and the pilot key challenges (Figure 3.1.4) at farm/local level and one at national level.



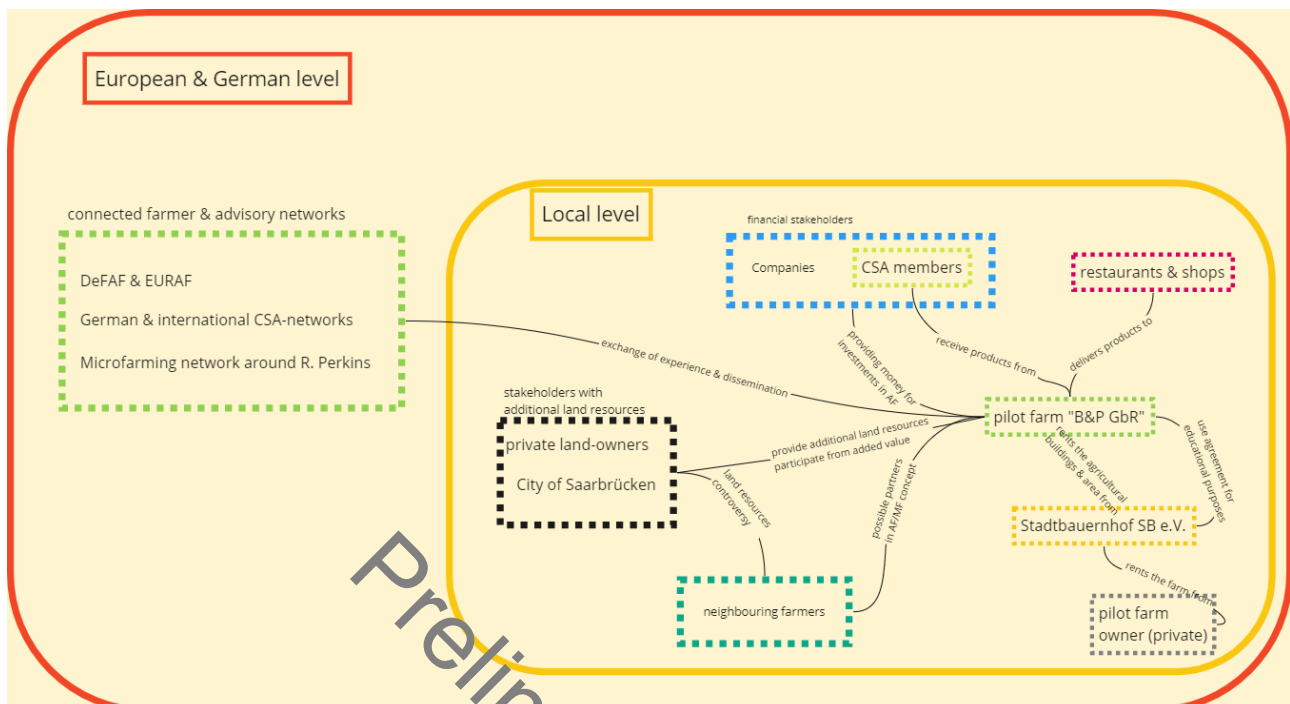


Figure 3.1.3. Pilot system analysis.

The farm rents the land from a private owner and leases the farm buildings and related areas from the pilot farm B&P GbR. In addition, the pilot is linked locally to the following stakeholders:

- Financial stakeholders: CSA members and companies that provide investment and receive in return for products from the pilot;
- Neighbouring farmers: they could be possible partners in the further implementation of AF/MF
- Restaurants & shops: to whom the pilot sells its the products
- Stakeholders with additional land resources: private landowners near the pilot farm and the city of Saarbrücken. The former could be involved in a dedicated capacity-building workshop to share knowledge and further develop integrated approaches in AF and MF. While the city of Saarbrücken has a key role to play in facilitating the implementation of a multifunctional land use system by incorporating the concepts into the city's land lease regulations.

At national/EU levels the system analysis is characterised by:

- Advisory networks: DeFaF & EURAF, which can be used as a source of specific technical and scientific knowledge to support the integration of AF in the pilot agricultural practices
- Connected farmers: Microfarming Network, which is also part of the Richard Perkins Association focused on regenerative agriculture

The key challenges, objectives and vision of the German pilot were updated during the course of the project.

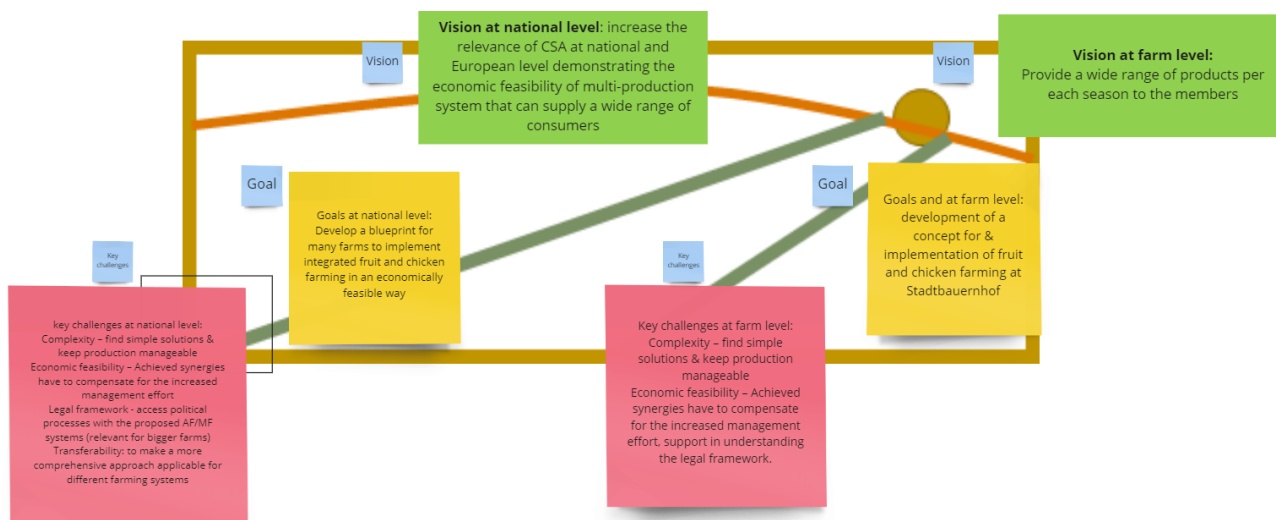


Figure 3.1.4. Pilot key challenges.

As a result of this process, the following main goals have been identified:

- Local level: integrate orchard fruit trees with poultry production at the Stadtbauernhof Saarbrücken pilot.
- National level: to create a blueprint for the integration of orchard and poultry production in other CSAs, and thus to upscale and support the implementation of AF in other pilot farms in Germany, beyond the intervention area of the AGROMIX project. In fact, the German pilot considers all the activities carried out at local level for the integration of orchards with poultry production as functional for the achievement of the general objective of developing a blueprint for farmers who want to implement AF to support the integration of a multifunctional system that includes economic feasibility offering a wide range of products. The lessons learnt from the pilot project will in fact be used for the implementation of the integrated system blueprint to display and support further development in other geographical areas and of common CSAs of AF.

In terms of the German pilot's vision, this can also be divided into two levels:

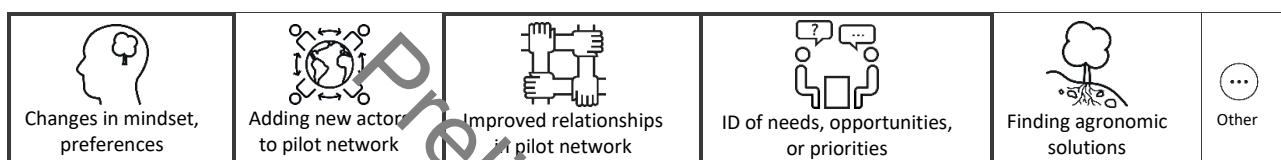
- Local level: to provide a wider range of products that will allow ensuring a supply in different seasons, also taking into account the possible demand of CSA members for additional products.
- National level: increasing the relevance of the CSA system as a source of food and services that can be economically viable towards the implementation of AF, integrating multifunctionality with biodiversity enhancement.

The key challenges at the local level relate to the development and implementation of a functional integrated system for the orchard and poultry production on the pilot farm. This also includes issues related to acquiring the necessary knowledge and expertise to implement and maintain the new system, including the required main power supply. It is also important to involve policy makers and government agencies in the process to support the implementation of AF systems at the policy level. The key challenges at local level concern the development and implementation of a functional integrated system for the orchard and poultry production in the pilot farm. This also comprises the issues related on gaining the necessary

knowledge and expertise to implement and maintain the new system also regarding the required main power. Moreover, it is also important to include policy makers and governmental bodies into the process to support at policy level the implementation of AF systems.

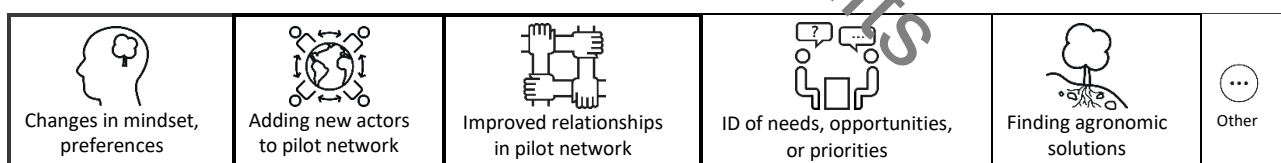
At national level, the key challenges are:

- The ability to manage a complex system such as AF and MF and to find simple solutions that will help to keep production manageable.
- Economic feasibility, as the costs associated with the implementation of AF and MF and the costs associated with the management of the new system require a compensatory solution.
- In terms of the legal framework - access to political processes with the proposed AF/MF systems (relevant for larger farms).
- Transferability: to make a more comprehensive approach applicable to different farming systems.



3.1.2.2 Stakeholder analysis

After the second workshop in May 2021, a stakeholder management plan was carried out, which plays a key role in achieving the pilot goal. Therefore, a **stakeholder analysis** was carried out in May 2022 to identify the 'stakeholder type' such as mover, floater and blocker. This was based on the attitude to change and the approach of the main stakeholders and actors to the pilot objective of integrating poultry with orchard production at the Stadtbauernhof Saarbrücken. The formulation of the "brief of requirements" for the identified actors was also carried out. This made it possible to identify the next steps to be taken to ensure adequate support for the pilot goals.









3.1.2.3 Interviews CSA members

During the spring and summer of 2021, various activities were carried out to gain a better understanding of the key actors and stakeholders' opinions on the implementation of the new pilot activities. In particular, the members of the pilot CSAs were interviewed regarding their interest in supporting or opposing the integration of orchards with poultry production in an economically viable way. The interviews were conducted with CSA members and employees of the pilot farms. 20 people were interviewed in person, and a further 50 were interviewed using a mixture of multiple choice and open questions via an online survey. Overall, the results of the interviews showed that people were often unfamiliar with agroforestry, so an explanation of the topic was provided to help people understand the questions. The CSA members who benefit from the products of the pilot farm showed a positive attitude towards the idea of

implementing orchards with poultry production. In terms of interest in buying additional products, there was a strong interest in buying eggs (regularly) and in buying fruit from the orchards, while there was little interest in buying jam and chicken meat (occasionally). The employees of the pilot farms expressed some concerns about the feasibility of implementing the new integrated systems. This was particularly related to questions about the additional work required to successfully set up and manage the new production system. In general, they showed some interest in contributing to planting and maintenance, but only occasionally provided additional support as they felt they did not have the time to fully contribute to these additional work activities. In fact, there was a suggestion that an expert should be hired for this purpose and that more technical knowledge was needed.

Visits to farms that have already implemented this production system and/or workshops on the topic were proposed. This activity has given the members of the pilot CSAs a voice to express their opinion on the new integrated farming system, and therefore to include the members' needs and concerns in the co-design approach of the pilot. Overall, this was also a good opportunity to improve relationships within the pilot network as members felt that their concerns had been heard. The results of the interviews were summarised in minutes and presentations, which could easily be used as a reference for the further development of the pilot co-design.

 Changes in mindset, preferences	 Adding new actors to pilot network	 Improved relationships in pilot network	 ID of needs, opportunities, or priorities	 Finding agronomic solutions	 Other
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3.1.2.4 On-field activities

Various activities have been carried out on the site, resulting in the construction of a new stable and green roof in the summer of 2022, combining biodiversity with insulation, as well as the planting of new fruit trees for the orchard.



Figure 3.1.5 German pilot farm on-field activities (source: Jörg Böhmer)

3.1.2.5 Expert interviews and literature review

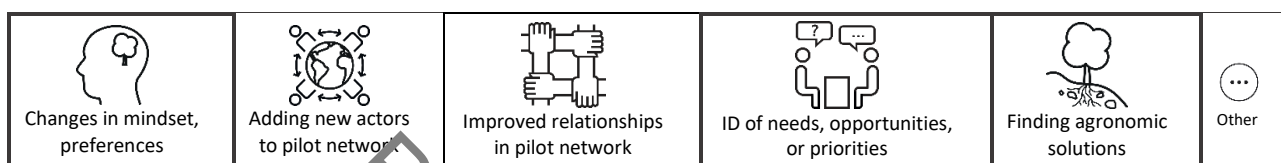
In autumn/winter 2021 and early 2022, a **literature review** on orchard and poultry production has also been carried out. An internal report was written on the pros and cons of combining poultry production with different farming systems and what management adjustments are needed for successful integration. The report included specific case studies of field activities carried out in different countries, such as from the UK on "Assessing the economic feasibility of a poultry agroforestry system", from the Netherlands on "Lessons learned from the combination of free-range chickens for egg production with different agroforestry systems", from Italy on "Assessment of biodiversity recovery and egg quality in an integrated hazelnut and organic poultry system", from Belgium on "Added value in organic farming combining kiwi berry plantation with free-range poultry production". The report also included information on planting designs such as mosaic, modular and row planting, as well as on pathway systems and feeding options in organic poultry production.

The collection of technical and scientific information was completed by adding the knowledge gained from interviews with pioneers in Germany. The interviews were conducted in the winter of 2021 and early 2022 and focused on:



- Fruit: yield, varieties, fungicide-reduced production,
- Chicken: space requirements, workload, minimum flock size, chicken breeds, animal health, economic data (costs/revenues), construction details, feeding strategies
- Workload for establishment and maintenance
- Synergies, trade-offs, drawbacks, marketing concepts for fruit & chicken products

This has provided an overview of the field activities and thus the actual environmental, social and economic aspects involved in implementing an integrated system such as orchards with poultry production. Overall, this has highlighted the key factors for a successful production system and has been very helpful to the pilot farm in developing its integrated approach.



3.1.2.6 Co-design workshop



Figure 3.1.6 Co-design workshop 13th July 2022

In **July 2022**, the first co-design workshop of the pilot farm was organised in the city of Saarbrücken. The focus of the workshop, which was held together with the CSA members who are also actively involved in the work on the ground, was to evaluate the future goals of the pilot with regard to the integration of the agroforestry system with a focus on chicken and fruit production. The following key aspects were analysed and discussed

- - Potential for further integration
- - Business plan and market expansion
- - Development of guidelines for transfer to other CSAs

The workshop was divided into several brainstorming sessions. In relation to the discussion on what potentials and benefits can be achieved by the pilot from the integration of orchard and poultry production in the context of the AGROMIX project, the most relevant points and opportunities were identified:

- To test new animal husbandry models

- To learn how to establish a sustainable farm cycle management system, also using the experience and results of the AGROMIX project, for example in relation to the re-use of chicken manure as fertiliser and organic composting as a feeding option.
- To promote and enhance biodiversity, for example by increasing the number of pollinators.
- To improve soil fertility
- To further implement educational activities and to increase the number of tours to showcase the pilot approach
- To develop a more profitable communication and marketing scheme as the new integrated production system will offer a wider range of products
- To offer more diverse products, thus reducing the dependence on supermarket products.

Another aspect that was again highlighted as crucial (and which had already been a concern during the interviews) was the increase in labour demand that would automatically accompany the implementation, development and maintenance of the integrated orchard and poultry production system on the farm.

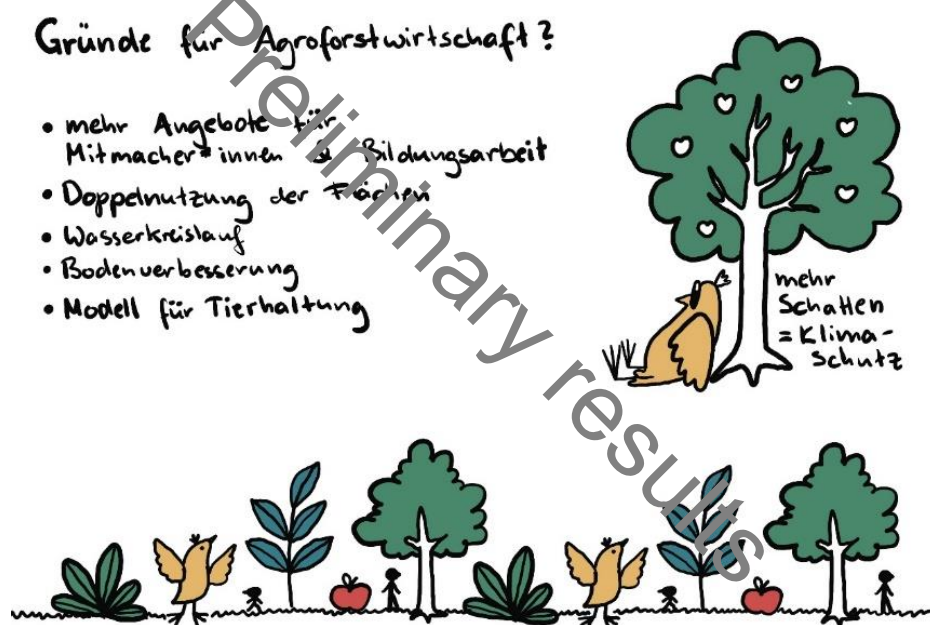


Figure 3.1.7 Reasons for the implementation of orchard and poultry production system at the German Pilot.

Moreover, the pilot **co-design cornerstones for both trees and chicken production** have been identified and discussed. Major emphasis was placed on:

- How to ensure the animal health and welfare
- Animal breeds
- Tree species
- Development of the irrigation plan for the trees
- The amount of work required to maintain the orchards and chicken stables, including pruning, the slaughtering of the animals, etc.

Regarding the educational activities, new perspectives should be considered to extend these activities not only at local level but also at national level. In terms of marketing, the key aspects are the development of

new marketing strategies aimed at the existing channels (at farm level, local restaurant, etc.) to add the new products, but also to expand the market to include, for example, ice-cream shops and to look at options for the sale of jam. Another key aspect is the development of a new business plan for the farm to ensure economic viability, and also to test a possible closed-loop structure to reduce dependence on external fertiliser inputs, for example by using chicken manure to improve soil quality.

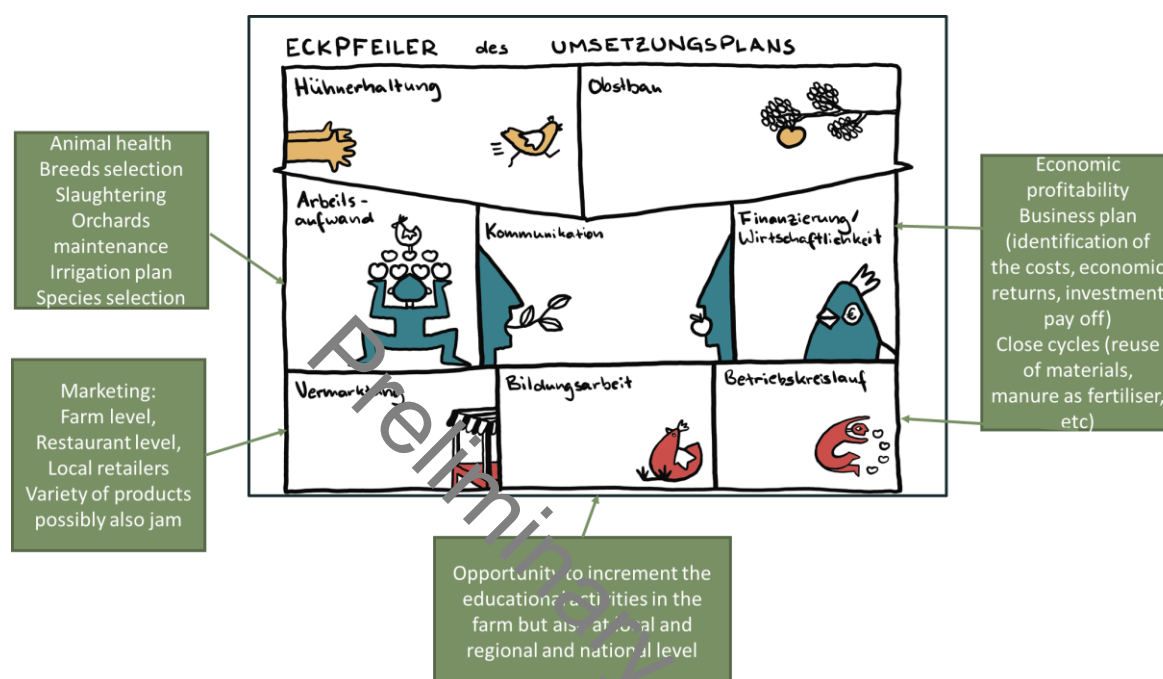


Figure 3.1.8 German Pilot cornerstones and planning activities

At the end of the workshop, all the results were used to discuss the next steps for the further development of the pilot co-design.

With regard to the key organisational aspects, the discussion highlighted the importance of finding the right person with technical expertise to look after the orchard and poultry production. In this context, the results of the brainstorming will be further analysed, including a list of paid vs. unpaid work activities, a survey analysis to analyse the cost parameters and a cost calculation for different job shares (half fruit / half chicken or 1/3 job depending on the structure of the concept). These will be important steps for the development of a detailed job description with the aim of finding a suitable person to work full time initially, with the additional help of an assistant, to look after the orchards and poultry production. This detailed job description will be advertised through various channels. In addition, one person from the farm will also be trained to become a fruit/chicken specialist.

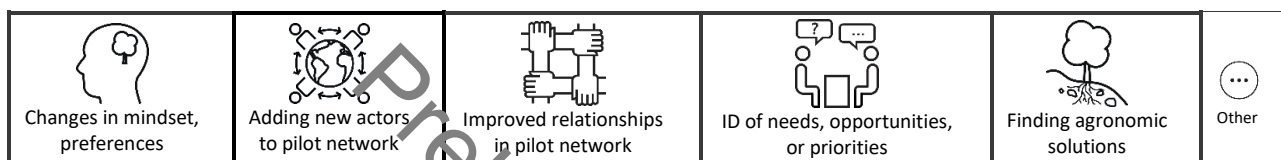
With regard to the tasks strictly related to field work, the following tasks should be taken into consideration:

- Fruit trees maintenance (e.g., pruning, etc.)
- Painting of additional trees
- Setting up pheromone traps
- Water, feed, manure chickens

- Collecting eggs
- Treatment of possible illness of the animals

Moreover, among the next steps the workshops participant considered important as next step to involve additional supporters:

- Involve the "Streuobstpabst" in the Saarland region
- Involve large organic fruit growers (Schneider, Latz, Jacobi)
- Finance position through sponsors (e.g., Energie Saar Lor Lux)
- External micro farm as model
- Involvement of fruit and gardening associations
- Involvement of Nabu
- Exposé to sponsors (e.g., Esplanade)



3.1.3 Lessons learned & future steps

The pilot had two main objectives:

- To establish orchard with poultry production at the farm aiming at combining environmental with economic feasibility
- To develop a blue print to guide other CSAs in the implementation of their own integrated systems

Using the RID as a guideline and the results of the co-design workshops as well as the results of the interviews, the literature review and the exchange of literature with the other pilots, two possible solutions were considered for the German pilot in order to ensure economic feasibility as well as the proper management of the workload:

- Either production is outsourced to third parties and linked through cooperative marketing. Then an AF farm with fruit and chicken production (or two separate co-operating farms) must reach a critical minimum size. Experience to date shows that fruit production needs to be sized for around 300-600 households (e.g., by supplying several CSA farms) and laying hen production for at least 100 (cost-covering) or 400 laying hens (small profits possible) to ensure the income of one or more workers.
- Alternatively, extensive production can take place within an existing vegetable farm. In this case, the activities have to be harmonised with the vegetable production, so that usually only very extensive fruit production and less labour-intensive poultry production are possible.

In general, however, it is possible to use more elaborate production methods (such as the use of old fruit varieties and dual-purpose chicken breeds), provided that the community supports and finances them through its contributions.

With regard to the development of the blueprint, discussions are currently taking place on

- Holding an additional workshop involving experts and various CSA members from other communities to further discuss the approach and subsequently develop the blueprint as a guide for future implementers.
- Conduct an additional workshop with only the pilot CSA members and selected experts in orchard and poultry production to share further knowledge and also to respond to the various requests from farm workers regarding required expertise, workload etc.

After the German pilot has completed all implementation activities, a blueprint will be developed in the form of educational material such as a video that could be used to disseminate the German pilot farm as a best practice example to other CSAs farms. The AGROMIX WP2 co-design approach was very helpful in defining the right steps for concept development and further implementation. The participatory mapping approach of WP4 will also be an important support for the learning and implementation process, as it allows to involve key stakeholders of the pilot farm, facilitating an open discussion about farming systems and agroecological transition, and the development of agroforestry systems in the pilot area.

Preliminary results



3.2 PHAE – Belgian pilot (ILVO)

3.2.1 Introduction

PHAE (Project Hansbeke AgroEcology) is a certified organic arable farm in Belgium covering 60 hectares, which rotates the production of legumes, cereals, and temporary grassland. One of the farm's main interests is the improvement of soil quality through the implementation of agroecological principles, including reduced tillage (farming with limited disturbance of the soil structure through tillage practices) and the incorporation of ponds, trees, hedges, and grass strips on the farmland.



Figure 3.2.1. Impressions agroecological infrastructure at PHAE.

After years of conventional farming, farm manager Felix de Bousies observed the damage being done to the farm's main asset: the soil. After learning about studies showing that the reduced tillage approach can gradually restore soil fertility, improve soil drainage, and capture more carbon, de Bousies switched to this agroecological method in 2017. In a reduced-tillage system, shallow cultivation fissures are created before sowing a main or cover crop. Weeds are controlled by light hoeing on the soil surface, the use of annual and permanent cover crops –including temporary grassland with goat grazing to exhaust weed seedbanks –and the use of 'fast growing' crops that quickly cover the soil to prevent weed germination. It is hoped that PHAE will note an increase in soil fertility and biodiversity, improved drainage, and discover the additional benefits of reduced farm operating costs due to the reduced-tillage approach. The land managers also anticipate trees and hedges to benefit from the reduced disturbance of the soil, as well as from the additional fertilisation provided by biodegraded leaf litter.

PHAE is one of the partners within the Experimental Platform for Agroecology in Hansbeke (**PPAE Hansbeke**). The other partners are ILVO (Flanders Research Institute for Agriculture, Fisheries and Food) and RHEA (Natural Resources Human Environment & Agronomy). Together they generate and share expertise on putting agro-ecological principles into practice.

The **participatory design pilot of Belgium** involves a multi-stakeholder group consisting of the PPAE partners (Felix de Bousies of PHAE, Alain Peeters of RHEA and researchers Koen Willekens, Jolien Bracke

and Bert Reubens of ILVO), supplemented by a changing cast (depending on the topic) of regional collaborating farmers, contractors, millers, consultants and experts. The **main objective** of the pilot is to expand agroforestry on the farm and to support the integration of animals (such as poultry, dairy goats) to increase the mixedness. It also **aims** to improve nutrient flows and fertiliser strategy by using wood chips produced on-farm from the tree component, either composted or as chipped wood, by on farm composting and by experimenting with micro-organism in the form of compost tea. Finally, Felix would like PHAE to be a lighthouse farm and promote the agroecological vision in order to encourage the transition to agroecological farming in Flanders and beyond.

3.2.2 Pilot Learning History

pilot learning history: PHAE

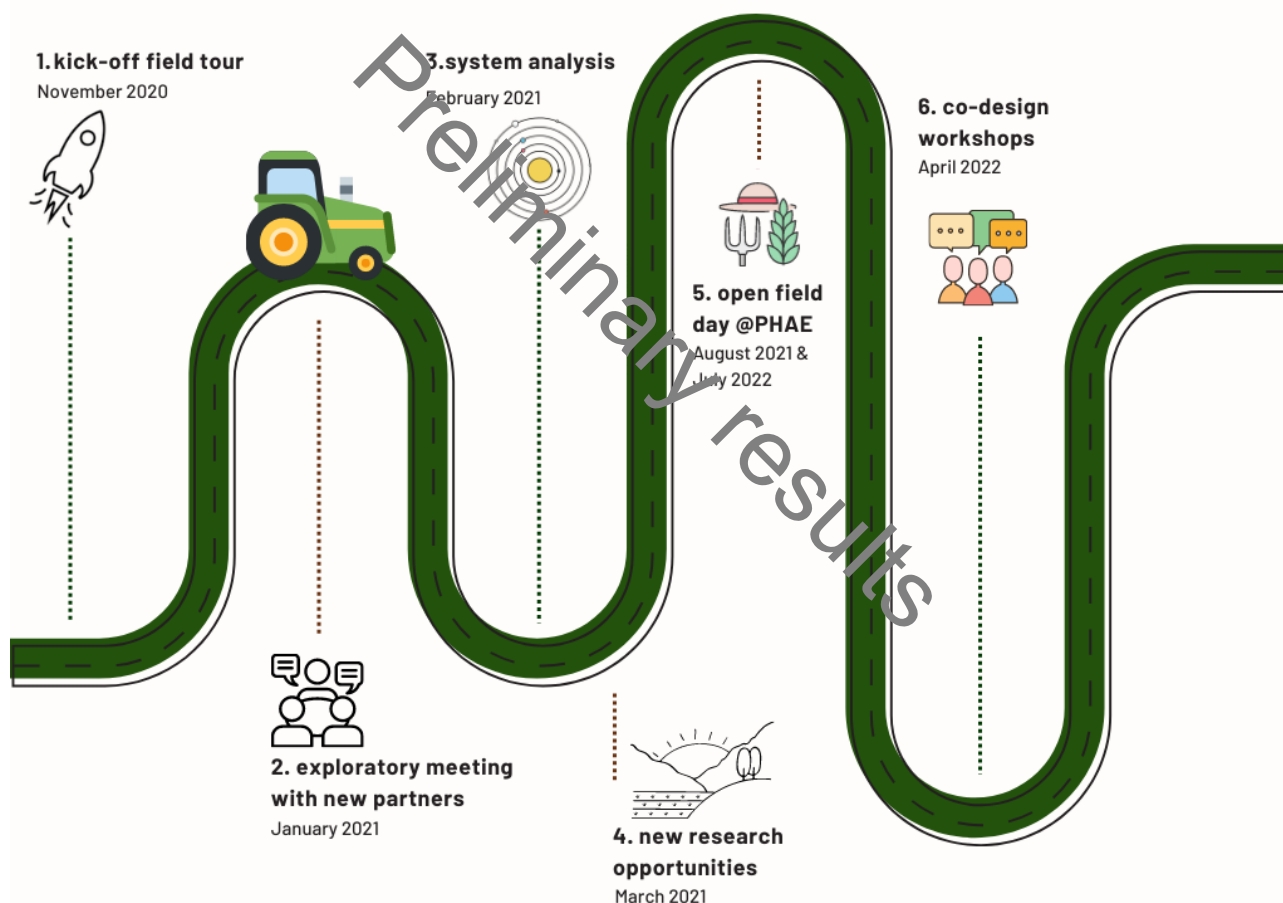
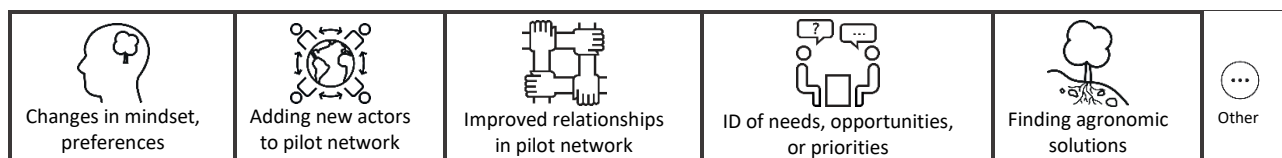


Figure 3.2.2. Pilot Learning History of PHAE.

3.2.2.1 Kick-off field tour

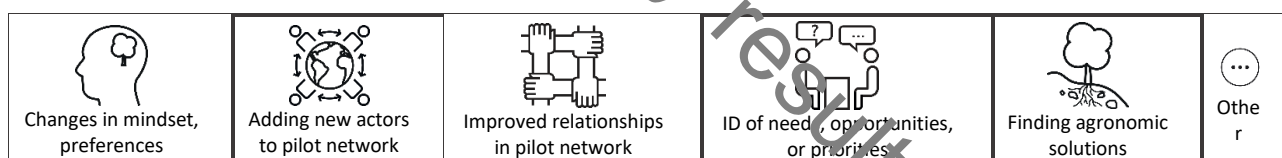
In November 2020, the pilot team (pilot ambassador & facilitator) met on the fields together with the farmer (Felix de Bousies), an agronomic advisor (Alain Peeters, founder of RHEA) and a number of ILVO researchers. We were shown around and PHAE's strategy was explained. The AGROMIX project was

presented, and the objectives of the pilot listed. Ongoing research was linked to the farm and seeds for new project ideas and research topics were planted. The farmer's vision and uncertainties were discussed, and everyone got a good idea of the farm management. The first acquaintance was a fact and by having this take place in an informal way, on the field, the foundation was laid for a smooth and open collaboration.



3.2.2.2 Exploratory meeting with new partners

As the farmer wants to increase mixedness on the farm, but has no specific interest in keeping animals himself, he searches for other farmers with an agroecological state of mind and looking for land. In January 2021, a meeting was held with possible new partners at the company PHAE. Attendees included a goat and sheep farmer, a cheese maker, the farmer, the pilot team, and a number of researchers. The needs of each partner were put on the table and many uncertainties were also revealed. For example, there was still a lot of uncertainty about timing, but especially about how to formalize a collaboration and how investments can be shared, how a cheese factory could find a place on the farm and how the goats could fit into the current business operations and crop rotation in a suitable way. For example, at that time subsidies were obtained for the cultivation of grass-clover and those were not compatible with grazing. Small bottlenecks were tackled by follow-up of the pilot team, while larger obstacles served as inspiration for subsequent co-design workshops.



3.2.2.3 System analysis

The first WP2 pilot workshop took place in February 2021. Different concepts were explained: goal & key challenges, system analysis and stakeholder analysis. The system analysis in particular was very enlightening for our pilot. By visualising the different processes and relating them to each other, the whole became clear. It also makes it possible to present the pilot to others in a clear way, to work on manageable parts of the system and to see at a glance what can be affected by a particular change. The system analysis could also be used to identify weaknesses and opportunities within the system, and on this basis two themes were selected for the co-design workshops: agro-ecological viticulture and optimisation of nutrient flows at PHAE (see 3.2.2.6). The system analysis is still regularly consulted and updated; it is not static.

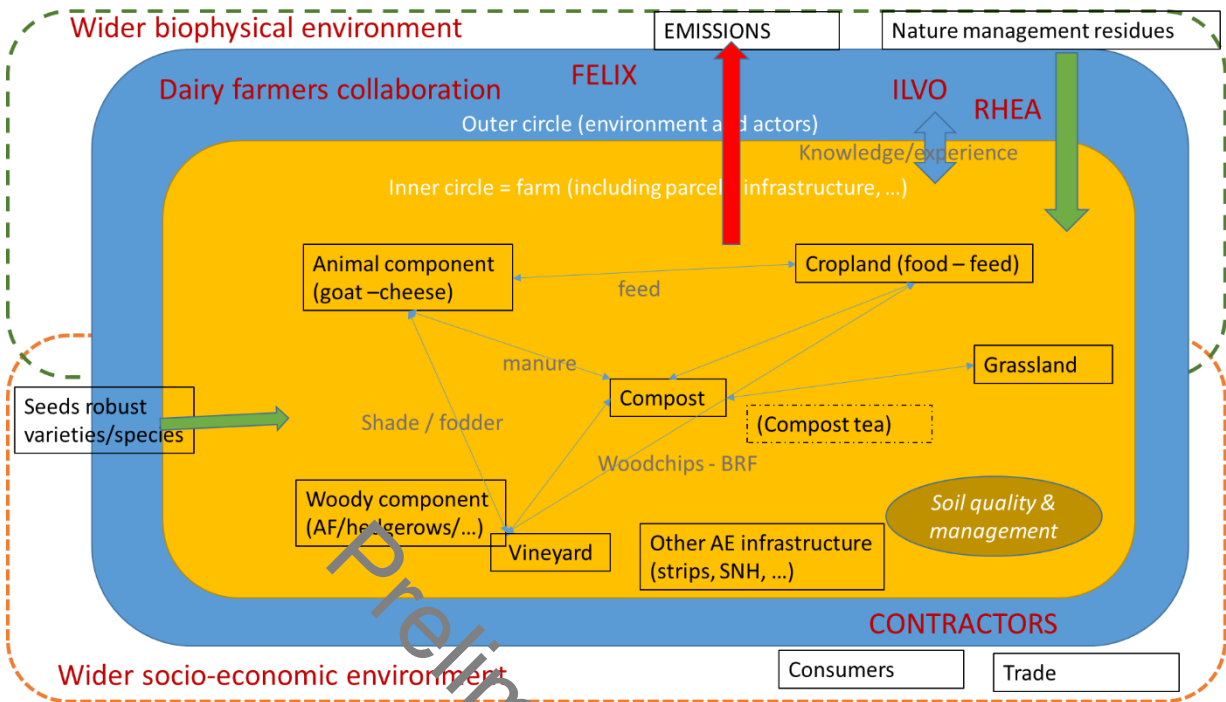
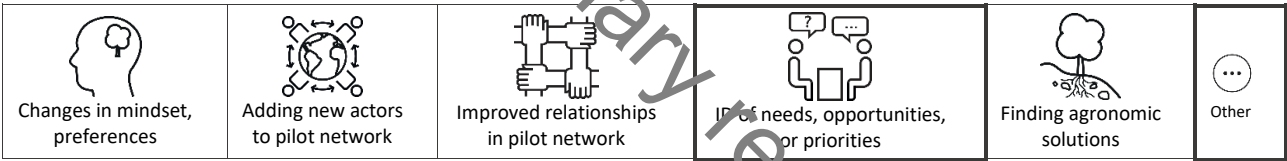


Figure 3.2.3. System analysis of PHAE.



3.2.2.4 New research opportunities

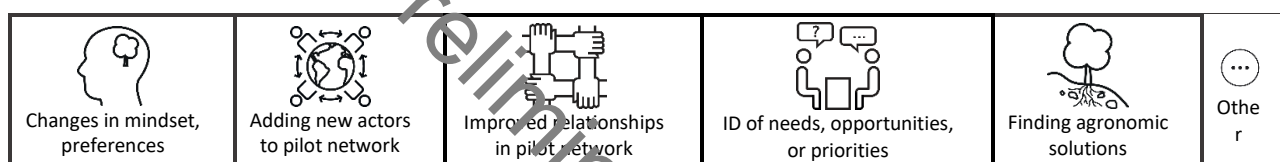
In the Spring of 2021 we visited Felix's fields with a group of ILVO colleagues. By explaining how the system works, they also learned more about agroecological farming, inspired them and thus allows a further facilitation of this farming system in the near future. Such a tour is always inspiring and enlightening, in both directions.



Figure 3.2.4. Field tour with researchers of ILVO at PHAE.

Due to the smooth interaction between ILVO-PHAE, Felix is always open to new research projects in his field. ILVO agreed with PHAE and RHEA to establish an **Experimental Platform for Agroecology - PHAE Hansbeke**. Specifically, the following research took place at PHAE:

- Trials with combined cultivation of leguminous plants: e.g. maize with beans (**project farmers' benefits**) and malting barley with peas
- Trials with wood chips as a mulch layer to decrease weed pressure and drought stress
- Monitoring of nitrogen release in fields where grass clover is torn in autumn and where grains are used as catch crop
- Research into the influence of compost tea on crop yield and health
- **Project KLIMGRAS**: more sustainable use of grassland in dairy farming, in response to the changing climate
- **Project Graanboeren met Natuur** (EN: Cereal farming with nature) in which agroecological and conventional grain cultivation is compared by farmers, millers and bakers
- ...



3.2.2.5 Open field days @PHAE

In August 2021 we (PPAE Hansbeke) were able to organize an open field day at PHAE. Despite strict covid-19 restrictions, no fewer than 200 interested parties came to hear about the experiences of the farmers, contractors and researchers involved. The information and demonstration moment was aimed at all farmers, contractors, researchers, agricultural advisers, policy officers, ...

During a tour we explained more about the cultivation system in all its facets, cultivation choice, farm composting in partnership, fertilization approach, reduced tillage, mixed crops, soil cover, ... The event received a lot of press attention and even the agriculture Minister Hilde Crevits visited the farm. On stage, she gave an overview of measures that can help farmers to meet a number of environmental challenges.



Figure 3.2.5. Impressions of the open field day at PHAE in 2021. Alain Peeters and Felix de Bousies (top left) and the minister of agriculture Hilde Crevits (top right).

In 2022, another demo day was organised in the summer (July 2022). The focus was on soil improvement, soil organic carbon and nitrogen dynamics. 135 visitors attended, some returning and some for the first time. 30 of the visitors were farmers and knowing that it's difficult to reach this target group, we are enlightened by this fact and can proudly say that Felix's farm is indeed becoming a lighthouse farm for agroecological practices.







 Changes in mindset, preferences	 Adding new actors to pilot network	 Improved relationships in pilot network	 ID of needs, opportunities, or priorities	 Finding agronomic solutions	 Other
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Figure 3.2.6. Impressions of the open field day at PHAE in 2022 with the pilot Jolien Bracke (top left) and pilot ambassador Koen Willekens (bottom right).

3.2.2.6 Co-design workshops

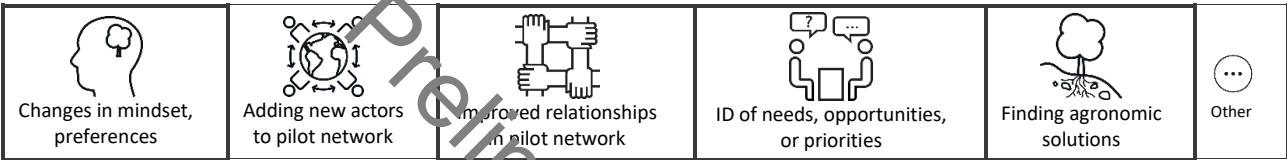
In April 2022, two co-design workshops took place that fit into the RID framework presented to us in Task 2.1. These two cases were identified through the systems analysis. One is a potential new collaboration between PHAE and a local caterer willing to grow an agroecological vineyard on PHAE. The idea is still young, but both parties are interested in working it out together. We invited another Flemish agroecological winegrower (from 'Het Lijsternest'), a grape grower, a legal advisor to explain the possible forms of cooperation and a few other stakeholders. It was an inspiring afternoon. Afterwards, we visited some fields on the farm where the future vineyard could be built, and we planned an inspiring visit to 'Het Lijsternest'.



Figure 3.2.7. Prospecting the fields for agroecological viticulture on the farm.

The other case was an existing flow between farmers who purchase grass-clover on field and come to mow it themselves and in return can sell their manure on the fields. In the future, even more grazers may be used. Correct pricing is important here, but also a good balance between input and export of nutrients. As a result, soil and crop quality remain optimal, without environmental contamination. As a follow-up, we continue to guide the neighbouring livestock farmers with their manure disposal and we continue to monitor the the soil status. It is of utmost important that the grass-clover system is in optimal condition, as it is the nitrogen-engine of PHAE. We're also planning to calculate the inputs and outputs of a full rotation of three years of grass-clover follow by two years of winter cereals to ensure that crop and soil quality is maintained.

Each co-design workshop was visualised by a “goal tree” that enabled us, the farmer and other stakeholders to elaborate further on the topics (Figure 3.2.8and Figure 3.2.9).



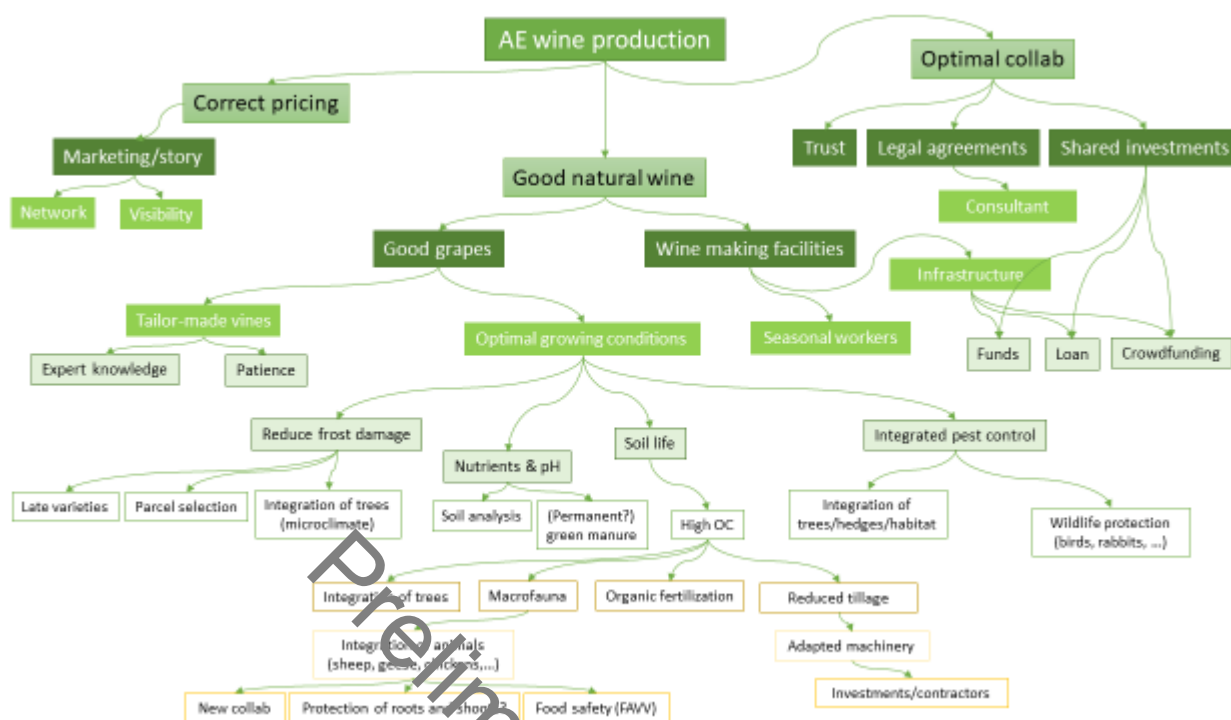


Figure 3.2.8. Goal tree as a result from the co-design workshop on agroecological viticulture on the farm.

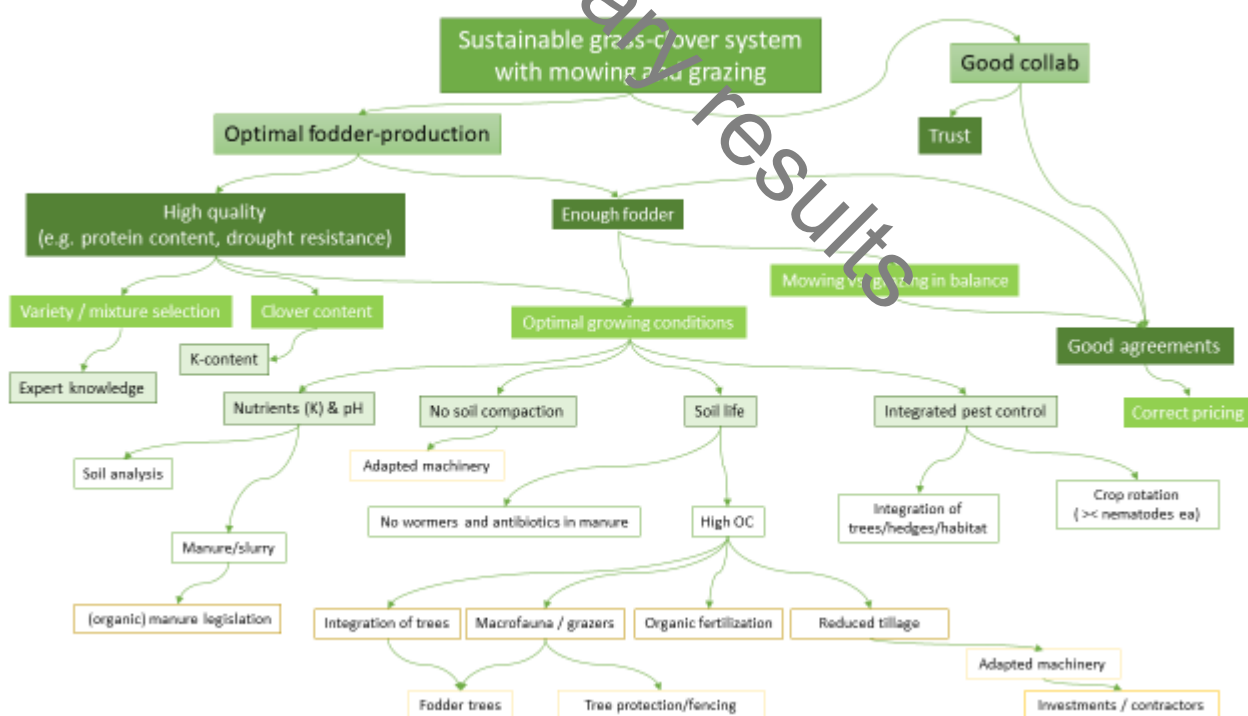


Figure 3.2.9. Goal tree as a result from the co-design workshop on nutrient flows in a sustainable grass-clover system with mowing and on the farm.

3.2.3 Lessons learned & future steps

The framework provided by AGROMIX was ideal for us to forge plans and dream big. The RID methodology was innovative and provided an approach we would not have followed without this toolkit. At the same time, there was enough flexibility not to go through every flow chart if we didn't feel the need to. This worked well for us. At the same time, not all the ideas have been implemented yet. The main objective of the pilot was/is to expand agroforestry on the farm and to support the integration of animals (such as poultry, dairy goats) to increase the mixedness. Change takes a long time, and sometimes reality caught up with us. For instance, after two years, no new perennial woody component has yet been planted at PHAE. There are, however, plans to expand the hedges, hedgerows and wood edging this autumn, and this as part of a Carbon Farming project in which ILVO is also involved. In addition, the vineyard idea has meanwhile become more concrete and it is also our ambition to help shape the agroecological interpretation.

As for increasing mixedness, meanwhile, there are animals on the farm (Figure 3.2.10), but there is no structural cooperation yet. However, because several experts came into contact with the pilot during the co-design sessions, the first steps have been taken and will undoubtedly follow during the coming years. When we do not look at farm level but zoom out and interpret mixedness more regionally, thanks to cooperation with neighbouring farmers who buy grass clover and in exchange deposit their slurry on the plots, there is already some mixedness. We are actively contributing to this by taking soil samples to assess soil nutrient status and sharing the interpretation with relevant stakeholders on the one hand, and on the other hand, by the plans to establish an input-output balance in the short term. The aims to improve nutrient flows and fertiliser strategy is thus still ongoing. The sustainability and resilience assessment tool, provided by WP4, is currently still ongoing but will also help us and the farmer to upgrade the system.



Figure 3.2.10. A cooperating farmer's sheep flock in action on the 'living mulch' white micro clover in September 2022. This is how the permanent ground cover is cut short in a tractor-less way before direct sowing of winter cereals (photo: Felix de Bousies).

Trials with direct seeding in superficially added wood chips to reduce drought stress and weed pressure and with compost tea, have further strengthened Felix's knowledge and will feed into the agroecological methods that are being used on the farm. Methods that, for sure, will reach other farmers as PHAE has proven to serve as a lighthouse farm already. For example, at one of the demo days, a local contractor was convinced to buy a superficial plowing (eco-plow), allowing other farmers to work more agroecological as well.

As pilot ambassador Koen Willekens is a soil and compost expert and is also involved in negotiations on farm composting at the Flemish level, farm composting will now stay at PHAE. In this way, woody biomass from the farm can be put to good use, as can residual flows from nearby nature reserves. The valorisation of wood and animal residues on the farm can be a trigger for scaling up agroforestry and mixed farming, respectively.

Because ILVO has a long-term collaboration with PHAE through PPAAE, several projects are ongoing. This sometimes makes it unclear which project is responsible for which achievement, but in general it is a positive thing that all sorts of things are happening and that there is continuity. From other pilots we sometimes heard that one of the challenges is to perpetuate the changes initiated in the long term, but at PHAE this is less of a concern thanks to the long-term cooperation. At the same time, it is undeniably to AGROMIX's credit that a lot of research, field follow-up and adding new stakeholders to the network could take place.

The exchange moments with other pilots (online and offline) were enriching and inspiring. Tips were often exchanged, especially within the group of pilots that concerned individual farms. Because of COVID-19, the first consultation moments with the AGROMOX partners were online-only, which made the exchange less dynamic. Sometimes it was unfortunate that the farmer could not participate in the exchange moments, but this is farmer-dependent and was also more difficult to organise practically. As PHAE had some agroecological practices already in place when it transitioned from conventional agriculture (land managed by tenants) to organic farming, it was not always easy to make 'significant' changes. Nevertheless, we think that the participatory mapping exercise (WP4) will help to help make land use more efficient and logical, and to guide PHAE's further outlines. In conclusion, looking back and zooming out, many processes have been initiated and seeds planted, on the farm and beyond.

3.3 Blue Pig Farm – French pilot (ITAB)

3.3.1 Introduction

The Blue Pig Farm is an organic pig farm in the west of France, set up by farmer Carl Sheard. The farm is about 45 hectares, of which 6.6 hectares are integrated agroforestry and pig fodder crops. The farmer's motivation for integrating crops and livestock is to produce his own pig feed to become more autonomous, improve animal welfare and improve meat quality. Since 2019, the farm has been involved in various projects with the aim of integrating more feed valorisation by pigs and testing some innovative practices. Implementing efficient grazing with pigs is a long process. First, several annual crops were tested. Due to the cost of implementation, the strategy today is based on the meadow, with the wish to bring the system closer to a classical system with ruminants (even if there is a specification with pigs).



Figure 3.3.1. The pigs of the Blue Pig Farm eating fodder crops.

Trees have been planted in 2018 and permitted to delimit paddocks in several corridors. If they don't provide many shadows, for instance, they will protect pigs from weather conditions (especially the sun) in the future. Other benefits can also be obtained, such as fodder for the pigs or fruit production (acorns, chestnuts, etc.).

3.3.2 Pilot Learning History

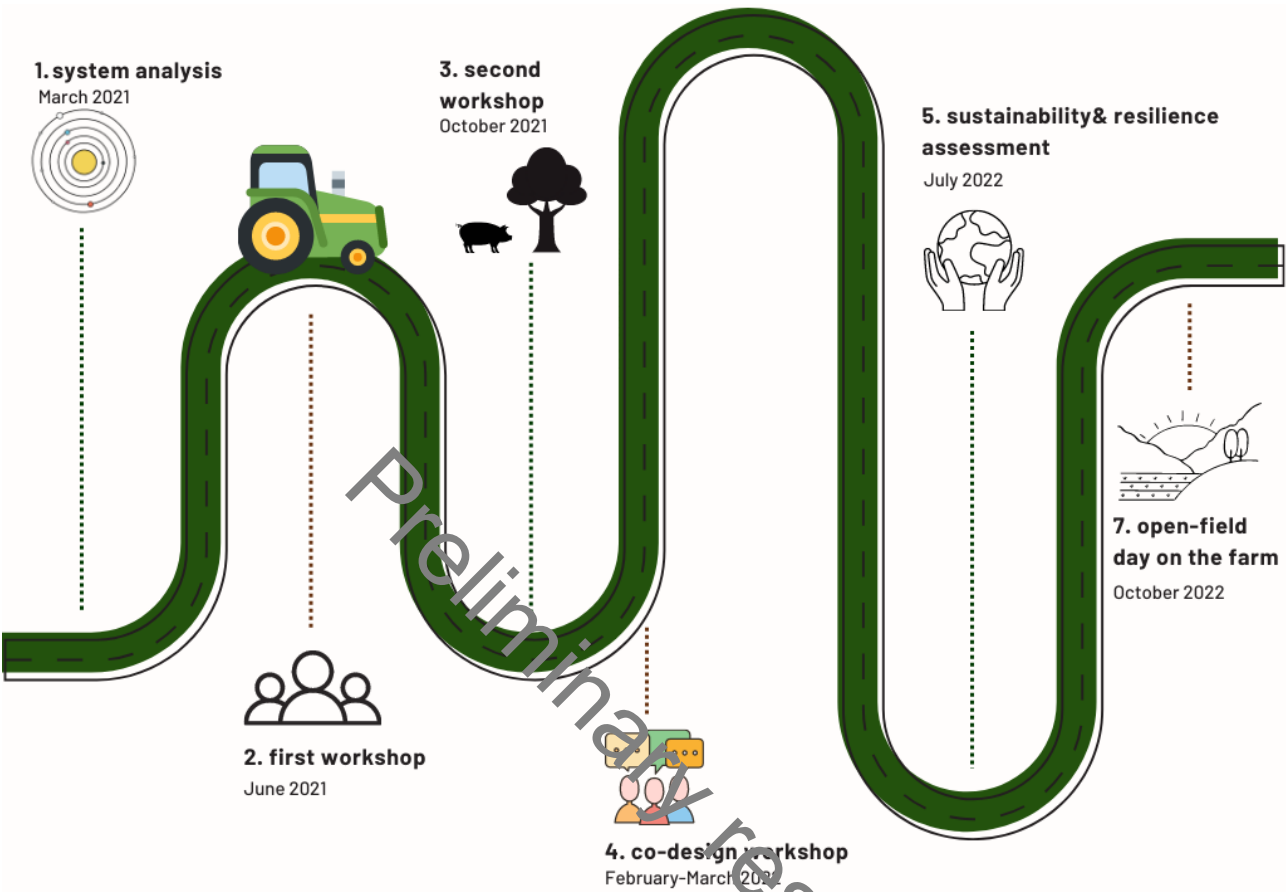








Figure 3.3.2. Pilot Learning History of the Blue Pig Farm.

3.3.2.1 System analysis

ITAB has been following the Blue Pig Farm for 3 years, but always through specific trials. With AGROMIX, the farm will be put into perspective. Thus, at the beginning of 2021, two meetings were held between the pilot facilitators and the farmer to deepen the understanding of his farm. This will allow us to make a systemic analysis of the farm and to identify some avenues to be explored in the following workshops.

 Changes in mindset, preferences	 Adding new actors to pilot network	 Improved relationships in pilot network	 ID of needs, opportunities, or priorities	 Finding agronomic solutions	 Other
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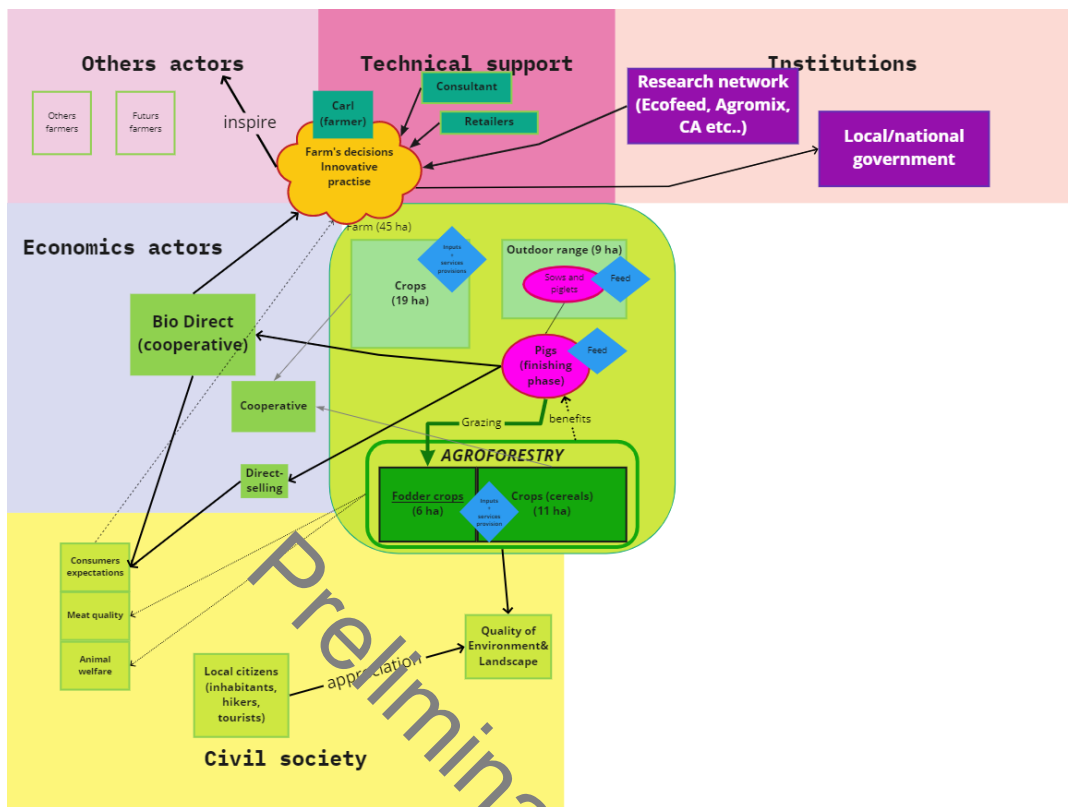


Figure 3.3.3. Pilot system analysis

3.3.2.2 First workshop, on an experimental farm

The first workshop with the group took place at an experimental station with organic outdoor sow rearing mixed with agroforestry (although the trees are still small at this stage). The aim was to put the group into action to start a systemic reflection on the pilot and the integration of pig feed in the agroforestry context. The first data from the pilot project were presented: agroforestry design, choice of feed and grazing calendar. The day was completed with a visit to the experimental farm with agroforestry design for sows in an outdoor area. The stakeholder group was formed with motivated people.







 Changes in mindset, preferences	 Adding new actors to pilot network	 Improved relationships in pilot network	 ID of needs, opportunities, or priorities	 Finding agronomic solutions	 Other
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Figure 3.3.4. Visit of the stakeholders of the first workshop to an experimental station pioneering with outdoor pigs.

3.3.2.3 Second workshop, on the pilot farm

With a similar group from the first workshop (a few new people), a workshop was organised at the Blue Pig Farm. The aim was to immerse the group in the reality of the farm and to give them a better understanding of the system that the farmer has set up with pig grazing. The morning was dedicated to the field, with information on pasture management: choice of varieties, harvesting methods and logistical aspects of pig grazing. In the afternoon, each participant took part in two small workshops on the three topics organised: "Valorisation of fodder crops with pigs", "How to promote the meat of pigs reared with pasture?" and "Perspectives of the use of trees in the Blue Pig farming system". A lot of ideas and food for thought came to the surface during this workshop.

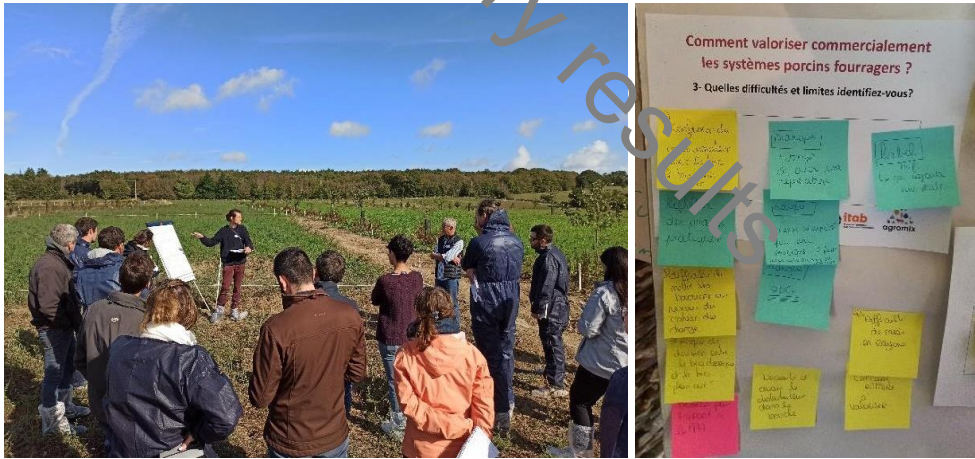








Figure 3.3.5. Left: pilot visit during the 2nd workshop; Right: brainstorm sessions with the stakeholder group.

 Changes in mindset, preferences	 Adding new actors to pilot network	 Improved relationships in pilot network	 ID of needs, opportunities, or priorities	 Finding agronomic solutions	 Other
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3.3.2.4 Studio design workshop (2 days)

The studio design workshop was divided into two days (February and March 2022). After preparation with the illustrator, the first day was spent at Blue Pig Farm with a group who already knew the farm well. The group of 10 showed a variety of profiles in the whole value chain (from farmer to retailer, with a technician and consultant part). After the first day, the identification of objectives, bottlenecks and levers to achieve a pig feeding system in organic and agroforestry production was drawn on the first board. the working approach was an interesting experience for everyone.









Figure 3.3.6. Impressions of the co-design workshop on the Blue Pig Farm.

Ten days later, the second day was held in Angers with a slightly reduced group (3 people apologised). The group examined the three main levers: all the data and references needed to promote the development of pig grazing, ways of optimising the Blue Pig Farm to make it more efficient, and the creation of a small value chain to add value to this type of production. Like the first day, it was very rich in exchanges.









Figure 3.3.7. Visualisation of the second day of the co-design workshop at the Blue Pig Farm.

 Changes in mindset, preferences	 Adding new actors to pilot network	 Improved relationships in pilot network	 ID of needs, opportunities, or priorities	 Finding agronomic solutions	 Other
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3.3.2.5 Sustainability and resilience assessments

All this work was carried out by the facilitator and ambassador of the French pilot, with the help of a colleague specialised in this type of assessment. Two interviews with the farmer were necessary to get as close as possible to his reality on the farm. Several stakeholders were also asked to respond to specific points (accountant, carbon scientist, agroforestry technician, cooperative).

 Changes in mindset, preferences	 Adding new actors to pilot network	 Improved relationships in pilot network	 ID of needs, opportunities, or priorities	 Finding agronomic solutions	 Other
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3.3.2.6 Open field day – combining two projects on the pilot

An open field day was organised on 28 October 2022 at a location close to the pilot farm. The group was enlarged as the invitation was sent to more stakeholders interested in the topic of pig feed. A wide range of stakeholders were present: farmers, researchers, pig technicians and agroforestry technicians. This day was the occasion to present the results of the two projects linked to the farm: VALORAGE (French project dedicated to fodder for monogastric animals) and AGROMIX. This open field presented

- Results of a trial of grazing with pigs monitored during spring/summer 2022
- Visit of the field at the Blue Pig Farm
- Discussion of the scenarios developed during the co-design workshops and the evaluation of the durability and resilience of the pilot.







 Changes in mindset, preferences	 Adding new actors to pilot network	 Improved relationships in pilot network	 ID of needs, opportunities, or priorities	 Finding agronomic solutions	 Other
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Figure 3.3.8. Open field day at the Blue Pig Farm.

3.3.3 Lessons learned & future steps

The mission of the Blue Pig Farm pilot was to understand all aspects of the system. The first approach was very technical: how to implement an efficient grazing system with pigs in the field, as it had already been studied here for 3 years. But, thanks to AGROMIX, a more systemic approach was found to get an overview. The stimulation and the flow of ideas through each workshop were very rich and revealed all the complexity of the farm. From the agronomic aspect (the field) to the quality of the meat (the consumer), the value chain was dissected and it was a very inspiring experience.

Working with the illustrator was a real advantage and allowed us to go beyond what we had envisaged. All the stakeholders involved in this studio design were delighted and the illustrator provided very useful support for the subsequent meetings and reflections for the future.

The stakeholders involved were very motivated and supported the co-design process with a lot of energy, as everyone is convinced of the agroecological way of MF and AF. But the economic reality is the first bottleneck to change for a large part of the group. They appreciated having an open space for reflection with co-design workshops, but they are aware of all the difficulties to overcome.

It's also a lot of work to organise a workshop in the field, but it seems to be the best place to have a discussion between stakeholders, especially for farmers who always find the technical point that drives the rest of the problem.

3.4 Swiss Agroforestry Network – Swiss pilot (ZHAW)

3.4.1 Introduction

Founded in 2011, the Agroforestry Network Switzerland (Interest Group Agroforestry, IG Agroforst) brings together 140 members from the German- and French-speaking Part of the country. In recent years, mixed cropping and agroforestry have expanded and modernised in Switzerland, which the network has supported by advising farmers and disseminating knowledge through conferences, field visits, newsletters and more. It has created a community of land managers committed to the adoption of agroforestry systems.

The main feature of modern agroforestry is that these systems are designed to meet very specific objectives. For example, fruit trees or trees for the production of high-value timber are increasingly being integrated into cropping systems, for example to improve the water-holding capacity of soils or as a measure against erosion. The distribution of trees has also changed so that farmers can use modern machinery and benefit from the reduced labour input.

The members of the Swiss Agroforestry Network participating in AGROMIX note that parallel to modernisation, the acceptance of and interest in agroforestry in Europe has increased, especially due to the visibility of successful modern agroforestry farms. Participants highlight the importance of networks such as the Swiss Agroforestry Network, as they can actively increase the visibility of agroforestry and engage farmers who have either been wary of joining the transition or who have been experimenting with these regenerative systems for years but have not received due recognition. Overall, the Swiss co-design pilot is about developing agroforestry on a national scale. A key overarching goal is for agroforestry to be better anchored in Switzerland's agricultural knowledge and innovation system and for farmers to be compensated for ecosystem services from agroforestry systems.

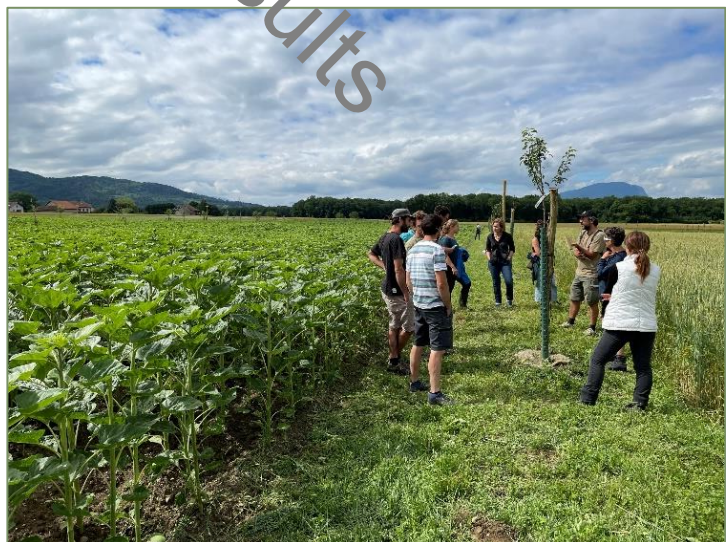
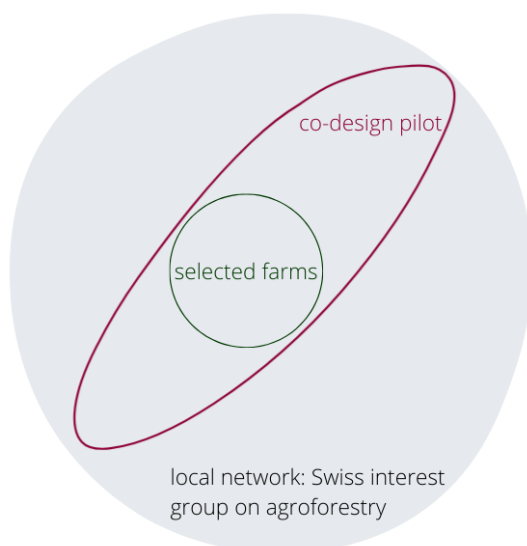


Figure 3.4.1. Structure of the co-design pilot.

3.4.2 Pilot Learning History

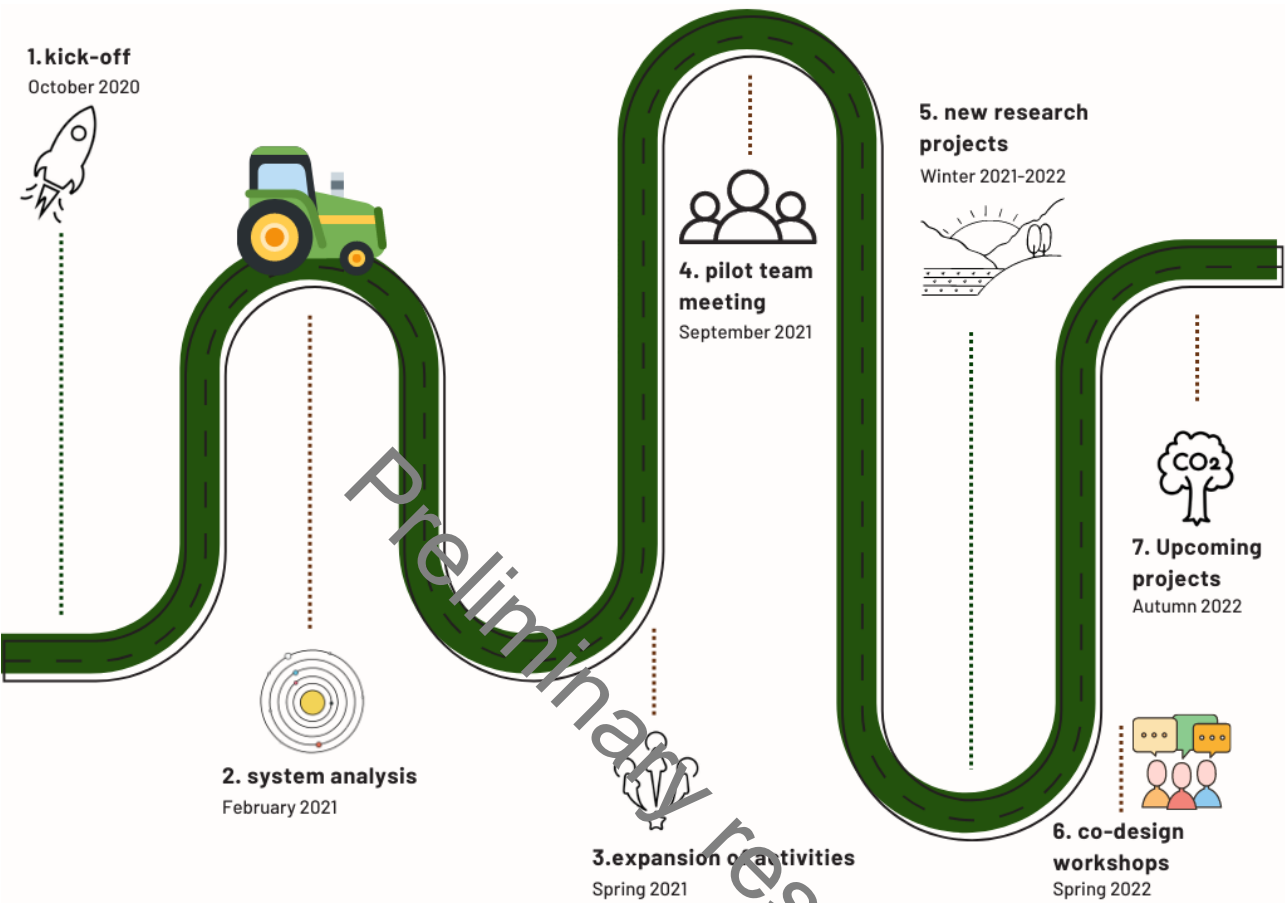








Figure 3.4.2. Pilot Learning History of the Swiss Agroforestry Network.

3.4.2.1 Kick off - Annual Conference IG Agroforst on 29.10.2020

In October 2020, at the annual conference of IG Agroforst, the AGROMIX project and the idea of participatory further development around the topic of agroforestry were presented for the first time as part of the co-design pilot and feedback was gathered from the audience. Initial ideas for the future development of the topic of agroforestry at national level were developed and new partnerships were considered.

 Changes in mindset, preferences	 Adding new actors to pilot network	 Improved relationships in pilot network	 ID of needs, opportunities, or priorities	 Finding agronomic solutions	 Other
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3.4.2.2 Concretisation - stakeholder and system analysis, definition of objectives.

In February 2021, the first WP2 Pilot Team Meeting developed important milestones for the design of the co-design pilot, such as conducting a stakeholder analysis, defining Goal and Key Challenges and conducting the system analysis.

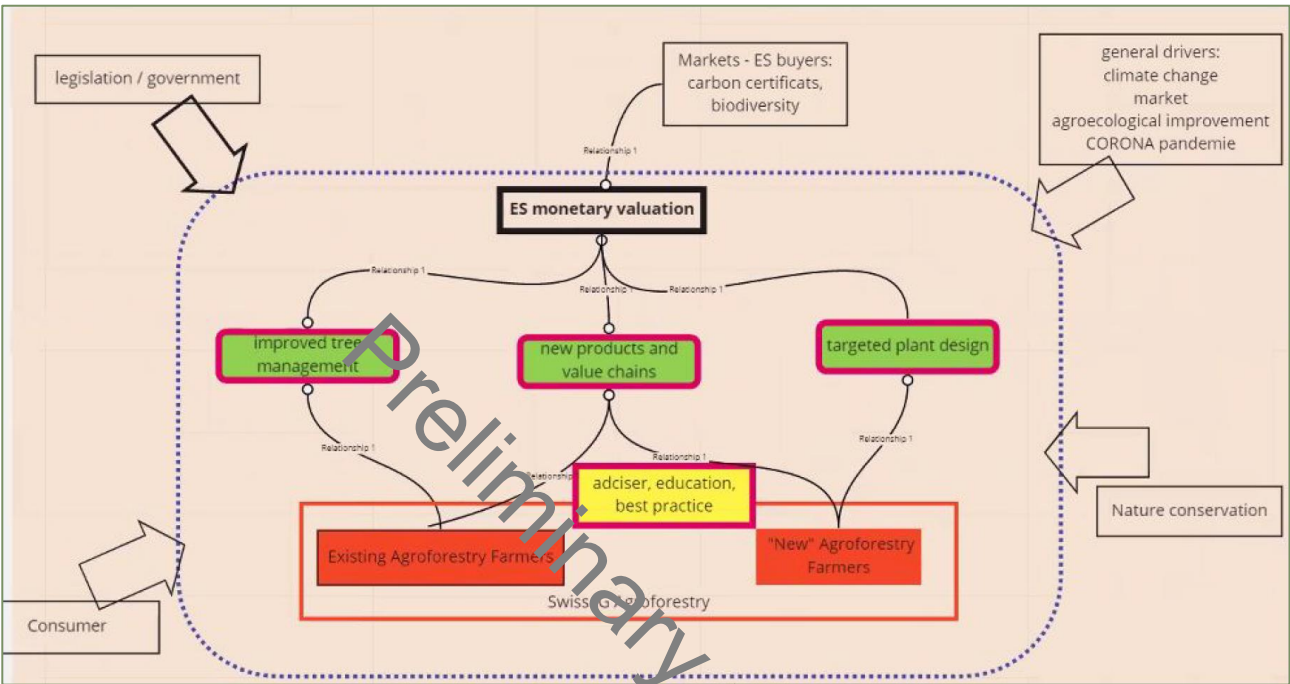








Figure 3.4.3. System Analysis of the Swiss Agroforestry Network.

An important outcome of this workshop was the definition of the actual goals of the co-design pilot and getting to know the participatory methodological approach RID. The system analysis is an important basis for the subsequent development steps and provides an orientation framework. Within the pilot team, this WP meeting was an important starting point to gain clarity about the approach and the goals of the co-design pilot.

 Changes in mindset, preferences	 Adding new actors to pilot network	 Improved relationships in pilot network	 ID of needs, opportunities, or priorities	 Finding agronomic solutions	 Other
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3.4.2.3 Expansion of proven and new activities within the national agroforestry network.

The existing activities, such as regular field walks and courses on agroforestry, were expanded overall. New topics were also taken up, such as the integration of agroforestry in viticulture and the integration of fodder hedges in grassland, or the topic of soil health in the agroforestry system.

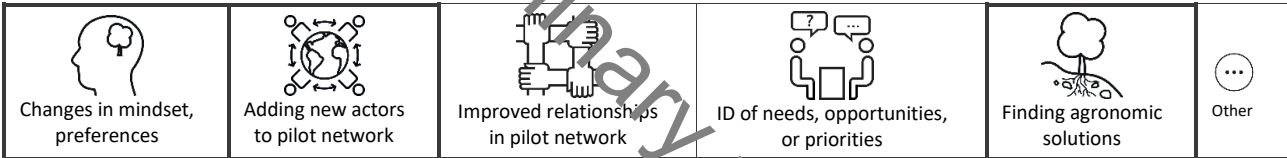


Figure 3.4.4. Impressions of the Agroforestry Network's activities.

The farm advisory service, which has been an important offer of IG Agroforst for a long time, could be enriched by new topics and techniques, such as the use of drones to record plots and optimise planting designs. Overall, IG Agroforst has been able to consolidate its role as a contact and advisory point for agroforestry in the last two years.



Figure 3.4.5. Tools used for the farm advisory service offered by the Swiss Agroforestry Network.









3.4.2.4 Pilot team meeting in Switzerland

In September 2021, we were able to hold another pilot team meeting in Switzerland as part of WP 2. We were able to discuss successes and failures within the individual pilots, define next milestones and deepen our knowledge of participatory methods. The exchange with other teams helps to regularly question the status of goal achievement and to reflect on certain hurdles and opportunities in mutual coaching. A highlight of this meeting was the visit to Simon K  ng's farm, which was also filmed on [video](#). This farm specialises in agroforestry systems with nut trees and was the driving force behind the founding of a cooperative for the processing and marketing of Swiss tree nuts www.swissnuss.ch.



Figure 3.4.6. Field visit to Simon Küng's farm in Switzerland.

 Changes in mindset, preferences	 Adding new actors to pilot network	 Improved relationships in pilot network	 ID of needs, opportunities, or priorities	 Finding agronomic solutions	 Other
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3.4.2.5 New research projects on national level

At the end of 2021, beginning of 2022, new practical agroforestry project took off. In the canton of Aargau, five farms were selected within the framework of a funding award, which will implement agroforestry on the farm in the coming years. Agroforestry is implemented here in a wide variety of production directions - from grassland to viticulture to arable farming.

In addition, a new project called 'Climate-neutral agriculture Graubünden' has been launched in the canton of Graubünden in autumn 2021, which will introduce agroforestry as a new topic in mountain areas. Farms applying agroforestry will also be visited regularly as part of an accompanying monitoring programme. From 2023, both biodiversity parameters and carbon measurements will be collected.



Figure 3.4.7. Two new research projects to improve and promote agroforestry.

 Changes in mindset, preferences	 Adding new actors to pilot network	 Improved relationships in pilot network	 ID of needs, opportunities, or priorities	 Finding agronomic solutions	 Other
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3.4.2.6 Co-Design Workshops

Political workshops

Between April and July 2022, three workshops on agroforestry were held in cooperation with the Federal Office for Agriculture and the Federal Office for the Environment. Of these, 2 meetings were planned as exchanges with lectures, discussion rounds and World Café, as well as a field visit to 2 farms implementing agroforestry. The pilot team (Mareike Jäger, ZHAW and Sonja Kay, Agroscope) contributed to the programme design and content in the form of lectures. In addition, these workshops were also part of a measure ("les arbres sortent du bois") that is part of the **"Sustainable Development Strategy 2030"**.

The objective for these workshops was set:

- To bring together the different actors of the agroforestry scene in Switzerland and their partners in order to initiate a dialogue.
- To inform and exchange on the state of scientific and practical knowledge, as well as on innovations in agroforestry and research needs.
- To reflect on possible future collaborations and exchanges related to agroforestry, with the aim of promoting its economic potential, especially in relation to climate change, and the many other services that AF systems can provide.



Figure 3.4.8. Impressions of the political workshops organised by the Swiss Agroforestry Network.

Workshop on networks in regenerative agriculture

Topics such as regenerative agriculture, permaculture, agroforestry and the whole spectrum of agroecology are becoming increasingly important in Switzerland. There is also a very diverse network landscape for this, with its very own development goals, orientations and projects. The meeting of the networks of regenerative agriculture took place within the framework of another co-design workshop (WP2). The aim of this meeting was to discuss how agroecological transformation processes can now be further developed







in Switzerland and with which scaling strategies. In addition, a common basic understanding of regenerative agriculture was to be built up and some non-negotiable principles were to be defined. Among others, the following questions were discussed:

- Do we need more exchange and cooperation?
- Do we need a common basic understanding of what we mean by "regenerative", "agroecological", "permaculture", etc.?
- Where do the networks demarcate themselves from each other, where are there legitimate overlaps?
- How do we react when the terms "regenerative" agriculture are appropriated and misused?

It was the first meeting of this kind where the networks of regenerative agriculture could exchange ideas. The following networks took part: IG Agroforst (organisation), Permaculture Switzerland, Regenerativ Schweiz, Visio Permacultura, EssWaldLand, AGRIDEA, ZHAW, Agricultura Regeneratio. The results of the workshop were recorded in minutes and will be used to further develop project ideas and enhance the implementation of agroforestry and sustainable mixed farming.



Figure 3.4.9. Impressions of the workshop discussing regenerative agriculture.

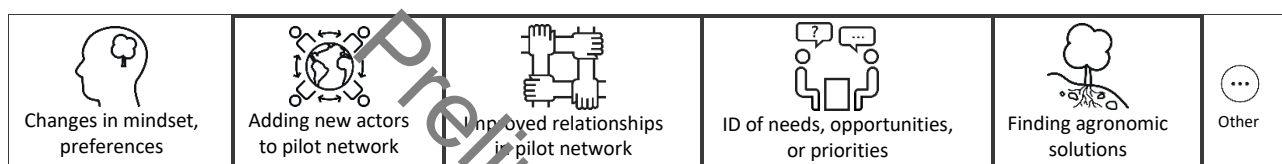
 Changes in mindset, preferences	 Adding new actors to pilot network	 Improved relationships in pilot network	 ID of needs, opportunities, or priorities	 Finding agronomic solutions	 Other
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3.4.2.7 Upcoming projects

One of our overall goals in this pilot is to ensure that farmers are adequately paid for ecosystem services. In other European countries, a first scheme has already been created for the economic compensation of

carbon services provided by agroforestry systems in the form of CO₂ certificates. From autumn 2022, a new carbon offset programme for Swiss agroforestry systems is now being created, together with an economic partner and business relations with potential buyers for this service. To this end, it is necessary to professionalise the administrative structures and, as a kind of side effect of the developments that have taken place within the pilot, the pilot team has founded a private company.

Another aim of the pilot is to build up knowledge and improve the quality of agroforestry projects, both in terms of planning and the implementation and maintenance of these systems. The core team of IG Agroforst, together with other partners, has started to develop a first CAS (Certificate of Advanced Studies) for the topic of agroforestry at university level. This type of professional training will then be available to interested persons from extension, practice, and research. *In addition, in autumn 2022, persons from the core team of IG Agroforst were able to conclude a contract with a book publisher for a new reference book on the subject of agroforestry.*



3.4.3 Lessons learned & future steps

The aim of the pilot was to develop agroforestry at different levels and scales at the national level. Numerous events and network meetings took place. In the process, we tried to orientate ourselves very strongly on the system analysis that we had prepared at the beginning. Visualising these basic processes and objectives at the very beginning of the project phase was very useful. However, it is also clear that a pilot on a national level and within the framework of a network functions very differently than an individual farm or a trial site. A big challenge is that one always has to deal with new constellations of actors and the development process does not evolve with a fixed peer group.

Another challenge is clearly the realisation that we are not alone. More and more institutions, farmers, extension services and research institutions are involved in agroforestry activities. The steps described under paragraph 3.4.2.7 are a logical consequence of this development and also offer great opportunities for new partnerships and more power for the agroecological transformation of Swiss agriculture as a whole.

- Our objectives were to improve the quality of agroforestry systems and the monetary valorisation of these systems. We believe we have made significant progress in achieving these objectives.
- We underestimated that our pilot project is a network, and that agroforestry development has to be considered on a national level - consisting of many individual sub-projects and activities with changing stakeholders. This makes it sometimes difficult to follow the logical flow of the methodological design approach of the RID.
- The exchange with the other pilot teams, the mutual feedback and the reflection rounds were always very enriching.

3.5 Cheese Valley – Italian pilot (SSSA - dry Mediterranean)

3.5.1 Introduction

As part of the twelve AGROMIX co-design pilots, we established the ‘Cheese Valley’ Italian pilot for the dry Mediterranean region, **focusing on the Pecorino Toscano PDO value chain in Tuscany**. The main objective of the pilot is to support the transition towards mixed and agroforestry sustainable systems. The pilot involves a multi-actor group composed by local farmers, local advisors, the **cheese factory** board, regional policy-makers, AGROMIX scientists, and retailers.

Located in southern Tuscany, the Caseificio Sociale di Manciano is a cooperative cheese factory bringing together roughly 200 farmers who manage a total of 56,000 sheep and produce more than 7 million litres of milk per year. The cooperative’s members face several environmental challenges, including soil erosion, unpredictable rainfall, and higher frequency of drought during the summer. To tackle these challenges, some members have begun implementing climate-smart techniques, including the reduction of soil tillage, the intercropping of grass and legumes, an increase in the share of legume meadow in crop rotation (to boost long-term temporary grassland in crop rotation), and planting trees at the perimeter of the fields. Farmers consulted by AGROMIX project reported positive results from these experiments, highlighting that to receive the benefits of these techniques farmers must implement a combination of these regenerative techniques at the field and farm levels. In terms of the future of regenerative systems in the region, members of Coop Manciano highlighted the need to increase and spread the know-how of implementing agroecological practices. Much work is needed to increase advisory services, carry out research in pilot farms, establish living labs for farmer-to-farmer learning, and to strengthen farmers’ networks.

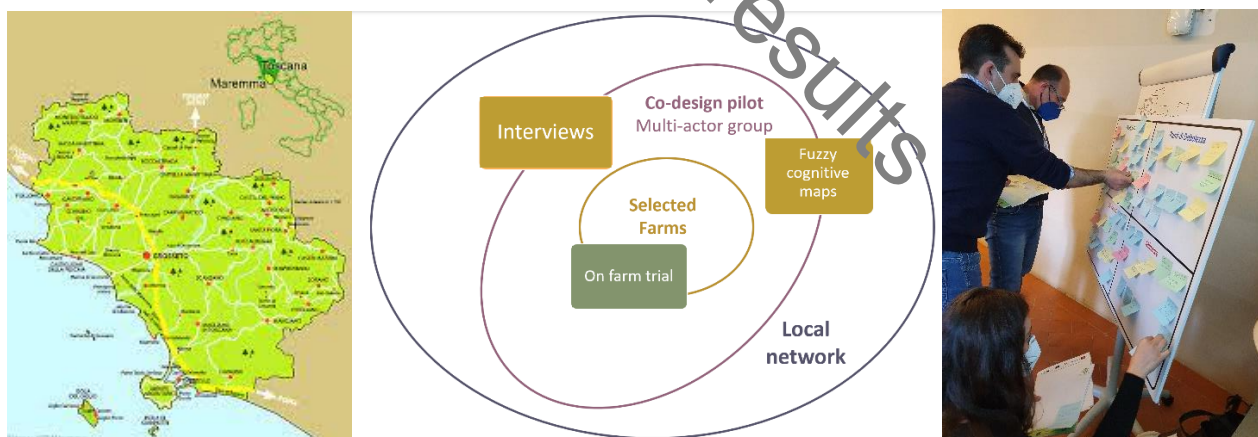


Figure 3.5.1. Introduction to the Italian Pilot ‘Cheese Valley’.

3.5.2 Pilot Learning History

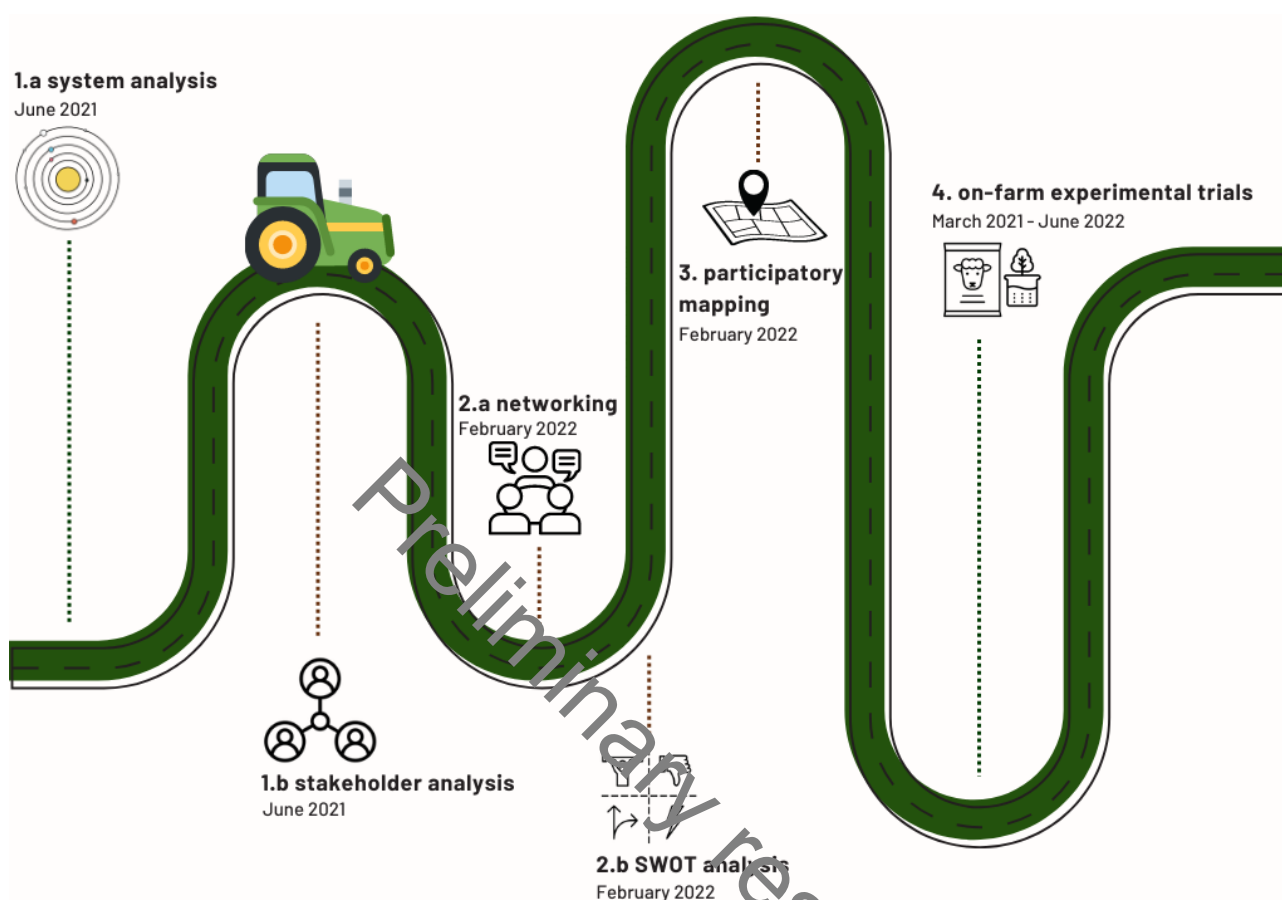


Figure 3.5.2. Pilot Learning History of Cheese Valley.

3.5.2.1 First pilot meeting: system and stakeholder analysis

The meeting took place online on the 25th of June 2021. The meeting was attended by 16 people representing the following roles: technical assistance, product and service suppliers, university and research, farmers, agricultural consortium, Tuscan pecorino consortium, cheese factory, and large-scale retail trade.

After a general introduction to the AGROMIX project, a brief introduction was given on the Pecorino DOP supply chain in the Manciano area (Province of Grosseto), an initial discussion on the establishment of the pilot has been carried out. At this point, a diagram was created with all the actors involved the supply chain and the meeting participants completed it by drawing mono- or bi-directional arrows to highlight the interactions among all actors. In the end, the limits present in these relationships and the opportunities that can arise from them were analysed.

After assessing the supply chain state of the art, the idea was to improve relations and communication among actors, in order to report critical issues and new ideas to decision makers. To do so, the diagram represented in Figure 3.5.3 (left) was used. The outcome of the dialogue led to the scheme presented right.



Once the diagram of the existing connections among actors was completed, the limitations and opportunities were analysed.

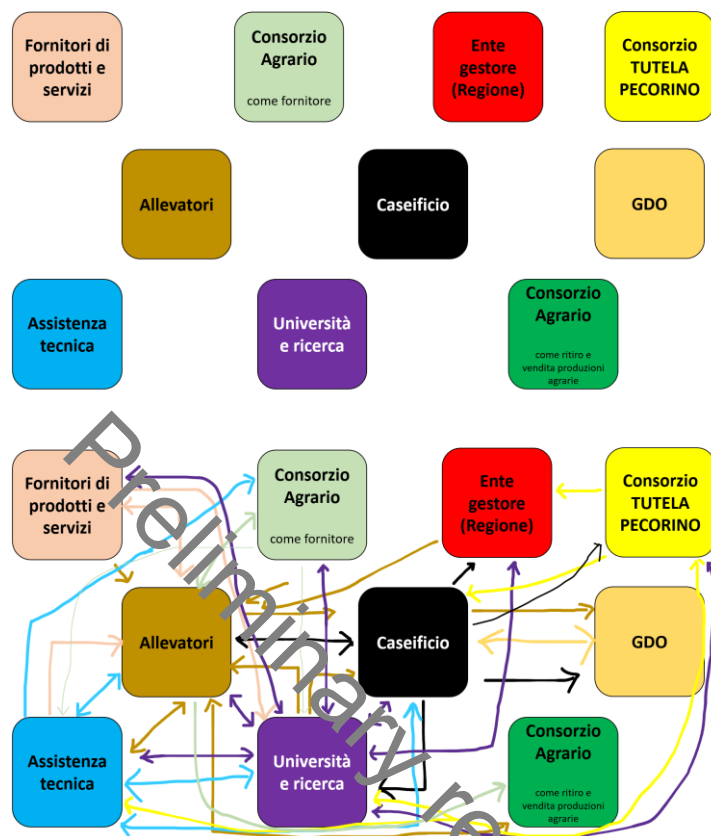


Figure 3.5.3. Diagram of actors in the supply chain before (top) and after (bottom) the dialogue during the first pilot meeting.

Changes in mindset, preferences	Adding new actors to pilot network	Improved relationships in pilot network	ID of needs, opportunities, or priorities	Finding agronomic solutions	Other

3.5.2.2 Second pilot meeting: networking and SWOT analysis

An on-site workshop was held at the Scuola Superiore Sant'Anna on 24 and 25 February 2022. The meeting was attended by 12 stakeholders. The multi-actor group consisted of selected farmers (3), cheese factory board (1), local consultants (2), regional policy makers (1), Agromix scientists (3), local retailers (1), large retailers (1). The meeting programme included both WP2 and WP4 activities:

- Introduction to the topics of the AGROMIX project
- Summary of the activities carried out by the working group
- **Speed-dating** between stakeholders (see below)

- Identification of the supply chain actors' needs, definition of objectives and comparison of the territorial system analysis (multi-actor **SWOT analysis**, see below)
- Analysis of the territorial context of the 'Cheese Valley': what are the positive and negative characteristics of the territorial context related to the production of Pecorino Toscano PDO
- Identification of possible common scenarios for the transition to *agroforestry* and *mixed farming* models

Speed-date to support communication within the pilot-System Design

After an introduction on the themes of the AGROMIX project and a summary of all the previous activities, the researchers at the Sant'Anna School of Pisa introduced and facilitated the *speed-date or networking* activity. This was organised to exchange information about professional relationship expectations and professional requests between stakeholders. Participants meet in pairs for a series of short exchanges over a set period of time (Figure 3.5.4). The aim of the activity was to solve communication problems and valorise connections and positive interactions.



Figure 3.5.4. Stakeholders engaged in speed-dating.

SWOT analysis of the system

In this work phase, each person had to carry out a SWOT analysis of the pilot production system: strengths, weaknesses, opportunities and threats. The aim of the activity was to identify the potential of the system and to find solutions to the weaknesses and threats within the existing strengths and opportunities. Afterwards, all concepts have been explored and analysed (Table 3.5.1).







Table 3.5.1. SWOT analysis of Cheese Valley.

Strengths	Weaknesses
<ul style="list-style-type: none"> history, tradition, territory and tourism expertise, research and development cooperation and collaboration product quality and certifications 	<ul style="list-style-type: none"> lack of innovation and untapped potential territorial and farmer network climate and biodiversity sheep breeds and crop varieties agricultural policies market
Opportunities	Threats
<ul style="list-style-type: none"> promotion of the territory animal and plant breeding research and innovation collaboration and exchange of ideas soil management 	<ul style="list-style-type: none"> poor representation and political weight immobility and static actors climate and biodiversity production costs generational turnover and number of farmers

The second day began with the continuation of the analysis process by identifying possible common scenarios for the transition to agroforestry and mixed farming models.

In the following paragraph we report on some of the answers given to the question: "*If and how can we implement the identified solutions?*"

- The *quality of products and certifications* (strength) can counteract the limitations represented of the lack of *market development* (weakness) and *promote the territory* (opportunity).
- The problem of *generational change and the decline in the number of farmers* (threat) can be overcome through the strength represented by *cooperation and collaboration between the actors in the chain*. This can also be achieved through the training of young people in cooperatives and on-farm training (woofer).
- Lack of innovation and untapped potential* (weakness) can be addressed through *expertise, research and development* (strength).
- Production costs* (threat) can be limited through *cooperation* (strength) and *collaboration and research and innovation* (opportunity).

 Changes in mindset, preferences	 Adding new actors to pilot network	 Improved relationships in pilot network	 ID of needs, opportunities, or priorities	 Finding agronomic solutions	 Other
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3.5.2.3 Participatory mapping activity

As part of the WP4 activities, a community mapping activity has been developed as a methodology for redesigning farms at field level using agroforestry practices. The activity aims to address the existing knowledge of agroforestry systems among farmers in order to identify possible knowledge gaps. During a stakeholder meeting, each participant produces their own map of the study area by combining scientific data related to the agroecological context, including the perceptions of the different actors belonging to

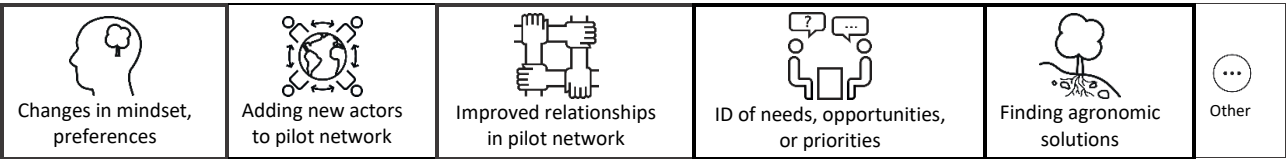
the value chain. This is followed by the development of a community map that meets the challenges of all stakeholders.

The participatory mapping of the territory was carried out to try to understand, through good practices, the potential that can be developed to improve the Pecorino cheese supply chain by carrying out the following steps:

- Presentation of the agroecological context.
- Identification of scenarios for the transition to agroforestry systems and mixed farming.
- Preparation of individual maps, agronomic-environmental solutions for land management in two selected areas (case study).
- Community mapping: comparison and synthesis of individual maps.



Figure 3.5.5. Community map development.



3.5.2.4 On-farm experimental trials

The field trials included two actions: poplar plantation and feeding trials. The field trials have been established on the pilot farms to stimulate the transition towards agroforestry systems.

Poplar plantation – March 2021

In 2021 the first on-farm field trials have been designed and implemented as illustrated in Figure 3.5.6.

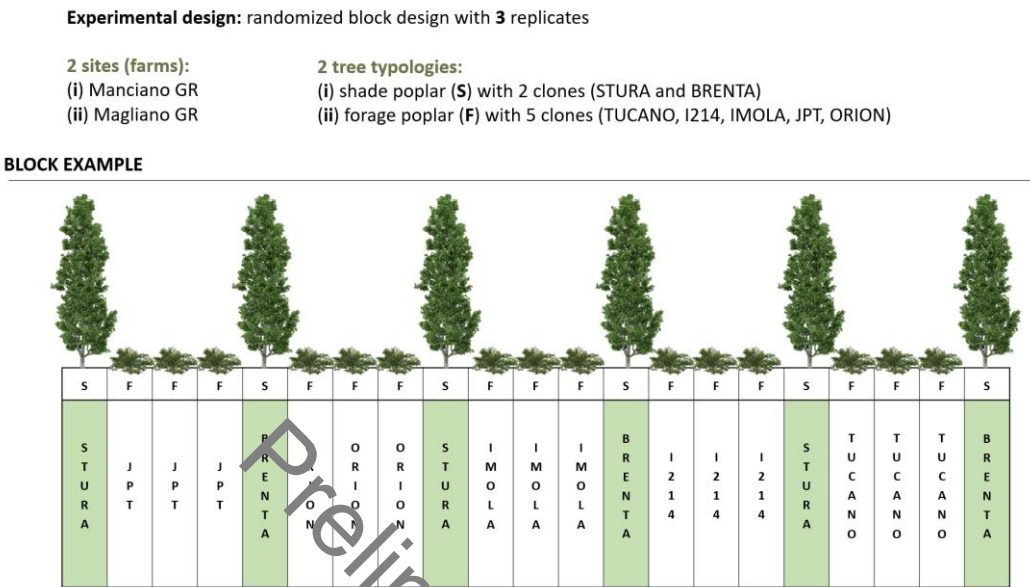


Figure 3.5.6. Experimental design.

Poplar trees were planted on two farms to establish a long-term, monitorable agro-silvopastoral system. Figure 3.5.7 shows the planting operations.



Figure 3.5.7. Experimental field trial implementation in 2021, poplar plantation.

In March 2021, seven different poplars clones (Stura, Brenta, Orion, I214, Imola, Jean Portet, Tucano), for a total of 124 cuttings, have been planted on pastures with the following planting layout: on each farm, trees have been planted by alternating trees for shade (Stura and Brenta clones) and trees for forage (Orion, I214, Imola, Jean Portet, Tucano clones). Figure 3.5.8 shows the planting layout.

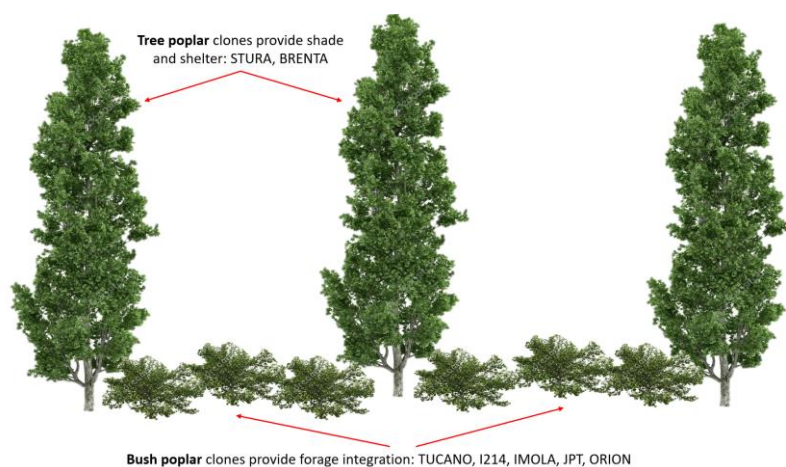


Figure 3.5.8. Planting layout.

The overall idea was to provide (directly or indirectly) fresh fodder to the sheep during the dry season. In 2021 we planned to carry out a feeding trial, either *in vitro* or *in situ*. During spring 2022 we assessed the biomass production of poplar trees in order to conduct an *in situ* feeding trial in summer 2022.

On farm sheep feeding trial

To measure the contribution of poplar trees to the sheep diet, without compromising animal health and milk production, an on-farm feeding trial was set up. In June 2022, six adult sheep were selected from the farmer's flock and placed in individual boxes (Figure 3.5.9). Three of them were fed normally (the control) and the others were fed fresh poplar trees to replace part of the alfalfa (the treatment). The trial lasted 15 days, the first seven days being used to facilitate the transition to the new diet and indoor living conditions.







The animals were milked daily and individual milk production was measured (kg). A sample of the milk was taken every other day and analysed by the local cheese factory (Caseificio Sociale di Manciano). The individual ration given and the remainder was weighted twice a day. In the morning, fresh poplar was cut and provided to the treated group.



Figure 3.5.9. Individual sheep boxes on the farm.

Sheep feeding trial, preliminary results

Data analysis from the first feeding trial showed encouraging results. Milk quality and quantity for fat and protein corrected milk (FPCM) were not significantly different between Treatment and Control. Daily feed intake was also not significantly different between Treatment and Control and the same significant differences occurred between days due to heat stress.

 Changes in mindset, preferences	 Adding new actors to pilot network	 Improved relationships in pilot network	 ID of needs, opportunities, or priorities	 Finding agronomic solutions	 Other
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3.5.3 Lessons learned & future steps

The challenge of our pilot was to introduce a new way of communicating. The people involved in the pilot already knew each other and this proved to be a double-edged sword. We had to rebuild trust and respect between stakeholders in order to have a positive interaction. We've learnt to avoid too open discussions and to facilitate each interaction carefully so that stronger personalities don't take over.

As a future perspective, we have many ideas, we need to build a structure to help small farms survive. Most of the farmers are rather old and do not have the next generation of farmers to take over. It would be nice to train young farmers who have no land but are willing to start farming.

We have started a practical process of transition with field trials. We have had good results so far and the next step would be to extend the trials to other farms.

For now, the main issue is to find a way to continue this vision without the support of AGROMIX.

3.6 Winthagen – Dutch pilot (WR)

3.6.1 Introduction

Winthagen is a region covering 200 ha in the most southern region of the Netherlands. In recent years, Winthagen has experienced an increase in flooding and soil erosion due to changing weather patterns, the intensification of arable farming, the loss of hedgerows, the disappearance of dairy farms and the grassland that had helped mitigate these issues. Many locals have been impacted by these issues, from the farmers whose crops and soil can be lost in the extreme weather events, to local villagers whose houses can be flooded. This was the main driver that led to the development of the pilot with the intention to redesign the region's landscape to overcome multiple challenges.



Figure 3.6.1. Typical landscape in Winthagen (NL).

Currently very few farmers in Winthagen practice mixed farming or agroforestry methods, though some have used subsidies to plant fruit trees in their meadows. However, other measures have been taken to prevent flooding and soil erosion, such as increasing soil organic matter by growing green manure, creating thresholds between potato ridges, direct seeding in grain stubble or green manure and non-inversion tillage on the hilly plots. The latter is required by the government, whilst the previous methods are applied voluntarily. According to the farmers, their investments in soil organic matter, green manures, and other regenerative methods have all helped to reduce flooding and soil erosion in their region. However, there is an appreciation that this is unlikely to be sufficient given the changing climate.

There is great interest in the development and application of further measures to meet their collective goals which has led to Wageningen University & Research working with the municipality Voerendaal, the Limburgse Land- en Tuinbouwbond (Farmers Union in the province of Limburg) local farmers, landowners, the municipality, the water board, and other relevant stakeholders (local nature interest groups, financial sector) to come to innovative solutions. The core **goals** of the pilot are to support: adaption to climate change, improve water management, improve landscape aesthetics, strengthen biodiversity, improve living quality and ensure economically viability.

3.6.2 Pilot Learning History

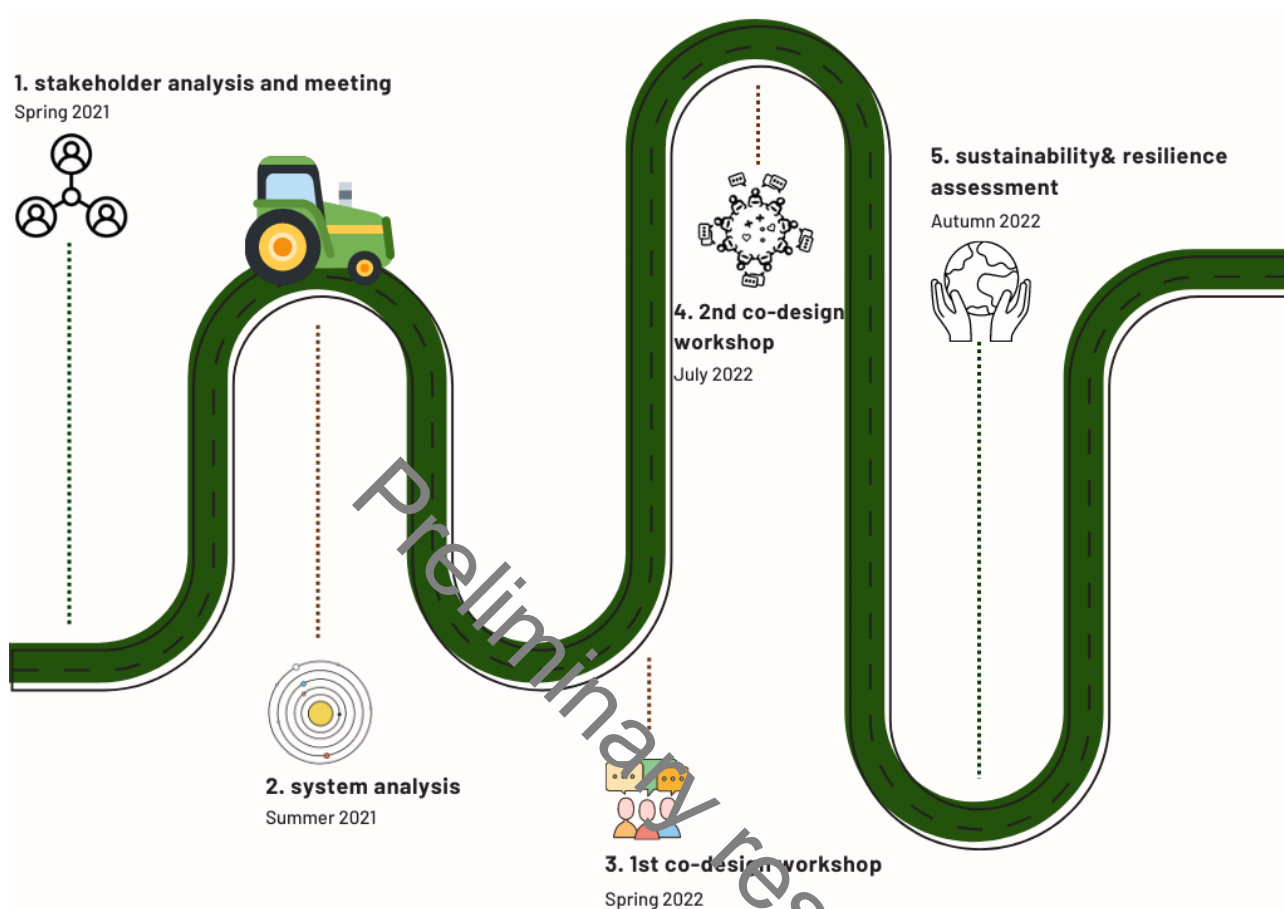


Figure 3.6.2. Pilot Learning History of Cheese Valley.

3.6.2.1 Stakeholder analysis and meeting

The pilot team carried out a stakeholder analysis and used this to guide meetings with various local stakeholders to discuss the pilot with them. We discussed the problems of flooding and erosion in the area and other challenges that they encountered. We also considered what had been done up until now to manage these challenges and their experiences with implementing these. Furthermore, we covered the need for further developments and their desires and concerns related to this. Finally, we discussed their interest to actively take part in the further development of the pilot. This resulted in a good overview of the needs and challenges of the different participants.

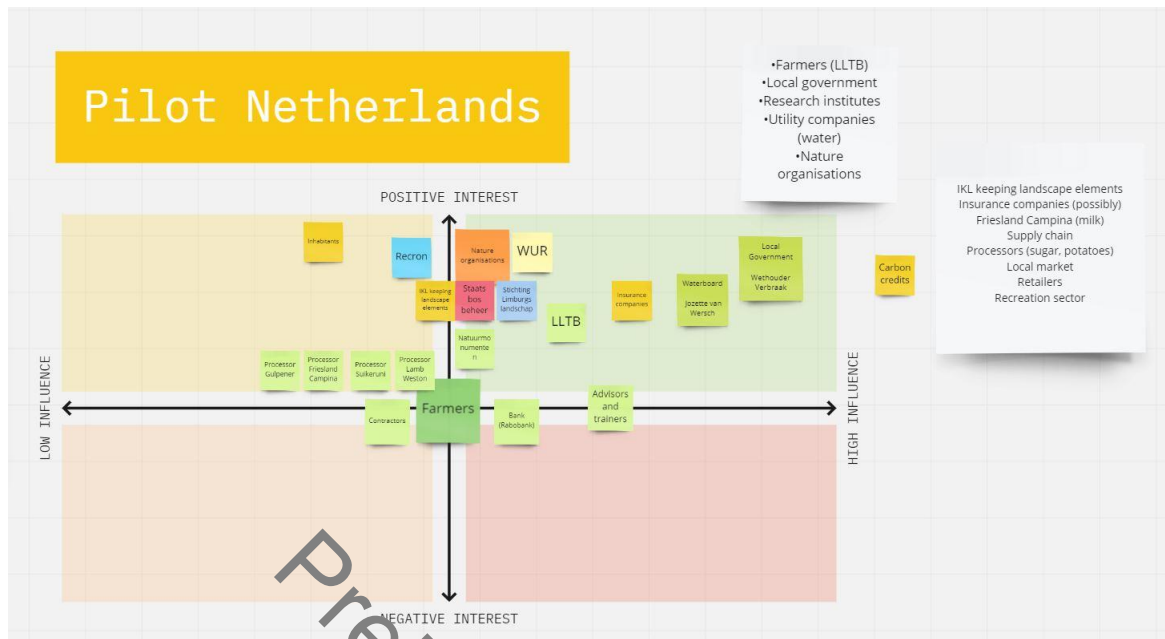
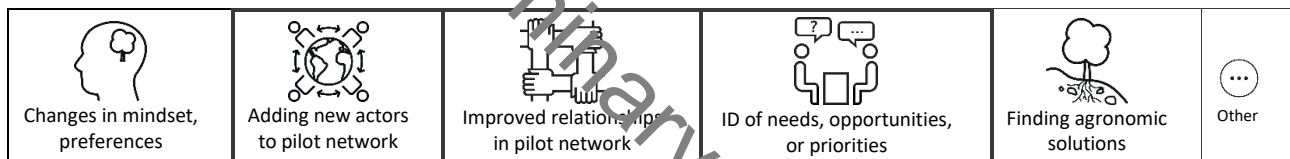


Figure 3.6.3. Overview and position of interest of stakeholder (groups) in the Dutch pilot



3.6.2.2 System analysis

Using input from the different meetings with partners, we made a system analysis. This helped to show the key system components together with their relationships and key goals. This helped to show how different stakeholders could influence the desired result and the importance of the each in achieving the desired result. It also helped to show that the greatest benefits would not always be achieved by the stakeholders implementing a change; that there was likely to be a mismatch between those making changes and those receiving the benefits.



Figure 3.6.4. Impressions of the pilot area Winthagen.

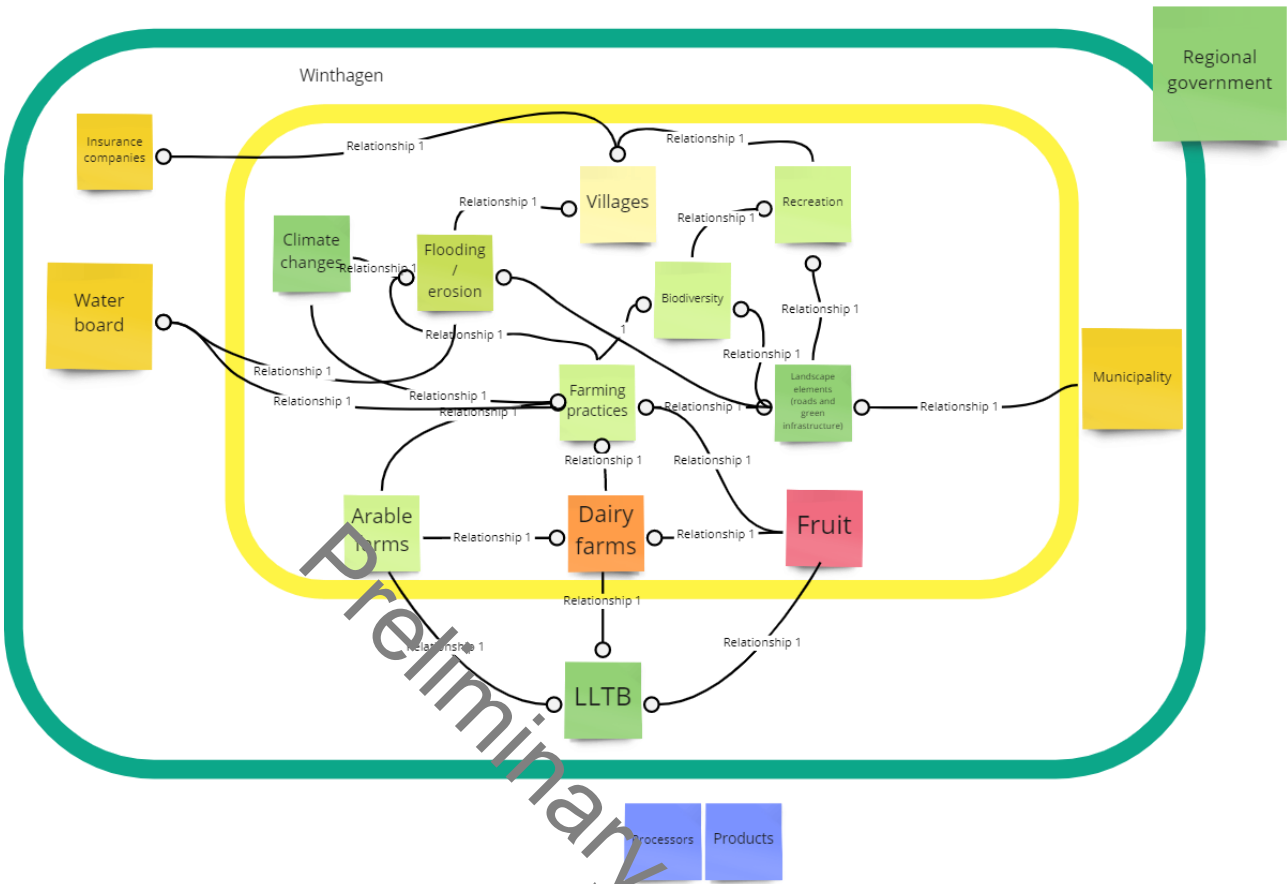








Figure 3.6.5. Overview of the system analysis of the Dutch pilot.

A provisional assessment of the area is developed. This assessment included current land use management and the expected risk of this type of land management to one of the key goals: erosion (Figure 3.6.5) and flooding. This was a valuable input for the first workshop, as it helped to show need for collaboration at landscape level (crop rotations) in order to achieve the goals at the landscape level.

 Changes in mindset, preferences	 Adding new actors to pilot network	 Improved relationships in pilot network	 ID of needs, opportunities, or priorities	 Finding agronomic solutions	 Other
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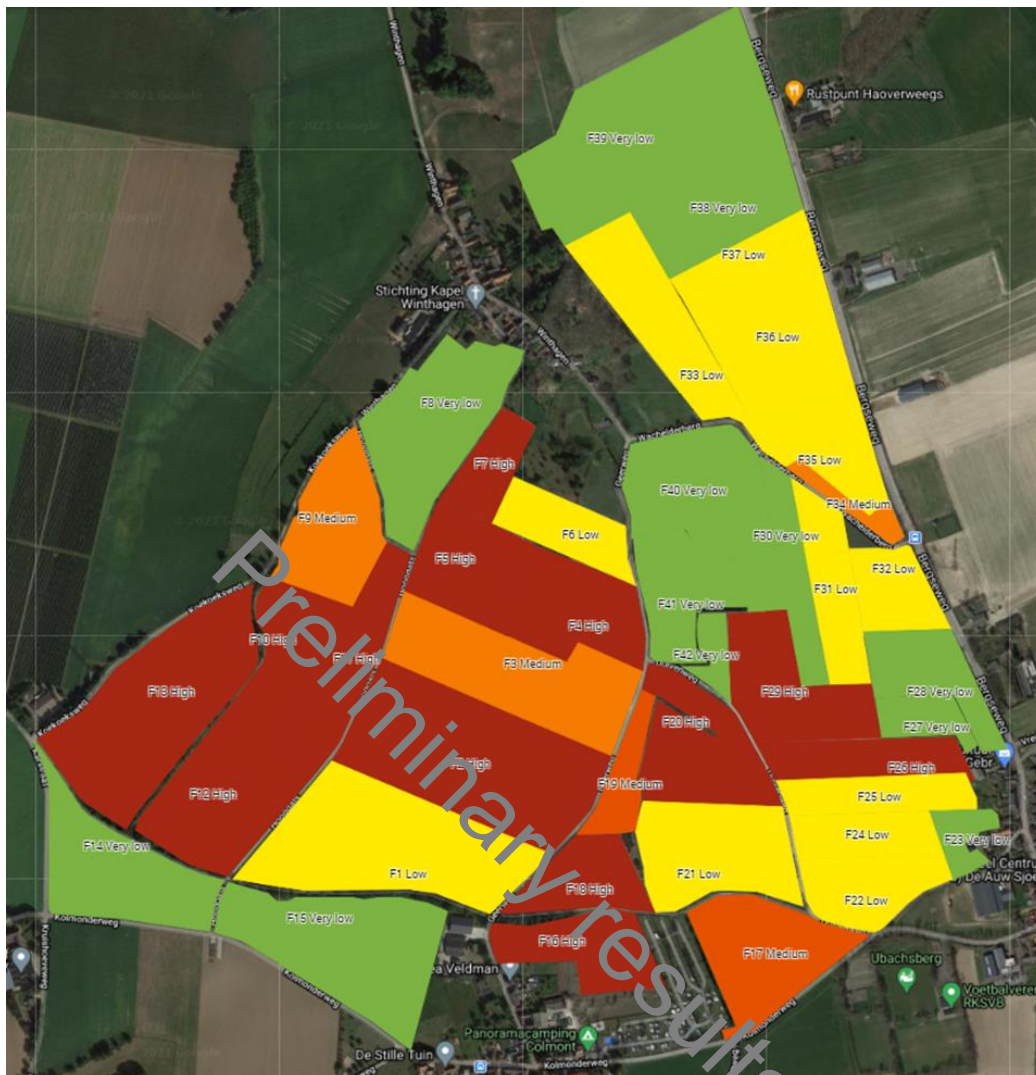


Figure 3.6.6. Outcome of RUSLE equation 2020, assessment of erosion risk related to land management.

3.6.2.3 First co-design workshop







Participants got to know each other through introduction rounds and collaboration during the workshop. More than 20 people participated in the workshop representing farmers, farmers' organisations, nature organisations, local government, the water board and a local estate. In the workshop we worked together to highlight the key challenges that we wanted to work on and developed a first proposal for the pilot goals.

- Adaption to climate change
- Improve water management
- Improve landscape aesthetics
- Strengthen biodiversity
- Improve living quality
- Ensure economically viability



The border of the pilot area were discussed and agreed on. We explored questions such as; how do you see Winthagen in 10 years' time? What happens if there are extreme weather events? How has it changed? We also developed a first mission statement: *"To make Winthagen more resilient to extreme rainfall and drought by achieving improved water management and simultaneously ensure that the area has good and reliable yields, higher liveability and more biodiversity."*







The common goals and mission served as the foundation for the further development of designs and ideas.

 Changes in mindset, preferences	 Adding new actors to pilot network	 Improved relationships in pilot network	 ID of needs, opportunities, or priorities	 Finding agronomic solutions	 Other
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3.6.2.4 Second co-design workshop

We built upon the results of the first workshop with mostly the same participants. In the second workshop, there was a representative of a local bank added to the group. We checked and agreed upon the goals and pilot area that we would work on together. Here we further discussed potential challenges, or contradictions, between various goals, such as the challenge of improving tourism and supporting biodiversity, and that with more people in the area wildlife can be disrupted. Having discussed these challenges, we went on with questions regarding the theme, such as: how can we ensure we have enough water by drought and no flooding by heavy rainfall? Next, we discussed solutions and placed them on a flip-over based on ease of implementation and novelty. We did this for the different pilot goals and this resulted in more than 80 different ideas for achieving the different goals. We clustered these based on the different themes to develop further in the following sessions. The themes we developed ideas on are:

- Landscape infrastructure
- Water infiltration
- Water storage
- Field crop management
- Built-up areas

 Changes in mindset, preferences	 Adding new actors to pilot network	 Improved relationships in pilot network	 ID of needs, opportunities, or priorities	 Finding agronomic solutions	 Other
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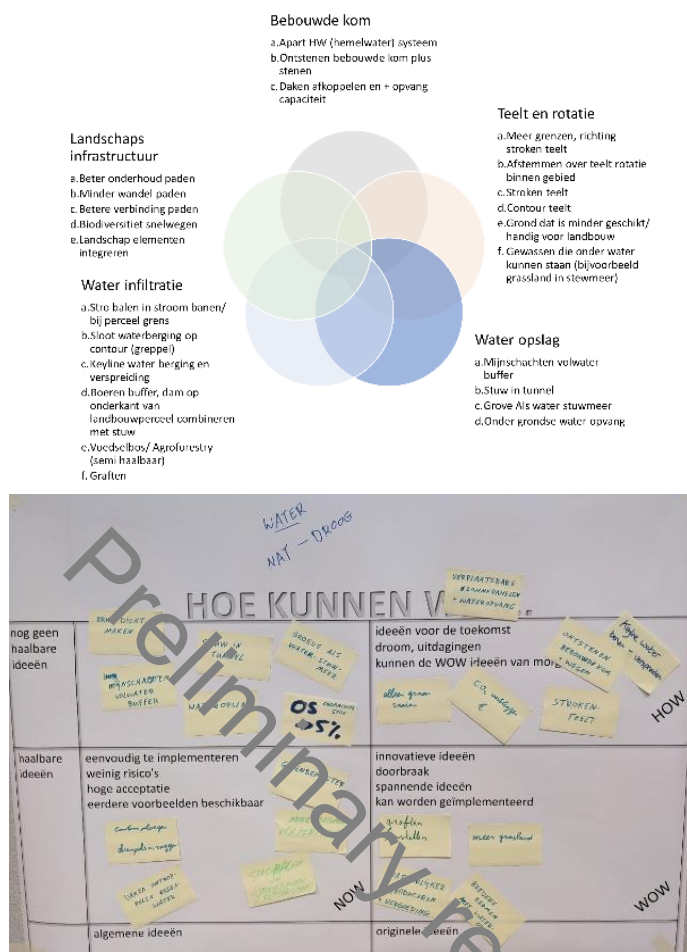
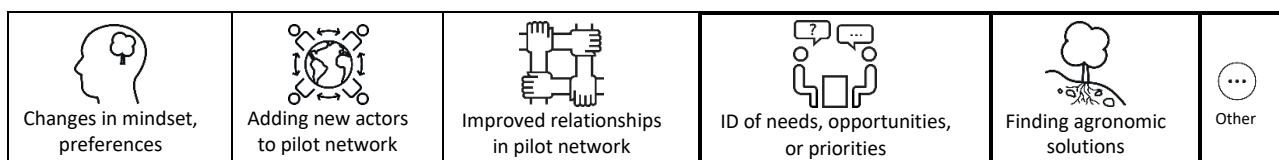


Figure 3.6.7. Overview of the ideas and canvas used in the idea creation

3.6.2.5 Sustainability and resilience assessment

We completed the sustainability and resilience assessment based on the current situation and the design ideas proposed to achieve the different goals. This helped to show where improvements could be expected and where we could do more to achieve our desired outcomes. Sometimes we were surprised by the results, which helped to stimulate discussion and new ideas. Largely because in some cases the new design scored less than we had expected because the assessment did not capture all the factors that influenced the core indicators. Despite this, it served to focus attention on what we were doing and what we expected to achieve.



3.6.3 Lessons learned & future steps

Overall, the design approach was valuable for the pilot in Winthagen. We came to collaborative goals and collaborative solutions to achieve them, which was necessary due to the differences in where the costs and benefits of changes would take place. This worked well as the different stakeholders were able to communicate what was important to them and gain a better idea of what and why certain goals were important for other stakeholders. This helped to build up a level of collective awareness of the different challenges and an understanding of how certain solutions were more or less viable for achieving the goals of the group. In this way, we have developed several ideas to achieve the mission of the group that are also acceptable to the different stakeholders. An interesting part of our approach was that we didn't promise that it would be implemented, and that it would be up to the group to implement the project, or not. This created an interesting dynamic in the group. It freed participants to be more explorative when approaching the different ideas. Furthermore, it highlighted that in many cases there was a desire to do something, as long as it was not forced. By giving the group ownership of the project, they had a greater interest in developing it and providing solutions that were feasible for them.

Nevertheless, this way of working was rather new for the participants. There were several discussions about this during the first two workshops. With comments such as: "Wouldn't it be quicker to just make a plan, present it and see if we like it?" (a business as usual approach). However, the group appreciated the added value of developing the goals and solutions together. In this case, the approach and facilitation in the workshop is essential to ensure that everyone participates. It is also important to have a balance of different opinions within the group and to have participants who are invested in the outcomes of the project. In this respect, the initial one-to-one interviews with stakeholders prior to the workshops were very valuable. This ensured that the first workshop started with interest and enthusiasm from the right stakeholders. In addition, the workshops ensured ownership and interest in the further development of the project. RID provided an interesting and valuable approach to developing solutions to challenges that affect multiple stakeholders in different ways.

In the case of the Dutch pilot, the focus was on the process and not necessarily on the development of MF or AF per se. Many different ideas were proposed to achieve the regional objectives. As a result, the exchange with other pilots was more at the process level rather than the technical development of agroforestry or mixed farming. As the pilot develops, we expect to be able to make more use of the experience of other pilots and exchange more with them. Nevertheless, it has been valuable to draw inspiration from other pilots and further exchange with them on how they have run design sessions and what tools or techniques they have used would be valuable. It could also be valuable for facilitators to attend some sessions in other countries to experience their design sessions and local challenges.

Key lessons

All stakeholders should be motivated to achieve something in the project, with reasonable opportunities to do so. They do not need to have the same specific goal, but it should fit within the broader framework.

- The RID process takes time. To initiate, to build a committed group, to design, and to develop. This time is well spent as it allows the development of ideas that the group wants to implement, and that also take into account considerations from other stakeholders that otherwise might be overlooked.



- To speed things up it would be valuable to have a more intensive start in the winter period when farmers are more available.
- It is valuable to have a local person to facilitate the link with the group and act as a facilitator. This has worked well to ensure trust and understanding. It has also been valuable to bring in guest speakers and expertise for inspiration.
- The facilitation and use of different techniques to encourage participation has also been very valuable to ensure that all the stakeholders are involved and heard. The use of group discussions, small group discussions, drawing sessions, post-its, maps and other media has been valuable.

Future steps

In November 2022, a third co-design workshop will be held with the focus on developing design concepts from the ideas from the former workshop. The concepts will be visually translated. Early 2023 there will final workshop with the complete group to discuss further on how the concepts could become reality in the pilot area and how the group can work on realizing measures. In 2023, the focus will be on anchoring part where we support the realisation of the most promising designs for this region. The pilot team will support this but will not take ownership in this part of the process.

Preliminary results



4 References and citations

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Preliminary results

