



-ACADEMIC CONSULTANCY TRAINING-

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Executive summary

Erfdelen can be seen as an opportunity to address two challenges The Netherlands is facing: housing shortage and empty(ing) farmyard buildings. Farmyard sharing initiatives (FSIs) can be defined as initiatives where groups of people from different households choose to start a housing project together on a former farm. *Stichting* Erfdelen.*nl* sees opportunities to use these former farmyards to create sustainable living communities that provide new, shared and healthy living spaces.

Although there is a large group of people interested in farmyard sharing initiatives (FSI), almost no projects are implemented in the Netherlands. This is because of a multitude of obstacles within the process, among them the interactions between initiators and municipalities. This research focused on how interactions between initiators and municipalities can be improved and how the obstacles that occur in implementing FSIs can be overcome.

The project team for this research consists of eight master students of Wageningen University & Research (WUR) and delivered this academic report, a presentation, a tool and an extensive Dutch summary. The research question was: *How can the interactions between initiators and municipalities be improved, to overcome the obstacles in realizing sharing farmyard initiatives?* The methods used to answer this question were literature reviews, a digital questionnaire among FSI enthusiasts, seven semi-structured interviews with Dutch municipalities and two interviews with farm-sharing initiators.

The research resulted in a list of important characteristics and process steps farm-sharing initiators must consider before applying to a municipality. Additionally, obstacles and potential solutions were coupled to create an advice and tool. The three main obstacles found are:

- 1. The lack of capacity and experience with FSIs in municipalities, and their attitude toward FSI
- 2. The lack of knowledge with initiators combined with the complexity of laws and regulations, and missing policies for FSIs, VAB and splitting of parcels
- 3. The difficulties initiators have with finding a suitable location

It is, therefore, recommended that farm sharing initiators use the *erfdelen* WikiBooks page, look for farms close to the build-up area, hire experts, talk to residents, send a well-prepared plan to municipalities, make use of subsidies, and run processes in parallel to reduce the time to completion of projects. The tool can be found online: https://nl.WikiBooks.org/wiki/Erfdelen.

Besides being a step in the right direction in terms of interaction between initiators and municipalities, this research provides several starting points for future research within the WUR. Future research could focus on in-depth research on rules and regulations, the financial and fiscal aspects, the social contribution, and municipal facilitation of FSIs.

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Terms and translations

Term in English

Dutch translation

Ordinance	Verordening
Land-use plan	Bestemmingsplan
Spatial planning	Ruimtelijke ordening
Norms	Regels
Former farmyards	Voormalige agrarische bebouwing
Rural area	Landelijk gebied
Urban development	Stedelijke ontwikkeling
Development direction	Ontwikkelingsrichting
Vacant buildings	Leegstaande gebouwen
Quality of the environment	Omgevingskwaliteit
Tailor made	Maatwerk
Demolishing and nullifying emission- and/or animal rights remediation	Saneren
Surplus	Overtollig
Perusal	Ter inzage
Local council	Gemeenteraad

1. Introduction

Erfdelen can be seen as an opportunity to address two challenges The Netherlands is facing: housing shortage and empty(ing) farmyard buildings due to the diminishing agricultural sector. Farmyard sharing initiatives (FSIs) can be defined as initiatives where groups of people from different households choose to start a housing project together on a former farm. The concept implies the adoption of a communal and ecological way of living, for example where equipment such as cars or washing machines, or facilities such as an organic garden, are shared (Duivenvoorden, 2019). Stichting Erfdelen.nl is a pioneer in the realisation of social, sustainable, small-scale and rural-friendly farmyard sharing projects. It is also a farmyard sharing platform with a proven experience and user base.

Farmyard sharing is an increasingly popular form of living since it is an alternative form of living that can contribute to solving two out of the many challenges that the Netherlands faces. The first challenge is the housing crisis. In February 2021 there was a housing shortage of approximately 300,000 homes in the Netherlands, and this shortage is forecast to increase in the following years (NOS, 2021). The number of people per household in The Netherlands has decreased a lot. More and more people are living alone or are single parents and the number of people who are lonely is also increasing (CBS, 2020). The second challenge is the nitrogen crisis. Due to the excess level of nitrogen pollution in the whole country, tightened nitrogen regulations have been implemented which limit the amount of construction work that can take place (Baan, 2019). Due to liberalisation, globalisation and therefore greater competition, smaller farmers cannot compete in the global market. Farms must grow and intensify to stay economically viable but a problem that grows with this is the nitrogen crisis. This is also a factor which is leading to the closure of agricultural businesses in the Netherlands (CBS, 2020), leaving farmyards unused or unattended. Since 2000 the number of agricultural businesses decreased from 97.400 to 52.700 in 2020 (CBS, 2022) of which 16.000 did not have a prospected business successor yet (CBS, 2021).

The pressure on the housing market and the decrease in active agricultural businesses pose problems which require creative solutions. Farmyard sharing could tackle both challenges. Given the previously described trends, The Netherlands seems to have a high potential for such initiatives. Pieter Parmentier, founder of the FSIs in the Netherlands and *Stichting* Erfdelen.nl, also thought so and tried to set up his own FSI. This was much more difficult than he thought, as he ran into obstacles, which took several shapes and came from different sources. *Erfdelen.nl* struggles to get an overview of these issues led them to seek research support from Wageningen University & Research (WUR), which led to this Academic Consultancy Training (ACT) group being commissioned by the WUR Science Shop.

Based on initial conversations with the commissioner and *Stichting* Erfdelen.*nl*, several obstacles that hinder FSIs were laid out. Even though thousands of farmers have stopped their work or are expected to stop within the next years, it has ironically not been that easy to find suitable farms for a FSI (P. Parmentier, personal communication, May 13, 2022; WUR, 2022). Securing financing is not straightforward and initiators have to work with legal entities to achieve their goal (P. Parmentier, personal communication, May 13, 2022). Finally, they must make sure that they have the time and the patience for the whole process, from self-organising to getting plans approved. The latter part is where the most issues seem to arise.

According to *Stichting* Erfdelen.*nl*, the main obstacles hindering FSIs seem related to policy and how governments, especially municipalities, handle these initiatives. Parmentier of the *Stichting erfdelen* assumes that governments are not used to facilitating initiatives directly taken by citizens, and therefore do not always have the knowledge on how to react (WUR, 2022; P. Parmentier,

personal communication, May 13, 2022). Municipalities are responsible for approving such initiatives. Both the municipality and the province have land-use plans. The small scale of FSIs makes the municipality the relevant governmental actor. Rules set by different levels of government can contradict each other, halting initiatives before they have a chance to get off the ground. Other processes with different institutions need to take place, related to the splitting up of parcels, or rules related to biodiversity, nitrogen, a building's monumental status, asbestos, and more (WUR, 2022; F. Langers, E. Bruning & P. Parmentier, personal communication, May 13, 2022). This makes the challenge of creating FSIs more difficult to untangle. The local government also might not be incentivised to support such initiatives due to the effort required to facilitate them on a case-by-case basis (E. Bruning, personal communication, May 13, 2022). All in all, *stichting Erfdelen.nl* experiences multiple obstacles within interactions between initiators and municipalities that make it difficult to realise FSIs.

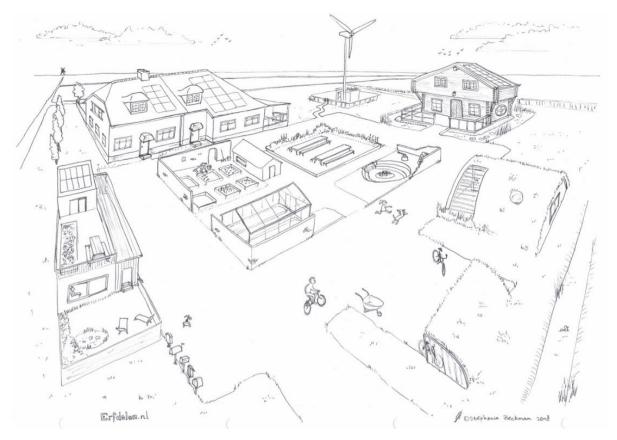


Figure 1. Illustration of a farmyard-sharing initiative by illustrator Stephanie Heckman, made for Stichting Erfdelen.nl

1.1. Problem definition

Stichting Erfdelen.nl, believes that the question why FSIs should be implemented is not as relevant anymore since in the last years it became clearer why it should be done. The current question is what should be done by municipalities to support FSI. However, this research team was open to the possibility that municipalities might not act in support of FSI, or that the problems did not lie with municipalities.

There are multiple obstacles within interactions between initiators and municipalities that make it difficult to realize FSIs. Previous initiatives show that the main bottlenecks emerge where potential farmyard sharers and municipalities meet. According to Evelijne Bruning (personal communication, May 13, 2022), previous projects had to search for gaps in legislation and had to rely on a tailor-made approach, which is a time and money-consuming process that often fails. There is not enough insight into the reasons why the process, in which the municipality plays a facilitating role, is problematic. There is a knowledge gap on what obstacles occur in the interactions between the municipality and initiators.

1.2. Integrative project purpose & research questions

Despite seemingly favourable conditions for FSIs very few come to fruition. Many initiatives appear to get stuck in lengthy administrative processes and spatial planning regulations involving municipalities. The goal of this research is to improve the process of setting up FSIs in the interaction between initiators and municipalities. The difficult bureaucratic process involved with setting up a FSI is assumed to be caused by a lack of municipal policies made with the concept of farmyard sharing in mind, conflicting legislation, and a lack of experience with the concept. Therefore, it was necessary to identify the key characteristics of FSI, processes steps, difficulties and solutions between municipalities and initiatives. And to learn from successful projects and the best practices of municipalities. Accordingly, the research question of this report is:

How can the interactions between initiators and municipalities be improved, to overcome the obstacles in realizing sharing farmyard initiatives?

And consecutive sub-questions:

- 1. What are the steps in the set-up process where initiators interact with municipalities?
- 2. Which context specific characteristics of farmyard sharing initiatives are important in the setup process between initiators and municipalities?
- 3. What are obstacles in the interaction between initiators and municipalities?
- 4. What practices can be adopted to help overcome obstacles within interactions between initiators and municipalities?

The project purpose for this research was to create an advice and tool for farm-sharing initiators and municipal civil servants. The tool aims to enable both parties to improve their handling of farmyards sharing initiatives in terms of regulations, conduct, efficiency and how to make FSIs more attractive to the municipality itself. It creates a clearer overview of what the interactions with the municipalities could look like and what obstacles can be expected. This knowledge can make a FSI process easier and quicker. Additionally, they can help manage initiators expectations. The type of tool that was chosen is a Dutch extended summary and a WikiBooks page to overcome the found obstacles. The WikiBooks page includes information about actors, policies, process steps, obstacles and solutions, and examples of successful FSI projects. It is hoped that others continue to add and improve information on the page.

1.3. Stakeholders

A stakeholder analysis was conducted to better understand the groups involved in FSI and to define the problem related to the FSIs. All stakeholders were identified and then prioritized in a power-interest grid, visible in figure 2, which maps the power and interest a stakeholder group has in the FSI and its outcomes (Mind Tools, n.d.; Solitaire Consulting, 2021). The complete analysis and a broader power-interest grid for implementing FSIs are shown in appendix 1. A short explanation of the power and interest of the most relevant stakeholder groups is given below.

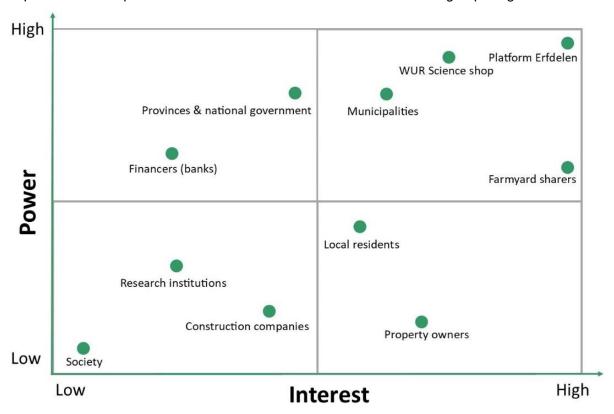


Figure 2.2 Power-interest grid project

The **WUR Science shop** is the commissioner of the project and for this reason, has high interest and power. **Stichting Erfdelen.nl** commissioned the WUR Science Shop for this research and therefore, has an even higher interest and power. **Erfdelen.nl** will benefit from this research since the project team will help improve how municipalities support farmyard sharing. The WUR Science shop benefits from this because this project has a broader positive impact on society, which is a requirement they have for projects they take on (F. Langers, personal communication, May 13, 2022).

Municipalities also have relatively high interest and power since, they are responsible for laws, regulations and policies and therefore can facilitate or hinder these initiatives. They will benefit from this research since the project team will provide a way to standardise and simplify the implementation of farmyard-sharing initiatives, which makes the process less costly and more efficient. **Farm-sharing initiators** will also benefit from the easier implementation. All four stakeholder groups will be closely managed throughout this consultancy project.

2 Methods

Discussed in this chapter are the choices for data collection methods and data analysis. By using three different methods of data collection (literature review, digital questionnaire, and interviews), a triangulation of data has been created. This enhances validity, creates a more in-depth picture of the problem at hand and allows for different understandings of the problem to be researched (Nightingale, 2020). Based on the stakeholder analysis (see Chapter 1.4), FSI initiators were surveyed and interviewed while simultaneously seven municipalities were interviewed. All data collected was used to create a tool as explained in chapter 1.3.

2.1 Literature review

At the beginning of the study, a literature review was conducted to understand the context of the shared farmyard, the bottlenecks, and what the research group should focus on during the process from a policy side of view. A literature review can broadly be described as a systematic way of collecting and synthesizing previous research (Snyder, 2019). It is a critical way to understand knowledge gaps and gain knowledge on the topic in research. The literature review helped to answer sub-questions 1 and 3 about the process and the characteristics.

Literature was found using Google Scholar and the WUR Library. No relevant scientific literature was found related to farm sharing. Literature on laws, policies and land use planning was found on government and company websites through Google. To explore the data efficiently, a keyword list was made based on the meeting with the commissioner, academic knowledge of team members and readings done at the start of this project. Specific keywords to apply in this initial research included: farmland (land type), small-scale living, *omgevingswet* and *VAB*-policy (See Appendix 2). The literature review was continued throughout the research since new terms and research possibilities came up after the questionnaire and interviews. Examples of such key terms are *omgevingsverordening*, *principeverzoek* and parking standards. All literature findings were checked by a group member, based on the 4-eyes principle. Information from the literature review is often placed in separate textboxes in appropriate locations. So that definitions to terms that come up in the report can be made available to the reader. Below there is an example of how this is done in the text.

Omgevingswet

With the implementation of the Omgevingswet, every province must publish an ordinance (verordening) in which they put conditions to the context of the zoning plan. The norms are meant for safeguarding compliance with provincial interest and having a good spatial planning. Provinces can decide for themselves what norms they want their municipalities zoning plan to comply with. After an ordinance is made the province expects municipalities to change their zoning plan or the norms in the ordinance apply directly to (in this case) farmers (Rijkswaterstaat, n.d.-e). All provinces currently follow the norms of an Interim Omgevingsverordening. This is an ordinance with the purpose of people having to already comply with new norms (Provincie Noord-Brabant, n.d.)

VAB-Policy

Due to developments in scale and business termination, agricultural real estate will become vacant, the so-called vacant agricultural buildings (VAB). VAB translates to Vacant Agricultural Business Buildings. Possible solutions for the functional transformation from VAB to housing depend on certain characteristics and legal factors of the VAB (Linthorst, 2016). VAB Policies are set by local governments like provinces, municipalities, or collaborations between municipalities. The goal of VAB policies is usually to facilitate, stimulate and regulate the process of changing the function of defunct farmyards. The goal of local governments in facilitating this function change is to prevent the vacancy and decay off agricultural buildings, remove potential breeding grounds for criminal activities and counter disorder in the rural areas. VAB policies are most relevant in areas where there is high number of agricultural businesses that cease operation or are expected to do so in the short term. In areas with a larger number of small scale farmers VAB will be a more important theme than in areas with predominantly large scale farming operations (Kolkman, 2004). VAB policies and instruments take different forms. can

2.2 Digital survey

A digital survey was done for two reasons. Firstly, it provided much needed initial information on the context, obstacles and municipal experience of a pioneer subject. Secondly, a digital survey was easy to distribute among farm sharing enthusiasts via *stichting Erfdelen.nl*. A digital questionnaire has provided qualitative data from farmyard sharers or people interested in sharing a (former) farm. The questionnaire was used to answer all sub-questions. The survey and first interviews ran simultaneously due to the time limit given for this project. However, the first survey answer has been used for questions in later interviews, for example about fees and splitting parcels policies.

The questionnaire has been made with Onderzoekdoen.nl since this tool adheres to the AVG-privacy policy of the WUR. The questionnaire contained a mix of open and closed questions in Dutch (Appendix 3). The open questions allowed qualitative answers, while the closed questions, such as yes/no, ensured that only data useful for this research is gathered. The questionnaire was tested in a small group before distributing it to the target group, this made sure that the questions were clear and relevant to the research purpose. The questionnaire link was published on the *Erfdelen.nl* website. The questionnaire was available from the 30th of May until the 8th of June. After closing the questionnaire, all answers were downloaded from Onderzoekdoen.nl for analysis.

The questionnaire was built up as follows; first, a brief introduction of the research, the team, and ethical considerations. Secondly, initiators were asked about their age, what kind of household they have and what kind of households they want to live with. Demographic information was not used for this research but allows future research to see if a different demographic was reached. Thirdly, we asked which municipalities respondents looked at for the FSI. Fourthly, questions about the project steps that they went through, and obstacles (potential) farmyard initiators came across. Then, questions about potential solutions for obstacles were asked. Lastly, respondents were asked to leave their email if they would be open for a follow-up interview or if they wanted to receive the final report.

Participants were free to answer the questionnaire and were made aware that they could withdraw from the research at any time during the research or skip any question. The participants were informed about the research objectives. Furthermore, their answers have only been saved on the researcher's laptop and shared within the report. Personal data such as email addresses were stored separately from the other data.

2.3 Interviews

Qualitative data was collected from municipalities and initiators by conducting semi-structured interviews. Semi-structured interviews provide the interviewer with guidance on what to talk about by having a set of key questions. The format also leaves space for both the interviewer and interviewee to elaborate more. Unlike a structured format it allowed for discoveries of relevant information that the research team was not yet aware of (Gill, 2008; Trochim, 2015). Themes discussed in the interviews were the type of farms in the municipality, the FSI process, obstacles and overcoming obstacles. The complete interview guide can be found in appendix 4.

To find the municipal perspective on the obstacles of FSI, seven municipalities were interviewed. Municipalities were selected based on the literature review; municipality who have had recent activity with FSI or the VAB-policy. Moreover, a list of active municipalities made by *Stichting Erfdelen.nl* was used. The following municipalities were interviewed: Barneveld, Boxtel, Bronckhorst, Doesburg, Moerdijk, Oss and Someren (see figure 3). Municipal interview invitations were sent directly to alderman responsible for land use planning. However, the interviews were mainly conducted with civil servants or alderman with expertise in spatial planning or the *VAB*-policy. The interviewees job position per municipality is shown in table 1.

The interview was piloted to make sure the structure was clear, understandable, and capturing information needed to answer the research questions (Gill, 2008). This was done by interviewing an easily approachable municipality first. After this interview was conducted, the interviewer and interviewee reflected on what could have been better. After the pilot-interview, it was realised that every interview should be personalised to the municipality to be more efficient. When allowed, the interviews were recorded, and transcribed or summarised due to lack of time.

Table 1. Job position interviewees municipalities

Name municipality	Job position interviewee(s)							
Barneveld	Environmental Policy Advisor							
	Alderman spatial planning, sustainability, recreation and rural development.							
Boxtel	Civil servant working on former farmyard regulations (experience in spatial planning, water management and rural policy)							
Bronckhorst	Policy officer Environment							
DIONCKHOISE	Spatial planning and urban design advisor							
Doesburg	Spatial planning policy advisor							
Moerdijk	Alderman economic affairs, mobility, spatial planning and living.							
Oss	Spatial planner							
Someren	Spatial Development policy officer							

Additional to the municipal interviews it was decided to do two semi-structured interviews with initiators. This was decided to gain more in-dept knowledge about initiators success and experienced obstacles. Many respondents from the questionnaire were open to doing an interview. Three respondents with interesting answers were emailed, and two were available during the data gathering phase of this project.

The first initiator interviewed is Marlies de Groot. She was chosen for an interview because of the success her FSI had in Doesburg, which provides a positive example for other initiators and municipalities. The second interviewed initiator was Douwe Kunst, who had made steps in the process for the past half year and is looking for a house and preparing to talk to the municipality for the first time. Kunst sounded very knowledgeable on the topic in the interview, unfortunately, he did not have any experience with the municipal process and therefore less of his interview was used for the research. In table 2 background information on the two interviewed initiators is given.

Separate from the interviews, a talk with Pieter Parmentier, initiator and problem owner, was done in week 6. As initiator of *stichting Erfdelen.nl*, Parmentier was able to test our results against his experience. He agreed with the findings and was positive about the tool the team was proposing.

Table 2. Explanation initiatives

Name initiator	Explanation of initiative				
Marlies de Groot	Marlies de Groot entered the process of sharing farmyards with Nic Drion in 2018. They have since bought the farm and are already living on it together. Over the past few years, they have progressed in realising the project and have a group with whom they will be living. The project is expected to be realised in 2023.				
Douwe Kunst	Douwe Kunst, together with a libertarian group, has been looking since the begin of 2022 for a farm where they can share the yard. They are currently living in Meanderhof in Zwolle, which is a similar initiative where property is shared.				

All interview participants were informed about the details of the project, they were assured about ethical principles such as anonymity and confidentiality. The intention was to conduct the interviews in locations the interviewee is familiar with, but all the interviewees preferred to have the interview online or via phone. Moreover, interviewees received the final product when there was interest in it.

2.4 Data analysis

The analysis of the survey and interviews was done inductively with a thematic content analysis. Common themes were identified, and the goal is to find patterns across data (Rev, 2022). Interviews detail coding can be found in appendix 5. Themes used to analyse were related to the sub-questions of the research. The following five themes were used for the questionnaire: process and making plans, characterises, bottlenecks, municipal motivation, and solutions. The seven themes used to analyse the interviews were: process, bottlenecks, characteristics, attitude municipality, solutions or success stories, incentives, and policy.

Coding was done through Excel and Word Office for two reasons; the amount of data gathered from the surveys and interviews was limited, and coding without a proper program was efficient and simple. Additionally, WUR has no licence for NVivo, and having three different people separately learn to operate a whole new software did not seem feasible within the time frame.

3 Results

To give recommendations to the WUR Science Shop about how they can help *Stichting Erfdelen.nl* and initiators with improving the implementation of farmyard sharing projects, literature research, a survey and interviews were conducted. As described in the methodology section, interviews were conducted with specific municipalities, whose distribution is visible in figure 3.

In total 44 complete questionnaire responses were received (prospective) farmyard enthusiasts, and 16 people left the questionnaire open. This relatively small number participants, relative to the 2000+ people signed up for the newsletter of Erfdelen.nl, shows that this is likely not a representative group and that only qualitative research can be carried out with the collected data. The respondents reached varying levels of progress in their projects, while others have already abandoned their projects. The



respondents mentioned a wide variety of municipalities in which they took steps to establish an FSI. Some respondents chose to give broader regional locations rather than specific municipalities, such as the area around the Veluwe natural area, the wooded area of Drenthe and Friesland, the area around the Noordoostpolder. A complete overview of the survey responses can be found in appendix 6

In this results section, the results for each sub-research question will be outlined. Under each sub-research question, there will be a description of the main findings from the interviews with municipalities, the interviews with initiators, the questionnaire and sometimes from the literature review assuming that content isn't already placed in separate text boxes with definitions.

3.1 Process of farmyard sharing initiatives

3.1.1 Interviews municipalities

Interviews with municipalities provided useful information about what they expect from initiators, and what steps initiators have to go through to successfully realise a FSI project. In table 3, an overview is given of all the main steps mentioned in the interviews, along with which municipalities mentioned them. A more exhaustive list of all the steps mentioned by municipalities can be found in appendix 7 Table A7.1.

Table 3. Mentioned steps implementing farmyard sharing initiatives

Steps	Barneveld	Boxtel	Bronckhorst	Doesburg	Moerdijk	Oss	Someren
Initiator hiring consultant							
Finding a suitable location							
Make a request at the municipality (informal)							
Feedback from municipality to initiator							
Submit principeverzoek							
Final decision principeverzoek							
Land use plan adjustment							
Land use plan for perusal							
Objection is made							
Decision local council							
Make permit requests							
Make contract with contractor							
Omgevingsdialoog: engaging stakeholders							
Additional research							
Purchasing the land							
Remediation rights							
Request subsidies							

	Legend				
Optional step					
Mentioned during interview					
	Order unclear				

From the overview provided by this table, we can see that submitting a *principeverzoek* and adjusting the land use plan were steps mentioned by almost all municipalities. Some steps seemed to be optional, such as hiring a consultant or handling objections by stakeholders – such as neighbours – to plans made by initiators. Some of the steps in the table may include multiple steps within them or are part of larger steps, which makes them sometimes hard to separate from each other.

Land-use plan

A land-use plan is a plan containing a collection of parcels which have an assigned plan for using the land. Each parcel can have their own land-use plan. A land-use plan contains the criteria within which the destination can be carried out. Some categories of destinations are residential and agricultural. Within these categories there are subcategories. All criteria, laws and regulations within the land-use plan are tailor made. Every parcel has a land-use plan stating the legal possibilities on the plot. A request can be made to change the existing land-use plan. This can be done via a land-use plan procedure (CAD Desk, 2022b).

Principeverzoek

When an development plan for an area does not fit the land-use plan, a land-use amendment must be done. When a development plan for an area does not fit the land-use plan, a land-use amendment must be done. To save time and money often first a *principeverzoek* is submitted to the municipality. The request contains a general idea of the development plan and a motivation about why the municipality should cooperate. A *principeverzoek* is a nice tool to get insight in the willingness of the municipality to cooperate with the plan (Jurable, 2019).

Omgevingsdialoog

An *omgevingsdialoog* is a dialogue between local residents and other stakeholders with interest. By having the dialogue the initiator gets more insight in the wishes, interests an objections the stakeholders have. The initiator can then use this input in the further design of the initiative. This often leads to a better initiative for the surroundings of the area. By taking the most important wishes and objections into account it is less likely an objection will be made to the plan. Which results I a faster and cheaper procedure for the initiator (Gemeente Oosterhout, n.d.).

3.1.2 Interviews initiators

Of the two interviews conducted with initiators, the interview with Marlies de Groot (initiator in Doesburg, in the building phase) along with the information already available on her project's website (Erfdelen Doesburg, 2022) was much more illuminating, as she was much further into the process than Douwe Kunst (initiator still looking for a property, in the preparation phase). Since these results are from the initiators' perspective, many of the process steps which were harvested from this method turned out to not be so relevant to the interaction between initiators and municipalities. An exhaustive list of the steps that both initiators undertook can be found in appendix 7 Table A7.2.

From this exhaustive list, the process steps mentioned by Marlies that are related to the interaction with the municipality or provincial government are maintained in this list. Steps that are not specific to FSIs, but that are applicable to property development in general – such as finding an architect or contractor – were also not included in table 4 below.

Table 4. Steps taken by Marlies

Steps taken by Marlies

Principeverzoek sent to the municipality (*College B&W* asks for advice to the *commissie ruimtelijke kwaliteit*), to check if they have 5 households on the yard by using already-existing buildings and the *Rood-voor-Rood regeling*.

College B&W reacts positively to splitting the farmyard into 5 households (not different parcels). Commissie Ruimtelijke Kwaliteit is positive on the condition that the farmyard is not altered.

Purchase contract for farmyard signed on resolutive condition that the soil be investigated for asbestos.

Consultancy office SRO Arnhem is hired to write the land use plan.

SRO writes land use plan, sends second *principeverzoek* to the municipality and receives a positive reaction to realise 8 smaller households within 5 buildings present on the farmyard.

Setting up a CPO association, discussion with notary about it.

Application for the *collectieve woonvormen* subsidy from the province of Gelderland for support. They receive €14.500 by the province Gelderland.

Land use plan change made available by municipality online, for a six-week period.

Part 1 of *flora en fauna verzoek* on barn owls completed. For this, there is no exemption from the *Wet Natuurbescherming.*

Development of Beeldskwaliteitplan for which a list of architects is also being drawn up.

Plan submitted to municipal council because no complaints were submitted.

Part 2 of *flora* en fauna *verzoek* completed, concerning bats. For this, there is no exemption from the *Wet Natuurbescherming*.

Land use plan is discussed in the Council Committee and approved by the city council of Doesburg. New objection period of 6 weeks begins.

No objections were received during the objection period, and the land use plan is now irrevocable.

Splitting parcels

Splitting parcels is the splitting of a parcel in two or more parcels. Someone can split a parcel with one of the following methods: as an owner you can make a request through the Kadaster; project developers, municipalities or other third parties often do it via the application Splits of Kadaster; the final option is splitting the parcel with the help of a notary after buying or selling a part of it (CAD Desk, 2022a).

A parcel being split does not mean that the land-use plan is correct. When a parcel is cadastral split, the land-use plan its borders remain intact. Meaning even though the parcel might be split, there is still only one land-use plan. In rural areas a residential land-use plan often only allows one house to be build, since the land-use plan remains after splitting the parcel it legally is still only possible to build one house on the parcels. The only manner to be able to build more houses is by requesting a land-use amendment or a deviating environmental permit (CAD Desk, 2022a).

3.1.3 Questionnaire

Information about the process steps that occur in the implementation of FSIs in the questionnaire mostly came from answers to "What steps have you taken to set up an FSI?". The open nature of this question leads many respondents to mention steps which did not have to do with the interaction between them and municipalities. The manual coding of the responses led to the creation of eight arbitrary categories of process steps. A full overview of all responses can be found in appendix 6.

The first category has to do with searching for a location. The second involves searching for a group or project to join. The third has to do with conducting research relating to the concept of farmyard sharing, learning about it and deciding whether it is the right option for the respondent. The fourth is about defining one's project, where initiators think of the vision or desires of their group, form a lobby, or join a CPO. Things get more concrete in the fifth, defining plans, which has to do with making specific plans regarding the design or set-up of the project, but which still doesn't include much involvement of the municipality, apart from holding informal talks with civil servants.

Interactions with the municipality come into the equation in the sixth category. Here, respondents mention involving the government, without showing clear commitment, for example by seeking preliminary contact. The seventh and largest category has to do with involving the municipality with commitment. Here, communication with the municipality takes place where implementers ask specific questions relating to the specific plot of land they are interested in, or the specific plans they have in mind, to get preliminary feedback. This step was the most highly mentioned, with 11 mentions. Multiple of these responses are worth attention. A respondent said that they "laid out the plan to municipality and did not hear anything from them even after some reminders. I was later told by a civil servant in an informal setting that there is a lack of knowledge to handle the issue". Another mentioned they also had to resort to informal rather than formal contact because "we were not owners". Respondents got conflicting responses depending on the alderman in question: "I spoke with an alderman who was enthusiastic, then spoke with an alderman who said it was not possible due to the geurcontour". A respondent sought contact with municipalities when they saw a farm that was for sale "to check if multiple house numbers were possible, and the answer was normally no, only one number, and families are preferred". Other steps within this category can be found in table 5.

Finally, the last category involves Making Plans without Involving Government, which got 2 mentions, where initiators are interested in setting up an initiative but did not directly government because they are convinced that their idea respects 'higher' laws and therefore does not need to be restricted by 'lower' laws or because they want to desire "detachment from the failing system".

Table 5. The process steps within the 'Involving government with commitment' category

Steps involving commitment of municipality	# mentioned
Official contact w/ municipality	11
Submitting land use plan change	3
Providing municipality w/ education	2
Submitting a principeverzoek	2
Requesting subsidy from province	1
Contacting the province	1
Requesting building permit	1
Changing initiator plan following contact	1
Contacting nature development organisation following contact with government	1

3.1.4 Review of process

To summarise the overall results, and answers to this sub-question, the most recurring and seemingly important steps have been outlined in figure 4. Not all steps are compulsory, or necessarily must follow each other in this order.



Figure 4.3 Important process steps

Before the interaction between the initiators and municipalities occur, initiators often (should) conduct preparatory work such as defining what they are searching for and whether is possible within the (regulatory) landscape. Sometimes they recur to the hiring of a consultant or advisor. Next, they investigate suitable locations on which they can set up their FSI. They then begin to meet the municipality to investigate the potential of their project, and the extent to which the municipality is prepared to support them. As already seen previously, this contact can sometimes take place without prior preparation from the initiator, who has high expectations about what municipalities can provide for them. Formal contact with municipalities often starts with the submission of a *principeverzoek*, followed by submitting a proposal for adjustments to the landuse plan, and finally the request of permits relating to the demolishing, building, or other aspects of the establishment of the FSI. Lastly, the initiator can begin the realisation of their project which involves developing the property.

Preparatory work, finding a location, informal or formal contact with the municipality and making formal plans, can all require early or late consideration of building regulations such as: bouwbesluit, bouwverordening, welstandseisen; required permits such as omgevingsvergunning and parking test; local policies relating to local VAB-policy, Ruimte-voor-Ruimte (RVR), Omgevingswet. Overall, the land use plan change request is considered the lengthiest and most complex part of the set-up process, since it also requires time to be reserved for people to oppose themselves against the plans.

Omgevingsvergunning

The most common permit initiators need is the 'Omgevingsvergunning', that is part of the Wet algemene bepalingen omgevingsrecht (Omgevingsloket online, 2022). Through this permit the municipality can judge if the planned construction/destruction fits their policies and will not create unwanted negative nuisance for people or the environment. An omgevingsvergunning is usually judged by the college van burgemeesters en wethouders (College B&W, in the municipality) or if needed by gedeputeerde staten (province). This permit requires a MilieuPrestatie Gebouwen (MPG) for new homes, so this might apply to certain Erfdelen projects (Rijksdienst voor Ondernemend Nederland, 2017). In MPG the sustainability of buildings is calculated, to show how materials used in construction impact the environment.

Bouwbesluit / bouwverordening / welstandeisen

A *bouwbesluit* is a mandatory policy that contains technical requirements for buildings to ensure new buildings are safe for people and the surrounding area (Rijksoverheid, 2022a). It addresses safety, health, usability, energy efficiency and the environment. An initiator needs to provide proof that the new building(s) will comply with those regulations, normally through expert advisors.

The *bouwverordening* is a set of regulations about non-technical requirements for construction or demolition, set up by the municipality (Vereniging Nederlandse Gemeenten, 2022). The *bouwverordening* is planned to disappear and is already partly non-active.

Welstandeisden are specific conditions that the municipality applies to planned constructions, so called 'welstandseisen' (Rijksoverheid, 2022b). These welstandseisen are evaluated by the Welstands commission that checks if the building aesthetically fits the surrounding area. This could entail architectural design or use of specific materials. The welstandseisen are registered in a welstandsnota, which can be checked trough https://lokaleregelgeving.overheid.nl/ or the municipal website.

3.2 Context specific characteristics

To be able to answer the second sub-question, characteristics were inferred from all the data of each method. The results are per method below, with a final concluding paragraph.

3.2.1 Interviews municipalities

Characteristics mentioned in an interview are visualised in table 6 below. As shown, all municipalities mentioned the importance of the location of the former farm for the success of the project. Most municipalities state to prefer new houses close to existing city centres while Oss explained that they have special designated buildings sites in the rural areas. Allowing a new residential house in an area depends on the land-use plan, mentioned by 6 municipalities.

5 out of 7 municipalities talked about the differences in *VAB*-policies between provinces and municipalities. This included two municipalities not having a *VAB*-policy at all, allowing for tailor made work. To ensure the right use of the *VAB*-policies most municipalities focus on quality and biodiversity improvement in the rural area. Doesburg mentions the following about their success case: "They are also going to bring back a lot of greenery, such as pollard willows and they are going to realize a watercourse and something else I believe. So, it is also good for the nature around it."

To ensure a former farm is fit for habitation the environmental norms need to be taken into consideration. According to the municipality's interviews, initiators must consider and research particulate matter, toxins, odour and sound nuances. Four out of seven municipalities explicitly mentioned asbestos as a context specific characteristic that could positively influence their decision. Moreover, four municipalities are anticipating changes in legislation (see table 6) for example, the environmental norms and land-use plan, which will make future FSI easier to implement in the future.

Table 6. Characteristics mentioned in municipal interviews

Characteristics	Barneveld	Boxtel	Bronckhorst	Doesburg	Moerdijk	Oss sso	Someren
Location former farm							
Improving biodiversity or nature							
Regional or provincial regulation(s)							
Land-use plan							
Group composition							
Different VAB-policy							
Quality improvement							
Possibilities of splitting of parcel or house							
Asbestos							
Omgevingsdialoog							
Monumental status or historical value							
Flora & fauna							
Municipal capacity or expertise							
Upcoming changes in legislation							
Environmental norms							
Traffic movement and parking spots							
Archaeological Values							
New sustainable houses							
Municipality size							
FSIs link with social domain							
Housing migrant workers							

3.2.2 Interviews initiators

In the table 7, you can find the information Marlies de Groot, who is in the final stage of their project and Douwe Kunst who is in the preparation phase of the process. The initiators mentioned similar characteristics as the municipalities but also new once. Such as initiators knowledge which helped creating success, the initiators needs when it came to the location and desire to live in a sustainable house.

De Groot talked about the regional policy between municipalities were they disuse the numbers of houses being built, since other municipalities might not be allowed to build if others already did in an area. However, she explained that these discussions are not needed with a small number of houses. De Groot her interview was after the municipal interview therefore this has not been verified with the municipality of Doesburg. The municipality on the other hand, mentioned that if you stay below 12 houses the province will not get involved.

Table 7. Characteristics mentioned in initiators interview

Characteristics	Quotes
	De Groot: The initiators did not want to live on a busy street, where a lot of cars pass every
Location former farm	day. This was evident from the potential places they let go around Arnhem. Marlies de Groot: The group wants to live close to amenities, such as schools, public
	transport and work.
	De Groot: According to Marlies, when the number of houses stays below 5 or 6, there is
VAB-policy	no consult needed with neighbouring municipalities.
	De Groot: Because of experience in spatial planning in the city council and studying law,
Knowlodgo	the initiator was well informed about the steps and possibilities during the process.
Knowledge	Marlies de Groot: When the group became bigger, people took certain tasks. Because of
	this, a lot of money on third parties was saved.
Municipality size	De Groot: Due to a small municipality, the contact was more personal, and the
wuricipality size	municipality was flexible.
Flora & Fauna	De Groot: Due to conservation of the biodiversity, two flora and fauna investigations had
Tiora & Fauria	to be done.
Asbestos	De Groot: Asbestos investigation had to be done.
Environmental norms	De Groot: Soil analysis had to be done.
Land-use plan	De Groot: The farm already had the land use plan of living, which spared a lot of time.
Monumental status	De Groot: The farm was monumental, because of that, certain things cannot change.
	De Groot: The municipality did want to know what sort of people are living there, where
	they are coming from originally.
Group composition	De Groot: The municipality prefers a mixed household composition. So different age
Group composition	groups.
	Kunst: The group has a vision and draws up a programme of requirements for the sharers,
	that is very much in line with the social-liberal line of thought.
New sustainable houses	Kunst: The group wants to live in a passive house, energy by means of insulation.

	Legend					
based on the municipality and law						
	based on the initiators					

3.2.3 Questionnaire

No questionnaire questions specifically asked about context-specific characteristics that may have affected the way projects were handled by the municipality. However, context-specific characteristics were inferred from responses. Characteristics mentioned in the survey are summarised in table 8 below. The most mentioned characteristic is the municipalities vision or attitude. One participant had to say the following about this: "Little cooperation, more like opposition". Whole another stated: "The benevolence was there, both at the municipality and at the province". A characteristic that was mentioned 7 times was the Land-use plan of the municipality. Splitting regulations were mentioned 6 times, while the noticeable difference between municipal regulations was mentioned 4 times.

Table 8. Characteristics mentioned in questionnaire answers

Characteristics	Number of respondents that mentioned it
Municipal vision or attitude	10
Land-use plan	7
Regulation on the splitting of a parcel or house	6
(Different) municipal regulations	4
Municipal experience	3
Municipal knowledge or capacity	3
Geurcontour	2
Provincial regulations and subsidies	2
Flora and fauna regulation	2
Milieucirkel	1
Traffic possibilities	1

3.2.4 Literature review

According to Rijkswaterstaat (2022a) there are several characteristics that are important to consider in spatial planning, as shown in table 9. Characteristics they were not yet found in the interviews and questionnaire are: nuisance from businesses, wind and light nuisance, sustainable energy, cables and pipes, and health.

Table 9. Characteristics (Rijkswaterstaat, 2022a)

Characteristics	Description			
Air quality	Polluting emissions, quality control of outside air			
Soil quality	Soil quality investigation			
(Ground) water quality	Quality and quantity check for (ground)water management			
Sound nuisance	Temporary or permanent sound hinder			
Odour nuisance livestock	Hinder from odour emissions by animal farms			
Odour nuisance businesses	Hinder from odour emissions by businesses			
Vibrations	Hinder from vibrations due to traffic or machines from industries			
Wind nuisance	Hinder from heightened windspeed			
Light nuisance	Hinder from artificial light sources (industry, greenhouses etc.)			
External safety	Dangerous materials, wind turbines or airports			
Energy	Sustainable energy resources			
Cables and pipes	Arrangement or protection of (underground) cables and pipes			
Nature	Flora & fauna investigation			
Heritage and archaeology	Monumental care, archeologic research			
Health	Anything that could improve human health			

3.2.5 Review of characteristics

To create a more organized overview of all characteristics from the different data gathering methods, they have been grouped and organised in Table 10. Characteristics are always important for an FSI and need to be checked for every location and municipality before writing a *principeverzoek*. Each characteristic may or may not be relevant to a specific project.

All respondents to the questionnaire were asked about their age and the household combination people would like to live in. These group specific characteristics can be important as mentioned by all municipalities except Doesburg. Most preferred a mix of ages within the community to ensure a sustainable future. Moerdijk stated the following: "We prefer mixed groups in terms of the elderly and starters. Elderly only is a short-cycle model". Moreover, municipalities prefer to house citizens of their own municipalities before housing people from others since all municipalities experience housing shortages.

Both the municipality and initiator of the nearly completed FSI in Doesburg, mentioned the small size of the municipality as an important success factor. Additionally, the Doesburg participants, mentioned about the splitting a parcel the following: "The positive attitude of the municipality; flexible zoning plan that allows you to vary the size and location of the homes (within the parcel)". This shows that a successful project can be supported by a positive alignment with that project's characteristics. The results imply that municipalities are far more focused on positive characteristics of a project such as quality improvement, solar panels and asbestos removal, since none of the questionnaire respondents mentioned those context specific characteristics. The interviewed initiators also didn't mention those factors, as the characteristics which came from them mostly had to do with Flora & Fauna and asbestos.

Table 10. Combined list of characteristics mentioned in the data

Characteristics	Description				
Quality improvement	Biodiversity and nature conservation, demolishing abandoned buildings				
Environmental nuisance	Odour livestock and businesses, vibration, wind, light, toxins, cables an pipes				
Environmental quality	Air, soil, water, asbestos and milieucirkel				
External safety	Dangerous materials, wind turbines or airports				
Flora & fauna investigation	For example, on bats and birds				
Health	Anything that could improve human health				
Heritage	Monumental status and archaeological value				
New sustainable houses	Sustainable energy resources, passive housing and no gas				
Group formation	Number of households and houses, age, locals, or non-locals				
Purpose of project	Project developer, own residential purpose, possibly including a social purpose such as housing migrant workers				
Municipality	Size, communication speed, experience, vision, attitude, and capacity. Difference in regulations for example within the <i>VAB</i> -policy, changes in legislation are expected.				
Location former farm	Closeness to residential areas or deep in the countryside. Close to amenities and infrastructure is preferred.				
Infrastructure	Public transport, traffic management, parking spots				
Omgevingsdialoog	Create goodwill and support with local community and neighbours				
Possibilities on splitting of a parcel or house	Differ per province and policy.				

3.3 Obstacles

The obstacles will be discussed per method. First the results from the interviews with municipalities and then with initiators will be discussed, after this the results of the questionnaire and at last a concluding paragraph will be given about the obstacles.

3.3.1 Interviews municipalities

In the interviews obstacles that can occur while implementing FSIs were discussed. In table 11 an overview of the mentioned obstacles is given. Table 11 shows that there are a lot of obstacles related to laws, regulations and policies, next to this obstacle that were mentioned were general or, related to the municipality or the initiator. The obstacles mentioned by municipalities will be discussed below.

Table 11. Obstacles mentioned by municipalities

	Obstacles	Barneveld	Boxtel	Bronckhorst	Doesburg	Moerdijk	Oss	Someren
Laws, legislation and policies	Provincial regulations							
	Veiligheidsafstanden							
	Quality of rural area							
	Parking norms							
	Noise pollution							
	Providing services to residents in rural area							
	Flora and fauna research							
	Splitting parcels							
leg	Monuments							
Laws,	Ruimte-voor-ruimte regeling							
	Emissions							
	Traffic movements							
	Geurcontouren							
General	Finances							
	Finding a suitable location							
	Complexity							
	Neighbouring farmers							
	Emotional process for stopping farmer							
Muni	Capacity municipality							
	Lack of vision/policy municipality							
Initiator	Unrealistic expectations							
	Initiators have lack of knowledge							

Ruimte-voor-Ruimte Regeling | Bouwtitel | Sloopmeters

Ruimte-voor-ruimte (space for space), Rood-voor-rood (red for red), sloopmeters (Demolition meters) and verevening, can indicate differences in design, scope and marketability of the instrument, the idea behind them is the same. Spatial quality is improved by demolishing vacant or defunct agricultural buildings, by nullifying emissions, and or by promoting animal rights or other possible desirable outcomes indicated by policy. To compensate for the costs of this improvement in spatial quality the initiator of this improvement is awarded the right to develop residential housing in the rural area (Gies, Nieuwenhuizen, Naeff, Vleemingh, & Paulissen, 2016).

Ruimte-voor-ruimte regeling (RvR) is a regulation that allows people to replace meters of demolished agricultural building (sloopmeters) with new buildings, either on the same spot or at a different location in the same municipality. Regulation ensures that owners clean up decayed or vacant buildings (VAB) neatly, improving the rural landscape (Boerderijmakelaar, n.d.)

Sloopmeters have a lot of (financial) value because they create building rights (*bouwtitel*), which allows for a new home to be built; these rights can be sold. Rights and obligations are determined locally, meaning that they are not the same in every municipality. Some examples of local rights and obligations are minimum amount of demolished area per location (e.g. 300 m² in Wierde), cultural and historical value and requirements to invest in spatial quality. The size of the investment in spatial quality is calculated by subtracting the demolishing costs, the residual value of the to-be-demolished building and other costs to be made from the (fictive) proceeds someone would make from selling their building plot to a third party. (Gemeente Wierde, n.d.; Ruitenbeek, n.d).

Laws, regulations and policies

Municipalities mentioned 15 topics that need to be considered within which obstacles may occur. The following topics were mentioned: provincial regulations, *veiligheidsafstanden*, quality of rural area, parking norms, noise pollution, service provision (facilities, flora and fauna research, splitting parcels, monuments, *ruimte-voor-ruimte regeling*, emissions, traffic movements, the number of houses and *geurcontouren*.

Veiligheidsafstanden

Safety distances apply for the distance between vulnerable objects outside of the organization (such as houses) and the installation site of: gas pressure measuring and regulation station, propane tanks, propane tank, and tank trucks (Ministerie van Infrastructuur en Waterstaat, 2022).

In total four municipalities mentioned **provincial regulations** being an obstacle. It must be noted that all these municipalities are in the same province, Noord-Brabant. The municipality of Oss stated: "if you ask what a bottleneck has been the past years, then I would purely look at Brabant, the province actually does not provide room for FSIs." The municipality of Boxtel mentioned the following regarding implementing FYI's: "There are no opportunities to implement such initiatives; also within the provincial regulations", "for now the provincial regulations are the biggest obstacle, it is hindering municipal policies to really develop policy', "it hinders the municipality's creativity and vision on it'," "It feels restrictive and constricting". The municipality of Doesburg mentioned the following about their province: "the province only has an opinion if it is close to a natura2000 area, if you are dealing with extremely polluted soil and/or if, more than 12 living units are being built.". This shows the extent to which provinces are an obstacle differs per province.

Geurcontouren

Livestock farms can cause odour by keeping animals, producing, and storing feed, and storing and processing manure. Odour can cause nuisance and health issues to people in the surrounding. The odour pollution on an area can make it an unsuitable living environment. Therefore, it can be undesirable to implement housing close to livestock farmers (Rijkswaterstaat, n.d.-c).

Based on the legally permitted number of animals, the species and the type housing systems in which they are kept; the location, height and diameter of emission points; the exit speed of emissions; and the building height; a *geurcontour* is calculated (Rijkswaterstaat, n.d.-a).

The **quality of rural area** is mentioned as an obstacle by 5 out of 7 municipalities. The municipality of Boxtel stated "you have to pay attention to the quality of the rural area. It can lead to cluttering." The municipality of Moerdijk stated 'Adding living units to a rural area is a last resort, you have to make something of extraordinary quality to explain why it is a good idea".

Another obstacle that is mentioned by multiple municipalities is **provision of services**. The municipality of Moerdijk stated that "someone who lives in rural area is dependent on their car, when they grow old the healthcare had to be organised from a distance. It is more convenient if people live closer to facilities".

Splitting parcels was mentioned as an obstacle by 5 out of 7 municipalities. It must be noted that there is a difference between cadastral and land-use splitting of parcels. The municipality of Boxtel explained that cadastral splitting is mainly about ownership. "the moment you split a parcel in two, then it is seen as new residential unit" "and provincial and municipal policies do not allow this, unless there is a large quality improvement, which often is done by the ruimte-voorruimte regeling, buying an expensive title." The municipality of Barneveld stated the following: "splitting parcels can be a problem" "parcels can be split but they have to deliver sloopmeters, however, the sloopmeter market is not favourable at the moment. Developments stagnate, this is a large discussion point. We have a housing shortage, so the costs for the sloopmeters should be adjusted. The nitrogen crisis, announcements and money that cause farmers to stop, is leading to more sloopmeters being on the market. For now, we do not feel like changing the system, since there are a lot of changes to come." Next to this

Parking norms

When developing a land-use plan where new developments are made, parking needs need to be considered for maintaining proper spatial planning. Based on the parking policy of the municipality or the regulations of CROW the amount of parking spots needed, can be calculated. The next step is proving that enough parking is available or can be implemented. The next step is proving that enough parking is available or can be implemented

(Rijkswaterstaat, n.d.-d).

Every municipality has its own set of rules regarding parking spaces to prevent new buildings leading to parking inconvenience regarding cars and bicycles (Gemeente Deventer, 2022). This is done to address solve parking problems in line with the parking policy.

Every municipality has its own set of rules regarding parking spaces to prevent new buildings lead to parking inconvenience regarding cars and bicycles (Gemeente Deventer, 2022). It is to be addressed how parking problems might arise and how they will be solved, in line with the parking policy.

Barneveld mentioned the following regarding their regional policy "it has been said that splitting living units will be made easier in the rural area. This is something we take seriously. Barneveld even considers making *sloopmeters* unnecessary to build a house".

As discussed in the paragraph above, the *ruimte-voor-ruimte regeling* is also an obstacle. This was mentioned as an obstacle by 4 out of 7 municipalities. The municipality of Someren explained "in the existing regulation a *ruimte-voor-ruimte bouwtitel* is needed to add a living destination. This is a major obstacle for people that want to live like this".

Boxtel stated "In the Netherland there are a lot of stakeholders and regulations you have to take into account." Other topics that need to be considered are *veiligheidsafstanden*, parking norms, noise pollution, flora and fauna research, monuments, emissions, traffic movements, and *geurcontouren*.

General

Another big obstacle that was mentioned was **finances**. The finances being an obstacle is largely related to the expensive the *ruimte-voor-ruimte regeling*. Oss explained: "if you had an agricultural business then you have to invest €200,000 in demolishing and if you then want to build 2 or 3 living units then you had to buy half a million worth of *ruimte-voor-ruimte* parcels. Then the business case does not work." "a *ruimte-voor-ruimte* title currently costs about €125,000."

Finding a suitable location is also a challenge according to Boxtel. "I can imagine it is quite difficult, since you have to search for individuals that want to sell their business and house to you.". The municipality of Bronkchorst mentioned "the demand and supply is a bottleneck. Farmers do not come out to tell everyone they want to quit", "the municipality is not a real estate agent".

Some municipalities mentioned that they can image it is quite a **complex** process. Boxtel stated "I think it can be quite difficult for citizens to know what is possible provincial, nationally and what the municipality approves of." "Before you have a proper image of this, you have already taken quite some steps.".

An obstacle that was mentioned by all municipalities is **neighbouring farmers**. Someren mentions that neighbouring farmers should not be limited in their business operations with the implementation of an initiative. Bronckhorst stated "when you select a parcel close to agricultural businesses then it will get difficult". Moerdijk elaborated more on this; "neighbours can object. A farmer that is operating next to it, is afraid of hassle" "my experience is that the stakeholders do not understand each other". Reasons for not wanting new homes near farms mentioned are: it limits expansion options for farms, creates opportunities for complaints from either the farmers or new home owners, and the high amount of environmental zoning regulations.

The latter part is also connected to another obstacle mentioned, the **emotions of farmers**. Boxtel stated: "you should not forget that ... for farmers, it is not only their job, it is their whole life and the moment this stops it is a heavy psychological process."

Municipality

The (lack of) **capacity** at municipalities was mentioned by 5 out of 7 municipalities as an obstacle. Barneveld mentioned: "the municipality does not have the capacity to take on cases such as these. That is a big problem", "therefore, requests must be well written to prevent a large amount of work to be needed. Barneveld would like to be of service and think along with such initiatives. On the other hand, we have a staff shortage, because of this we cannot help facilitate tailor-made and unique cases". Barneveld also mentions a problem is the ignorance they have in this field. Boxtel also mentioned they need more staff but also more people with experience with such initiatives.

Boxtel also mentioned that they think many municipalities have not thought of FSIs, since they are difficult to implement and since there have not been many requests in their municipality. The **lack** of **policy and vision** at municipalities, therefore, is also an obstacle.

Initiator

Municipalities also mentioned that they see **unrealistic expectations** manifesting themselves by initiators. Moerdijk elaborated an example of expectations initiators have and then mentioned "that is not possible of course, they have the wrong expectations. People come with very ambitious plans and later on withdraw it since they came to the conclusion they're not realistic." Oss mentioned some initiators might be a bit naïve; "in rural area the project must solve an obstacle, there has to be a cause from the spatial perspective to implement the initiative". Often initiators mention that their initiative is adding value since it contributes to solving the housing shortage, however the municipality of Oss mentions that urbanization is something they primarily want in the city. Initiators also do not have proper understanding of what is possible. The municipality of Boxtel mentioned an example of a plan initiators had but the plan was only possible with the *ruimte-voor-ruimte regeling* and a big quality improvement to the area. This was not what the initiators envisioned. "In my eyes there was a mismatch between the demand of such projects and the possibilities in the rural area at the moment".

The last obstacle that was mentioned was initiators **lacking knowledge**. Bronckhorst stated the following about the requirements for FSIs: "it is complicated, the requests often come from people that do not have experience with it". Someren mentioned "when we receive a plan from uninformed people, we are more inclined to deny the request". The municipality of Boxtel expressed empathy for these initiators: "I can imagine that a process can be quite frustrating at first, because you may indeed be told a no, from us (municipality) for very logical reasons, but not for a citizen for whom it may not always be completely transparent".

3.3.2 Interviews initiators

As forementioned two interviews were conducted with initiators. The following obstacles were mentioned in these interviews: expectation of initiators and possibilities, Laws, regulation, and policies and, finding a suitable location. These obstacles will be discussed below.

Expectations of initiators

Marlies knew that a lot of people send in requests for initiatives to the municipality without considering how expensive it is or how long it is going to take. The costs their initiatives had so far is €150,000 and the process will take 5 years according to her. Because of the wrong expectations initiators sometimes have, she says that municipalities can often be reluctant, and that they want to see a good *principeverzoek* in advance before they spend time on it. Some of these people can even expect the municipality to find them a location. Douwe mentioned that he expected to have to spend €50,000 for the initiative, this is not in line with what Marlies spent in a few years, while there are still costs to be made. Douwe did expect the process to cost 5-10 years, therefore, his expectations regarding time are realistic.

Next to time and costs expectations there are also other non-realistic expectations. Marlies for example said they wanted to implement an initiative with 10 houses, this does not fit "the possibilities" of the location. She mentions that when housing projects get too big, the province may need to be involved, and evaluate the project in light of the current housing stock.

Laws, regulation and policies

During the process Marlies explained that certain laws were holding certain actions back and needed investigation. Examples are flora and fauna research and parking requirements. Dealing with both took time. For the flora and fauna investigation they first looked into barn owls, they had to wait for the results, this took approximately three months before they could move on. Next, they looked into the living area of bats, the outcome of the investigation was that the demolition could only take place from September to January of the next year.

Finding a suitable location

Marlies explained that the location of the farm could be a big obstacle. The municipality is more willing to cooperate if a farm is located on the outskirts of a built-up area rather than primary agricultural area. This has to do with the potential growth of agricultural businesses, traffic movements and facilities such as healthcare that are organized in urban areas.

Other

Next to these obstacles there are also some issues that might occur. In Marlies' initiative she had the issue that civil servants within the municipality changed. This took time since people had to study the project again. Another issue initiatives will likely encounter is the changes in the macroenvironment. Marlies mentioned the difference between 2018 and 2022, the building materials have become more expensive and mortgage interest rates are higher. The COVID-19 pandemic also made things more difficult.

3.3.3 Questionnaire

In the questionnaire the initiators were asked if they had encountered obstacles while implementing their initiative concerning the government (municipality/province and/or laws and regulations), if so if they could explain the obstacle(s) and how much time these obstacles occupied. Table 12 shows the obstacles mentioned by the initiators.

Table 12. Obstacles mentioned by initiators via questionnaire

Obstacle	Number of respondents that mentioned it
Laws, legislation and policies	14
Municipalities attitude	10
Finances	7
Finding suitable locations	5
Complexity	5
Contact with municipalities	5
Difference between municipalities	4
Lack of vision municipalities	3
Mismatch interests	2
Capacity municipality	2

In the questionnaire, 23 out of the 44 questionnaires respondents ticked the box about encountering obstacles related to the government for implementing FSIs, while others marked that they did not encounter obstacles relating to the municipality. 17 out of the 21 respondents mentioning that they did not have obstacles related to the government had not yet had contact with municipalities or other governments. One respondent had a small informal talk with municipalities and did not encounter obstacles yet. The other three said they did not encounter obstacles but still mentioned some while explaining their process steps, these obstacles are also discussed in this chapter. The obstacles mentioned by the initiators will be discussed below.

Laws, legislation, and policies

Respondents mentioned six types of topics that need to be considered with which they encountered obstacles. The following topics were mentioned: splitting parcels, *geurcontour*, demolishing (*Ruimte-voor-Ruimte*), traffic, and flora and fauna.

There were 6 mentions about the difficulty getting permission to split a parcel or placing multiple homes on that parcel.

There were 3 mentions of the 'geurcontour' surrounding farms which makes it impossible to develop housing there. "An existing geurcontour of a neighbouring farmer could not easily be lifted. Then no new residential buildings can be constructed.".

There was only one mention about each of the following topics: demolition not being allowed, traffic problems, and flora and fauna research.

One respondent mentions that a lot of research is needed. The topics above are some examples of what type of research needs to be done.

Municipality attitude

There were 10 mentions of municipalities not showing interest, commitment, or flexibility in facilitating farmyard sharing projects. One respondent said that "almost no municipalities wanted to consult at all, even if their housing vision stated something completely different". At the same time, the fact that that respondent contacted so many municipalities shows that they did not have a very concrete project plan in mind. Another respondent complains about "fussiness, not thinking of opportunities, while [the municipality] has a beautiful, well-constructed zoning plan for the rural area".

Finances

There were also 7 mentions of financial problems, which sometimes only relate to the initiator's personal situation, but sometimes also have to do with government. For example, one respondent could not get funding because the municipality did not approve of their plan, because they were not owners of the land in question. Another respondent's project could not continue because "the province objected to giving a pre-subsidy", and another complained about the high cost of all the permits that were required, which amounted to a total of 50,000 euros according to them.

Finding suitable locations

There were 5 mentions of unclarity regarding how to find a suitable location. One respondent stated "we have been looking for a location for about 1,5 years now.".

Too complicated

5 respondents mentioned that the whole process is too complicated. One respondent stated: "written our 1st plan in half a year which the municipality supported positively, but we had to go into dept from there and the "bears" came our way. We decided to cancel it in consultation with the community".

Contact with municipalities

4 respondents mention the difficulty in finding the right civil servant to contact and/or getting responses to requests/questions. One respondent stated: "Due to differences between municipalities a specific civil servant was needed, who was not always easily accessible". Sometimes initiators did not get a response at all "Submitted plan to the municipality. Did not hear anything even after reminders".

Differences between municipalities

There were 4 mentions of the differences between municipalities in how farmyard sharing is addressed. One respondent stated: "Since, we were looking on the border of 3 different municipalities, we have had to deal with 3 different policy and permission areas.". Another obstacle that was mentioned was the *Rood-voor-Rood regeling* not being applied in the same manner everywhere.

Lack of vision

3 respondents mentioned that it is a shame that the municipality lacks a specific vision when it comes to dealing with former farmyard initiatives. According to one of the respondents the municipality of Amersfoort said: "we first need to make a vision".

Mismatch interests

Two respondents mention the differences in interests between what initiators would want and what other parties such as municipalities or project developers want. One respondent stated: "Interests of real estate agents, project developers and municipalities made it a viscous whole".

Capacity of municipality

In total two respondents mentioned that the municipality had too little time/experience. One respondent was told to: "come back in two years, we don't have time and first have to get started with environmental law and regional energy strategy". Another respondent mentioned that they: "informally heard via a civil servant network the municipality lacks experience".

Other

Next to these obstacles regarding the government (mostly municipalities) also one other obstacle was mentioned which fall out of the scope of this research. One respondent stated: "I miss initiatives for my target audience. I have money, time and am skilful in many areas because of my job history" however so far, they were not able to find initiatives fitting their criteria.

3.3.4 Review of obstacles

The obstacles found through the interviews with municipalities, initiators and the questionnaire conducted with initiators are discussed and interpreted below. There are three categories of obstacles that were mentioned within all methods of data collection: laws, regulations and policies, and finding a suitable location. Mainly municipalities mentioned a lot of different topics that need to be taken into account for complying with laws, regulations and policies. Flora and fauna research and traffic movements were obstacles mentioned in all data collection methods. Parking norms, service facilitation, *geurcontouren*, finances, capacity of municipality, complexity, splitting parcels, municipality with lack of policy/vision and initiators with unrealistic expectations were mentioned as obstacles in two out of three data collection methods.

Provincial regulations, *veiligheidsafstanden*, quality of rural area, noise pollution, monuments, *ruimte-voor-ruimte regeling* and emissions were legal topics that were only mentioned by municipalities. Next to this only municipalities said neighbouring farmers and the emotions of a stopping farmer are obstacles that need to be taken into account. Another obstacle only mentioned in the interviews with municipalities was the lack of knowledge initiators have on the subject.

The following obstacles were only mentioned in the survey: municipal attitude, contact with municipalities, difference between municipalities, and the mismatch between stakeholders.

3.4 Overcoming obstacles

The solutions will be discussed by method. First the results of the interviews with the municipalities with the initiators, then the results of the questionnaire and finally the concluding paragraphs on the solutions will be given.

3.4.1 Interviews municipalities

In the interviews possible solutions for improving the implementation of FSIs and best practices were discussed. In table 13 an overview is given of all possible solutions. The possible solutions are categorized as actions to be taken by municipalities, initiator, the research group.

(Interim) Omgevingsverordening

With the implementation of the Omgevingswet every province must also publish an ordinance (verordening) in which they put conditions to the context of the zoning plan. The norms are meant for safeguarding compliance with provincial interest and having a good spatial planning. Provinces can decide for themselves what norms they want their municipalities zoning plan to comply with. After a ordinance is made the province expects municipalities to change their zoning plan or the norms in the ordinance apply directly to (in this case) farmers (Rijkswaterstaat, n.d.). All provinces currently follow the norms of an Interim Omgevingsverordening. This is an ordinance with the purpose of people having to already comply with new norms (Provincie Noord-Brabant, n.d.).

Table 13 Possible solutions for improving implementation of farmyard sharing initiatives

	Solutions	Barneveld	Boxtel	Bronckhorst	Doesburg	Moerdijk	Oss	Someren
era	A party that coordinates demand and supply of former farmyards							
Genera	New omgevingsverordening may give new opportunities for collective living Interim omgevingsverordening already does							
# .	Inform initiators better							
Project	Provide good process description							
Pro	Share good practices							
	Manage expectations of initiators							
	Have a clear vision/policy for former farmyards							
، : ے	Provide document explaining possibilities							
Action	Provide appendix with conditions							
Act	Provide appendix with inspiration							
	Make a decision tree based on the location							
,	Have a dedicated person at the municipality that believes in the concept							
	Make use of tiny title							
	Look for locations close to build area							
	Invest in the quality and appearance of parcel							
	Engage local residents							
	Get a spatial consultant							
	Come to municipality with concrete location							
	The initiatives should come from society							
_	Reach out to the municipality well prepared							
Action initiator	Add a vision to your request (initiator), to explain improvement of environment							
i r	Take conditions when province interferes into account							
ţi	Use temporary permit							
Ac	Shared transport to limit traffic							
	Take management measures for protected species							
	Take municipal policy into account for request							
	Building within the built-up area requires less research							
	Wait for natural moment for land use plan to change							
	Have an open attitude							
	Pick locations dedicated as mixed use							
	Balance remediation and settlement							
	Solve multiple "bottlenecks" by implementing your initiative							

Based on the interviews with municipalities the following suggestions were made:

Provide a process description

The municipality of Boxtel says that it would be nice if there were "a good process description, possibly containing a list of things to consider before making a request at a municipality", "if that side is functioning well, that automatically makes it easier for the municipality to assess it". The municipality of Moerdijk also states: "the tool must focus on information, the portal of the *principeverzoek* should have a tab where they can find specific information. People get an understanding of what is and is not possible. People should know the rationality from the municipality, so they can understand why things are checked". The municipality of Someren mentioned that if there is no *VAB*-policy then a helpful guide for municipalities on how to pick up such a project could be useful.

Share good practices

The municipality of Boxtel shared that they would find it helpful if there are some examples of good practices, since you can get 'dos and don'ts' from them. The municipality of Someren stated the following: "it would very nice if there is an example (of a successful initiative) located close by or similar to our municipality and know how they tackled this and if they have had positive experiences'.

Manage expectations of initiators

The municipality of Moerdijk states: "It is also important that people have perspective, about how much time and costs the steps will take." Also, Oss notes this: "Often you see that people put their soul into the story", "I get them, but this is not considered for the spatial consideration. It is important that people realise this". Someren says something along similar lines: "It is also nice if people read up on how a municipality works, so the expectations will not be too high, because they must understand how the municipal world works... There are civil servants working that try their best, however they must consider the system. The frustration that comes is not helpful. If a new obstacle occurs, it slows it down even more".

All the suggestions to facilitate the process listed above are about better informing initiators. This was also mentioned in less specific manners by the municipality of Boxtel: "The moment the knowledge on both sides is increased, then the mismatch will decrease". The interviews also resulted in a list of action points that municipalities can take. These are discussed below.

Have a clear vision and policy for former farmyards

The municipality of Barneveld stated the following regarding how to deal with staff shortage: 'it would be nice to have a few clear policy guidelines to help people facilitate their initiatives in a better and quicker way". The municipality of Boxtel stated: "if the municipality has a clear vision, then the cooperation of the province will be easier." They added that this will especially be important with the implementation of the *Omgevingsvisie*. Someren mentioned it would be helpful to have policy regarding FSIs. The municipality of Barneveld and Boxtel also mentioned regional visions (*gebiedsvisies*) as a possible solution. Barneveld mentioned that it would be nice if they considered the concept of farmyard sharing in the regional *functieveranderingsbeleid* (a term used by the Food Valley) they will set up. In this vision they can add how they can effectively use these types of initiatives for other municipal goals, for example public housing. The municipality of Barneveld states: 'the regional policy can be used for efficiently using parcels for public housing, and "the regional visions, those will be important for taking decisions". Boxtel proposes to make farmyard sharing its own kind of function that can be assigned in a land-use plan. Then some

norms can be added to each location about how many households would be acceptable as part of FSIs.

Provide document explaining possibilities

The municipality of Bronckhorst stated that a document should be provided to initiators explaining possibilities regarding outbuilding and farmyards.

Provide a document with conditions

The municipality of Bronckhorst stated that a document should be provided to initiator explaining the conditions.

Provide a document with inspiration

The municipality of Bronckhorst stated that a document should be provided to initiators with inspiration.

Make a 'decision tree' based on location

The municipality of Bronckhorst stated that municipalities could make a 'decision tree' where decisions are made based on the location. The time that is currently used for explaining could then be used for assessing the initiative.

Having a civil servant that believes in the concept of farmyard sharing

When discussing how the initiators can help improve the implementation of FSIs the following solutions were mentioned.

With a group of people

Two topics are relevant to the group: initiatives should come from society and projects should engage locals.

Have a good plan

The first part is finding a location, "Come to the municipality with a concrete location", "look for locations close to the building area", "building within the built-up area requires less research". The second part is having a fit purpose", "pick locations dedicated as mixed-use." "Add a vision to your request", "have shared transport to limit traffic", "the third part is understanding laws", "get a spatial consultant", "take municipal policy into account for request as initiator" Take management measures for protected species" and the last part is "Invest in the quality and appearance of the parcel."

Take the risk

Two topics are relevant to taking the risk", "take conditions when the province interferes into account" and "balance remediation and settlement"

Communication

Three topics are relevant to communication. "Have an open attitude as an initiator", "solve multiple "bottlenecks" by implementing your initiative" and "reach out to municipalities well prepared"

Possible solution

Three topics are relevant to possible solutions. "Use a temporary permit", "wait for the natural moment for the land-use plan to change", "make use of the tiny title

3.4.2 Interviews Initiators

As mentioned in the methods section, two interviews were conducted with the initiators. In these interviews the following solutions were mentioned about the municipality: flora and fauna surveys, providing information, major research, subsidies, good civil servants, legal flexibility. Quotes from these initiators can be found below. The first quotes are by Marlies. If there is a second quote, it is by Douwe.

Flora & Fauna investigation

"Discuss properly how to keep the owls and bats in the area, so that a win-win situation can be created. We can think about the conversation of nature, and it takes less time for the municipality and the process"

Providing information

"The initiators should have access to proper information, to know in advance what the processes are and what are the time and costs included."

The principal research:

"The principal research reduced a lot of risks for the initiators, so that they could purchase the farm and know that the municipality will work with them to realize the project."

Subsidies

"By using the subsidies based on collective housing (*collectieve woonvorming*), the costs become less, and projects are easier to realize. Provence Gelderland gave subsidy during this project. Furthermore, the interviewee knew that in Overijssel also subsidies were given out, to give a front-example to other initiators."

Good civil servant

"Having a connection with the civil servant makes the process run more smoothly. During the Erfdelen project, the official was very flexible and that helped a lot"

Flexibility on the laws

"Serve the greater purpose of a law and make exceptions if it serves the greater purpose of a law. This needs some flexibility and creativity of the municipality"

The following solutions were mentioned in the interviews with the initiators: Parallel process, good preparation

Parallel process

"Make sure that several processes are running simultaneously, such as flora and fauna research and creation of further plans"

Good preparation

"The initiator should prepare very well to make it easier. If the principal request is advanced, the municipality takes it more seriously and sees more possibilities. To do this they hired several third parties, to supervise during the process." "To be well prepared for contact with the municipality, the group hired in people who can give advisory and who can guide the process."

3.4.3 Questionnaire

In the questionnaire, solutions to the obstacles came from two parts of the questionnaire, one where respondents were asked for ideas about solutions to the obstacles they encountered, and another where respondents were asked for further comments. Table 14 shows the solution named by the initiators. Following these explanations, there is a shorter section about the answers that some respondents gave to the question about best practices, with the results summarised in table 15.

Table 14. Solution mentioned by initiators via guestionnaire

Solution	Number of respondents that mentioned it in Q1	Number of respondents that mentioned it in Q2
Municipality's attitude	7	3
Change in (use of) policies and innovation	7	3
Change initiator plan	3	1
Municipalities standardizing their approach	2	-
Focus on economic issues	2	3
Municipality knowledge	1	1
Seek opportunities	1	3

In the questionnaire, Of the 44 questionnaires, 22 filled out the question about ideas for solutions to the bottlenecks, and 21 filled out the question about further comments by combining the results of the two parts of the questionnaire. The possible solution mentioned by the initiators will be discussed below.

Change in (use of) of policies and innovation

There were 10 mentions that municipalities should be involved in (use) policy and innovation. Five of them mentioned that policies should be relaxed, two of them mentioned the implementation of *ruimte-voor-ruimte* policies, two of them mentioned international regulations, and one of them mentioned the issue of timing. The implication here of this is that more attention should be paid to the implementation of specific policies.

Finances

There were also 5 mentions of financial aspects, two mentions that the municipality is more interested in getting more money, one mentions that FSIs can have an impact on housing prices, one mentions financial related regulations and one mentions subsidy applications. This part of the request asks the municipality to be aware of the financial implications and that policies relating to finance should be more easily communicated to the public.

Change initiator plan

There were 4 mentions of change initiator plan. The main content is: two of them mention having a better vision, one mentions having better writing, and one mentions changing the plan of the house. A better project plan from the initiator can also facilitate the project.

Municipality knowledge

2 respondents mentioned that the municipality should have more knowledge. One respondent stated: "Do more to share knowledge and open their network. Saves time." The municipality should listen to the initiator of an expression of knowledge aimed at professionalism. The solution for the municipality is that having a platform for sharing experience and to take advice from the initiator of the project in terms of experience.

Municipalities standardizing their approach

2 respondents mention the municipalities should standardise their approach. One respondent stated: "A central body that does not make uniformity out of it", another respondent said: "It would be useful if you had one contact person at the municipality", implying that the approach of municipalities should be more holistic.

Seek opportunities

There were 4 mentions of the seek more opportunities. One respondent stated: "Provide the opportunity to have plans formally tested.". It was also mentioned that it was hoped that a list could be found of information about the start of the FSIs, the other initiators and the municipalities where the successful projects were located. information would provide more opportunities.

Good practices by municipalities/government can also be part of the solution. From question good practice by municipalities/government in the questionnaire the initiators, Table 15 shows the good practice named by the initiators.

T 11 15 0	4.0		4 424 2		and the second second
Lable 15 Go	nd practice	mentioned h	v initiators	VIA	questionnaire

Good Practice	Number of respondents that mentioned it
Good Attitude	10
Compliment a city	7
Easy to find information	2
The city has a good platform	1
Negative opinion	6

In the questionnaire, of the 44 responses, 28 filled out the question about good practices, but in these 28 responses 8 said that the question was not applicable to them and 6 had negative comments. The best practices mentioned by initiators are specified below.

Good Attitude

There were 10 mentions of good attitude from municipalities. Five of them mentioned the municipality's willingness to cooperate, and one of them said " Our municipality was always available to talk to us, and we also consulted others nationally". The other five said that the municipality had provided useful information and one of them thought it was great that "the municipality appointed a project officer for our project". The advice drawn from this is that a good communication attitude can facilitate the progress of a project.

Compliment a city

3 respondents compliment a city by name. This means that there is something to learn from these municipalities. There were two mentions of Ede and one mention of Deventer, mostly to do with how accessible they were in terms of being contactable.

Easy to find information

2 respondents mention that it was easy to find information. One respondent stated: "Clear zoning plan, easy to find online." Easy-to-find information can also contribute to the project.

City has good farm

1 respondent mentioned that the municipality has an established platform where potential farmyards can be found. The respondent stated: "The province of Utrecht has an excellent site about vacant agricultural buildings." Having the right location in the city is also part of the success.

3.4.4 Review on overcoming obstacles

Combining questionnaires, interviews, and literature surveys, the solutions are summarized as follows.

Experience and attitude

Most municipalities are optimistic about the concept but lack experience with initiatives like farmyard sharing. Some have or are working on a *VAB*-policy. One municipality (Doesburg) with no policy made up for it with their tailored and more personal approach, which allowed them to be flexible. This experience is probably unfeasible for larger municipalities, so it is advisable to have a clear policy about rural housing and living arrangements with multiple households. The lack of experience can be a self-fulfilling prophecy. However, in the past, the local policies were way more prohibitive to concepts like farmyard sharing; as the new policies provide more experience, opportunities will open up more naturally. To help this process of spreading expertise and knowledge to the municipalities, studying successful cases like the one in Doesburg can be helpful to both initiators and municipalities, especially if these successful projects encountered different problems or were subject to other policy regimes. A more in-depth overview of what we can learn from the Doesburg case study can be found in our Dutch summary.

Expectations

The expectations of the initiators that wish to realise a farmyard-sharing initiative often are not in line with reality. Consequently, they do not prepare well or get bogged down by the lengthy and often complicated process. The wrong expectations on the initiator's side can also strain their relationship with the municipalities early. To prevent this, it is important that the initiator is not only well prepared, but also have the right expectations on the process's length, cost, and complexity. Clarity on what the municipality can and will do for the initiators, what a suitable location might entail and what a realistic balance is between the costs of the project and the number of realisable households are important for future realisation attempts. It is also essential for farmyard initiators to know that allowing residential housing in the rural areas is not a goal for the local government or even desirable to them; but they can be encouraged if they gain something from it. In the eyes of the government, housing projects should be developed in urban areas. The initiator should take note of these circumstances and adjust their expectations accordingly.

Finding a location and planning

A problem indicated by municipalities is that often initiators do not approach them with a good plan. The most important aspect of this is that they need to have a location already and preferably already have talked to the current owner of that location. Finding a suitable farmyard can save a lot of time. From the municipality's perspective, the land issue is a combination of various problems such as: the environment, space, aging, and public transportation. Price, environment, and policy are more interesting the initiator's point of view. Investigating and consulting the appropriate professionals to avoid risks in the municipality, note down related policies, and establish a complete plan is recommended. Land close to residential areas should be chosen over large-scale agricultural land. This raises a few other problems for initiators; how can initiators find a farm that may be available soon and check whether it is feasible and desirable in the eyes of the government to build houses there without just calling the municipality or entering a costly procedure. From the municipality's side, making policy easier to find and understand can help the initiator set up the plan.

Also, the literature result can be use. Literature survey based on the *interim omgevingsverordening* of Noord-Brabant is quite elaborate; multiple municipalities in the province have stated that the

province is quite strict compared to others. Their ordinance contains conditions that must apply to a location before collective living arrangements can be set up. A detailed explanation is in appendix 7 Table A 7.3

These table can be used as guidelines for writing a solid request to municipalities since they take a lot of aspects into account, which might make the initiative more interesting for a municipality to implement.

Policies

FSIs will be subject to many regulations and policies. These policies can and will even differ per municipality. They indicate how much can be built in exchange for demolishing a certain amount of defunct barn, how you can otherwise provide improvements to spatial quality in that area (and thus possibly be allowed to build more houses), and what, according to the local government are suitable locations to initiate the project and even maps where these locations are. For the initiators, it is important to know these policies for the area they are looking for a location and to design their plan in accordance with them as much as possible. The municipalities can make this easier and increase the chances of receiving workable plans by providing the relevant information in a logical and easy-to-find place on their websites or somewhere else. Unfortunately, these policies were and are often still very restrictive to concepts like FSIs, prohibiting the realization of multiple homes or favouring large single-family homes. These policies are already changing, opening more opportunities for farmyard-sharing initiatives. More can, however, be done; lowering the valuation of a "building right" as opposed to the size of a house will mean a lot for the possibilities for farmyard sharing.

Characteristics that increase your chances are part of the solution

As mentioned in section 3.3.4, the monumental statue of the prospective farmyard can both be a downside and provide opportunities for farmyard-sharing initiatives that could take advantage of the government's wish to preserve the buildings in exchange for more room for residential development. Other factors can be considered, like removing asbestos, sustainability, fossil-free living, or setting aside land for valuable nature conservation projects. Directions for this can often be found in documents on the local *VAB* policy.

4 Discussion

In this chapter first the results are discussed by interpreting them and comparing them to literature at last the limitations of the research are discussed.

4.1 Discussion results

The results are discussed based on relevance and relation between results.

Informing initiators

A lot of obstacles that were found during the data collection are intertwined. The laws, regulations and policies and the processes regarding implementing FSI are complex. This makes it difficult for initiators to be well informed on the topic and this might cause them to have unrealistic expectations. This also makes it more difficult for initiators to find a suitable location.

From the survey and interviews with initiators the obstacle of not being informed properly, did not come up. This likely is since, initiators do not have the right expectations for the role municipalities take in facilitating such initiatives. Which in its turn is connected to initiators not being well informed.

Initiators can manage their expectations by doing preliminary research into FSI. This will increase their knowledge of the topic and this in its turn also makes their expectations more realistic. The project team has made two tools to help inform initiators and municipalities better about FSI: a WikiBooks page and a Dutch summary have been made, initiators should use these products to be more informed on FSIs.

Tool

After the final presentation, unfortunately the Wikipedia moderator decided that the page created about Erfdelen was not a right fit for the platform, because it was too much like a guide. They were right about this. There is still a request on Wikipedia to ask for a second chance, to create a page that solely provides encyclopaedic information. The decision is still pending. The content was moved to WikiBooks (https://nl.wikibooks.org/wiki/Erfdelen). This 'set back' provided the opportunity to add more of the findings and recommendations to the page and it will be easier for others to add their input since there are less rules to comply to. The downside of WikiBooks is that it has a much smaller outreach than Wikipedia.

The WikiBooks in its current form gives a good outline of all information found on the concept *erfdelen*, within the scope of our research and a little beyond that. The incredible thing is, that it can be improved and expanded by other students, initiators or practically anyone with an internet connection. *Stichting* Erfdelen can help inform initiators by adding; a link to the WikiBooks page and the Dutch summary on their website. Next to this it is recommended that *Stichting* Erfdelen and WUR Science Shop continue their collaboration and let further research be done into FSI. The findings of future research and successful initiatives should be continued to be shared, by keeping the WikiBooks updated.

There are some recommendations for improving the tool, a suggestion is to add in-depth research on rules and regulations, how to arrange financing, societal benefits and how to best apply for a land-use amendment. Also, extensive research on success- and fail factors, expand the list of external links to useful websites and the table of running or completed projects could be added. There is added value in providing examples of documents used in successful projects, like <code>principeverzoek</code>, land-use amendment and a timeline of projects, including the steps and obstacles they encountered and how they were overcome.

Selecting a suitable location

Laws, regulations and policies are complex in general but for initiators it is even more complex since the regulations and policies can differ per municipality. A lot of initiators are open to implementing their FSI in different municipalities, which partially increases their chances of finding a suitable location but on the other hand also makes it more complex to be well informed on the regulations and policies to consider while selecting a location.

Next to this it is difficult for initiators to find a suitable location. Even though the CBS stated that the number of operating farms almost halved (CBS, 2021), it is still complicated for initiators to find which farms are stopping their operations and are available to them. Farmers ceasing their operations often have a strong connection to their farmyard or even have plans for further use themselves.

Coordination demand and supply

It might be helpful if there was a party coordinating the demand and supply of vacant buildings and FSIs. The municipality of Someren already has a section on their municipal website devoted to this. It is recommended that other municipalities can follow this example. Currently initiators sometimes go up to municipalities asking for suitable locations, overall, it is not their responsibility to help initiators find a location for their project however, vacant farms are also undesirable since they might attract illegal activities (Alterra, 2020). Therefore, municipalities coordinating the demand and supply can help both initiators and municipalities.

As initiator it is important to be aware that it is not the role of the municipality to help you find a suitable location. This research showed that municipalities are more willing to help if you reach out to them after finding a suitable location. Therefore, it is recommended to only reach out to municipalities after finding a location.

Building concentration

Many municipalities mentioned that farmyards close to build up area, or close to existing concentrations of non-agricultural buildings in the rural area are preferable for implementing FSIs. This is confirmed by the reviewed policy documents (Gemeente Barneveld, 2017; Regio Food Valley, 2016). Implementing a FSI in a primarily agricultural area is very complex and often unrealistic and impossible. Because the houses will likely be too close to operating farms for laws, regulations and policies to allow people to live there. Therefore, it is recommended that initiators select a location close to an existing residential area or close to groups of existing buildings in the rural area and not in the primary agricultural area.

Informal contact municipality

After finding a suitable location, initiators should reach out to municipalities to check if the municipality is willing to cooperate with the FSI. This can be done officially by submitting a principeverzoek. However, in some municipalities, there are already costs attached therefore, checking if the municipality seems willing to cooperate before submitting an official request might prevent initiators from making unnecessary costs.

Complex and restricting regulation

In a *principeverzoek* the way the project will improve the quality of rural area should be mentioned. The municipal and provincial policies should be considered while writing this. Add a vision to the request to explain how the environment will be improved. An initiator should make a request which solves multiple problems in the eyes of the municipality, a FSI just contributing to solving the housing prices does not cut it according to municipalities.

Splitting parcels and Ruimte-voor-Ruimte

For FSIs often multiple houses are built back on a property that before only had one house, this means initiators also must add something like the *Ruimte-voor-Ruimte regeling (RvR)* in their *principeverzoek* since this is a part of making sure the quality of rural area is improved.

An example of a complex process is splitting parcels. Cadastral splitting a parcel itself is not an obstacle however the problem is that the land-use plan does not change by doing this. Often a land-use amendment needs to be done to get permission to build more houses and for this, the *RvR* applies.

The *RvR* regeling itself is also complex and can also be seen as restricting. An example is the VAB-policy Food Valley currently has. In addition to an amount of *sloopmeters* related to the size of the would be build houses they require a *bouwitel* for each separate housing unit. The price of the *bouwtitels* in *sloopmeters* is quite hefty compared to the price of the size of a modest house. This makes the *RvR* more favourable for constructing large single-family dwellings. Next, this research found that RvR needs to be more clear, shorter and the process needs to be quicker. RvR currently can take up to three years and requires a lot of pre-finance with high risks (Strijker, 2020).

Therefore, it is recommended to change the existing *Ruimte-voor-Ruimte* policies, to make them more flexible and more friendly to projects with multiple smaller housing units, by abolishing the *bouwtitel* or by significantly lowering their price. This could create a lot more possibilities for FSIs. However, this requires the approval of the provincial government.

Principeverzoek and land-use amendment

The municipality makes a final decision about if the *principeverzoek* seems implementable or not. If it seems implementable initiators can request a land-use amendment. When the municipality makes the final decision on the *principeverzoek* they also communicate what type of research is needed for their land-use amendment to be accepted. The land-use amendment also is a complex process. Municipalities recommended initiators hire experts to help them with implementing FSI. The consultant should be hired from the initial starting face of the FSI since they can also help with finding a suitable location. Next to this, there are a lot of aspects that need to be taken into account for implementing FSIs, an expert can help with this. A future ACT group or thesis researcher can make a guideline or example for a *principeverzoek* based on aspects that need to be considered.

When the land-use amendment is submitted the new plan will be up for perusal for 6 weeks. Stakeholders with interest in the FSI can object to the new plan. To get to this stage a lot of costs already have been made, among other things for conducting research. When an objection is made it can take up to two years extra for implementing the FSI. To make sure the costs and time put into the land-use amendment are worth it, from the start a good *omgevingsdialoog* should be done.

Omgevingsdialoog

In an *omgevingsdialoog* initiators talk with residents and other local stakeholders to get insight into their interests, wishes and objections. The initiator can then use this input in the further design of the initiative. This often leads to a better initiative for the surroundings of the area. By taking the most important wishes and objections into account it is less likely an objection will be made to the plan. This results in a faster and cheaper procedure for the initiator (Gemeente Oosterhout, n.d.).

Permit request and subsidies

When the land-use amendment is accepted the new land-use plan is final. Then the initiators need to request permits and apply for subsidies. A future ACT group or thesis researcher can do more research into obstacles that occur in the process of getting permits and subsidies.

Attitude government on FSI

The attitude of the municipality was not mentioned as an obstacle during the interviews with municipalities. The municipality of Someren did mention that the expectations of initiators are often too high, the initiators sometimes get frustrated with the municipality even if the civil servant is trying their best, which might slow the process down even more. Therefore, it is expected that municipalities might come across as having a negative attitude towards initiators and FSIs but this is closely related to initiators not being informed properly and therefore, having unrealistic expectations of what is possible and desirable for the municipality. Overall, the interviewed municipalities seemed to have a positive attitude of FSI.

However, the motive initiators have for wanting to realize their FSI do differ from the ones the municipality/government has. First of all, it must be clarified that municipalities have to follow national and provincial laws. All municipalities in the province Noord-Brabant mentioned that the provincial *VAB*-policies are an obstacle. The municipality must take provincial policies into account and therefore, cannot write their own more lenient policy and vision on it. Every province has their own *omgevingsverordening*, *which* states what considerations are made for land-use plans.

Some provinces such as Noord-Brabant have relatively more strict objectives and visions which limits the possibilities for FSIs. However, the municipality of Someren stated that the new *Omgevingsverordening* will give more room to implement alternative forms of living. Gelderland, another province where we interviewed municipalities from, is less strict.

Second, the main goal of *VAB*-policies encountered in this research was to improve the spatial quality of rural area. Most municipalities mentioned they do not want to add new buildings in rural area. *VAB*-policy instruments such as the *RvR regeling* are based on the objective of improving the quality of rural area. This often means the initiator must demolish vacant agricultural buildings. But they do not get to build as many metres as they demolished to make sure the amount of build area decreases the quality of rural area improve, according to the governmental organizations. This and the restrictive *RvR* being more favourable for bigger houses do clarify why initiators experience municipalities as being uncooperative, inflexible and resistant. There are also other manners to improve rural spatial planning, municipalities often give preferences of spatial quality aspects they would like to see in FSI, in their policy documents.

To increase possibilities for FSIs, a positive attitude toward FSIs and similar concepts should be noted down in the policy. By providing conditions under which FSIs can receive a form of preferential treatment, like ignoring the *bouwtiteIs* and only looking at the size. However, this needs to fit within the provincial policies.

Jurable (2019) an expert in environmental law even mentioned that implementing homes in rural areas has a low success rate. They clarified that provinces often want the rural area to be non-build area as much as possible which confirms the findings of this research. Jurable continued to state that in some cases the municipality is willing to cooperate with special housing initiatives. Provinces are possibly more willing to cooperate with such initiatives since these initiatives overall are more socially desirable. Some examples of special housing initiatives are an informal care homes, residential care or a service flat. Even farmyard sharing initiatives can be considered a special housing initiative, in this context, these types of initiatives are also referred to as

vriendenerf. Jurable did research and found that *vriendenerf* initiatives are mainly stimulated and subsidized by municipalities and provinces in the East of the country. They state that the province of Overijssel is a frontrunner in this. The province and the municipality Olst-Wijhe financially supported initiators for implementing a FSI (Jurable, 2020). Jurable (2020) also mentions that they think that only the provinces in the Eastern part of the country will be willing to cooperate with large scale FSI projects. For this research, only municipalities in Gelderland and Noord-Brabant have been interviewed. It did become obvious that the province Noord-Brabant currently has more strict regulations and policies and therefore, it might be more difficult to implement a FSI there compared to Gelderland. However, further research is needed to make a fair judgement of what provinces are willing to cooperate more easily. A future ACT group or thesis researcher can do this by interviewing provinces about their *VAB*-policies and vision of FSI.

Good practice | Vriendenerf Olst-Wijhe

Vriendenerf is a small scaled CPO-living project for and by active people over 50, their FSI has been implemented within 5 years. In 2012 they created a union, in 2016 the construction of the buildings started. In 2017 the construction of 12 houses and outbuildings was finished (Vereniging Vriendenerf, 2020).



(Vereniging Vriendenerf, 2020)

Capacity municipalities

Municipalities mentioned that they lack experience in implementing FSI, which makes it a more time-consuming process to go through. Most municipalities currently did not have a vision or policy on FSI and next to this some municipalities also have a staff shortage. These three obstacles make it more complex and time consuming to implement FSIs.

Municipalities should write a clear vision and policy of FSI. The policy should be, clear, understandable and findable. The policy should contain a part explaining under what conditions FSI is seen as desirable. Next to writing a vision and policy municipalities could make elaborate area development plans, containing information about the possibilities per location. It would also be nice if municipalities would share success stories of FSIs that were implemented in their municipality and other inspiration.

The WikiBooks page and Dutch summary should be used by municipalities to be better informed about what steps can be taken to implement an FSI. The products contain a good practice and process steps which might help municipalities with getting an understanding on how such projects can be tackled.

The contact with municipalities was also mentioned as an obstacle by initiators. This likely is related to the lack of experience, policy and staff at municipalities. Since some municipalities have never had people reach out to them about FSI, and since they do not have policy for it there might not be a specific person assigned with the responsibility to pick up such projects. This combined with the staff shortage might cause initiators to not receive responses.

Finance

Finance was mentioned as a possible obstacle by both municipalities and initiators. The two biggest reasons for finances being an obstacle is the aforementioned *RvR regeling* and the costs of other research needed for land-use amendment and getting permits. If allowed by the province the regulations regarding *RvR* could be made more favourable for FSI. Next to this, initiators might also need to be better informed about how much it might cost to implement an FSI. The difficulty of financing residential projects with multiple owners in combination with the long process and uncertainty that are associated with FSIs can also be the subject of future research.

4.2 Research limitations

The research conducted by this ACT group was limited by several factors which affect the applicability of our results. This research was conducted by eight students (see Appendix 8) within a time of eight weeks, where other ACT-related activities and university commitments also took up time. Because a result had to be delivered within eight weeks, the research group limited the research field to the interaction between the municipalities and the initiators. As a result, they did not focus on, for example, financial matters, opportunities in the housing market, the actual healthiness or sustainability of FSIs, or obstacles unrelated to the interaction with the municipality. Thus, in the end, this research only proposes solutions to one part of the whole process. The limited timeframe also prevented the researchers to pursue new insights and tips from the initial interviews. For instance, interviewees advised to also interview provinces about the subject of FSIs and an agency that advises farmers ceasing their operations.

Throughout the study, several municipalities were approached early to interview. Some responded, even after reminders, after the set deadline in which the interviews could still be conducted. The reasons given were changes in job positions within the municipality during this period and limited capacity. The municipalities that replied positively to the request for an interview, could arguably be more likely to be sympathetic to FSIs than the municipalities that did not respond in time, did not respond at all or declined to be interviewed. Because of the likelihood of such a bias the overall picture regarding the municipal attitude towards FSIs can be skewed. Since it can be argued that the employees most enthusiastic about FSIs were most likely to be willing to take time out of their agenda to conduct the interview.

Another limitation has to do with the phrasing of questions in the questionnaire. The intention was to make the questions as open and non-leading as possible, but this left a lot of room for interpretation to the respondent about what the question was asking. While this way of writing questions allowed for the harvesting of new information, it is possible that we may have had more insight into how often specific obstacles came up, for example, if multiple-choice options were offered.

The next limitation has to do with the way the questionnaire and interview results were coded. Codes were created manually by several group members as having several different group members learning to use a coding software would have been very time-consuming. However, this may have led to inconsistencies in the ways that codes were categorised, between different sections of the document.

The lack of the inclusion of academic literature about how communication between governments and initiators is normally carried out, and how it can be improved, also limits the research's results and its proposed solution. The absence of this literature came from a lack of consideration, and a lack of supervision by an academic advisor during the first half of the project since the first academic advisor was unavailable due to personal circumstances. If the group had received the recommendation to use academic literature on communication between governments and initiators earlier, they could have followed up on it.

Lastly, the overall number of participants in the research, whether it be through questionnaires or interviews, was limited due to time constraints and the availability of channels that could be used to reach the target group. However, this is slightly made up by the fact that all the respondents had a pre-existing affinity with the concept of FSIs.

In the research proposal phase, the focus of the result was on the municipality. During the research, the focus changed to the initiators. This is due to findings in the research, which led the

research group to find out that the biggest progress could be made on the side of the initiators. At first, the research group did not plan to interview initiators but settled for their answers in the questionnaire. In the end, based on the answers from the questionnaire, they invited three people for an interview, which resulted in two interviews. One of these interviews yielded little information because it had not yet had contact with the municipality. The study could have been more complete if more initiators had been interviewed. More success stories, for example, could have yielded more potential solutions.

5 Conclusion

In this research, the main purpose was to reduce the implementation gap for farm sharing initiatives (FSIs) and its potential, as found by *stichting Erfdelen.nl*. By improving the process of setting up FSIs in the interaction between initiators and municipalities in the Netherlands. FSIs can help solve parts of the housing crisis and the side effect of the nitrogen crisis; abended farmhouses.

This research has provided an insight into the interaction between farmyard owners and the municipalities. By doing literature reviews, a digital questionnaire and interviews this study identified several obstacles in the process of FSI and possibilities for improvement on the initiator and municipal side. From the information gathered it can be concluded that firstly, the capacity of municipalities to implement FSI is too low while the municipalities' vision for FSI lacking. Secondly, initiators require more knowledge and expertise for a successful plan on policies and regulations. The lack of knowledge, combined with complex regulations and missing policies on FSI, VAB and splitting of parcels makes it almost impossible for initiators to create a good plan. Lastly, selecting a proper location for a FSI is difficult due to the unclear and complicated policies.

The main research questions of this research; *How can the interactions between initiators and municipalities be improved, to overcome the obstacles in realizing sharing farmyard initiatives?*, is answered by the tool created. However, the fact that certain process steps cost a considerable amount of time and money stays, such as the zoning plan amendment, flora and fauna research or, for example, the submission of applications for public inspection, which takes at least six weeks.

This research group has created a tool in the form of a WikiBooks page. The page provides information about actors, policies, process steps, obstacles and solutions, and examples of successful FSI projects. The page can inform both initiators and municipalities. WikiBooks is an open and easily accessible platform for anyone looking for the concept of FSI on the internet. The tool is placed on the open-source platform WikiBooks, so future researchers and stakeholders can continue to update the page. For example, they can add new insights from additional studies or adjust the page because things change around regulations. This page ensures that initiators are better informed when they start their interaction with the municipality. The tool can be found online: https://nl.wikibooks.org/wiki/Erfdelen.

6 Recommendations

The research group found out about other potential solutions during the research and would like to share this through the recommendation section. It also mentions what they find useful to investigate in the future.

6.1 Recommendation aimed at initiators

The study group recommends using the *erfdelen* WikiBooks page and making it known that it exists. Those involved in the process, both initiators and municipalities can use it to find useful information. It is recommended to refer to the link on the website of *Stichting Erfdelen* and to share it through their communication channels. Municipalities can get useful information from it and share the link on their website. They can refer to it when an uninformed person approaches them about FSI.

The study group recommends using the *erfdelen* WikiBooks page and making it known that it exists. Those involved in the process, both initiators and municipalities can use it to find useful information. It is recommended to refer to the link on the website of Stichting *Erfdelen* and to share it through their communication channels. Municipalities can get useful information from it and share the link on their website. They can refer to it when an uninformed person approaches them about FSI.

A recommendation has been drafted which focuses on tips on how to approach the municipality. By making use of the following points below the process with the municipality should be faster.

- Look for farms close to the built-up area. This will increase the success rate of a FSI. It is
 easier for the municipality to realise, and it fits better with their vision of this type of projects.
- Hire experts; successful projects have often used specialists regarding zoning changes, financial/fiscal matters and finding suitable locations.
- Talk to local residents and business owners; they can seriously slow down the process if they object to the zoning change.
- Raise the municipality's interest by sending a well-prepared plan, in which you demonstrate
 that you are knowledgeable about their policies for example, flora and fauna regulations.
 A good *principeverzoek* will enable the municipality to judge whether the proposed project
 has potential.
- Make use of subsidies for FSI. There are examples where subsidies have been used to reduce consultancy costs.
- Run processes in parallel to reduce the time to completion of projects. During obligatory
 processes of the municipality, the initiator can, for example, work on the composition of a
 group.

6.2 Recommendation aimed at municipalities

The study has brought the subject of FSI to the attention of the municipalities interviewed. The employees interviewed were given a copy of this document. During the study, it became clear that the municipalities are interested in these kinds of initiatives, partly because there is a lot of work to be done in their regions regarding nitrogen policy. To take steps in this direction, the research group has drawn up the following recommendations:

 Provide the initiator with information on the website regarding the wishes of the request for principle. This will provide the municipality with much more concrete applications and will take less time.

- Make use of a platform where it is made known which farms can (in the future) be used for FSI
- Make use of specific contact persons within the municipality for similar projects. Furthermore, permanent third parties (chosen by the municipality) can provide support in the process. This will make the process more effective and efficient.

6.3 Further research suggestions

Since this topic is still in its infancy, the research group has made suggestions for further research. An interesting method would be to set up an FSI as a means for research, working out the whole process. Other, more feasible, research that fits within an ACT/Thesis period could focus on the following topics:

- Regulation and policymaking: In-depth research on rules and regulations. What does
 this process look like after policy changes or, for example, in the Food Valley where several
 municipalities are involved? Future research could also focus more on the role of provinces
 and their view of FSIs.
- Financial and fiscal aspects: What are the financial and fiscal aspects of a similar project? What does the financial picture look like regarding FSI? Which subsidies and tax schemes can you use and how can you make use of them? Is it necessary to set up a CPO organisation?
- **Social aspects**: What is the social contribution of a FSI and how can you communicate this to society and the stakeholders involved?
- **Perspective municipality**: In cooperation with a municipality, how can a municipality best facilitate this process and what would a good request for principles look like?

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Appendix 1: Project description

A.1.1 Research questions

The first question is meant to get a clear view of all the steps of the set-up process of a farmyard sharing initiative that involves the municipality. The second question is supposed to identify the obstacles, in the steps identified in question 1, that hinder the realisation of farmyard sharing initiatives. Obstacles may also include a lack of specific policy on farmyards haring, a lack of enthusiasm among the municipality about farmyard sharing and obstructing or conflicting laws and regulations. The third question is to identify the characteristics of farmyard sharing initiatives that have consequences for the way the initiative should be handled. Characteristics encompass all traits an initiative can have, which are not shared by all other initiatives. These may or may not include the presence of asbestos, the involvement of agricultural land, what people are part of the initiative and the distance to existing public goods, and more. Question 4 is to design and collect ways to overcome the obstacles from question 2 and how to handle the additional problems that may arise when initiatives have specific characteristics identified by question 3. Finding ways to overcome these obstacles and documenting them would allow farmyard sharing initiatives to be realised in a more standardised and less time-consuming way.

When creating the outputs of this consultancy project, an ethical concern that should be kept in mind is that by promoting sharing initiatives, other projects that would make use of the empty (former) farms may be undermined. For example, if a municipality uses this project's tool to initiate a farmyard sharing initiative for elderly people, they might be stopping others, such as companies or starters, from using that land. Since it is meant to help facilitate farmyard sharing initiatives, this consultancy project is implicitly biased in favour of farmyard sharers. It is up to governments and civil society to decide whether farmyard sharing is the best option, if they want to use our output.

A.1.2 Outputs

The project will produce four outputs: a report, a tool, a summary in Dutch and a presentation. The report will contain the steps where initiators interact with the municipalities; the obstacles in the interaction; characteristics of the initiatives that are important in the interaction and municipalities and the practices that can be adopted to help overcome the obstacles within the interaction. The report will also contain information about the chosen research approach and methods of data collection. The main language in the report will be English, except for the extended summary that will be in Dutch.

The second output is a tool designed for municipal civil servants and policy makers. It will be based on the obstacles the farmyard sharing initiators encounter in the process with the municipalities and the difficulties seen by the municipalities themselves. The aim of the tool is to enable municipalities to improve their handling of farmyards sharing initiatives in terms of regulations, conduct, efficiency and how to make farmyard sharing initiatives more attractive to the municipality itself. It will contain policy recommendations on how to potentially become a "farmyard sharing friendly municipality". It will also be relevant to initiators because it creates a clearer overview of what their interactions with the municipalities would look like and what obstacles they can expect. This knowledge can enable them to work through these obstacles with the municipalities. The tool will be presented in both English and Dutch to make it more practical in use.

This guideline tool could take the form of a brochure, a step-by-step flowchart, or a decision tree. It is important that the tool is designed to be intuitive for the target audience. In the presentation both the report and the tool will be presented to the commissioners and other external interested parties. Feedback will be used to improve our outputs to deliver optimal end products.

A.1.3 Stakeholders

A stakeholder analysis was conducted to better understand and define the problem and to evaluate where possible support can be gained (Mind Tools, n.d.). All stakeholders were identified and then prioritized in a power-interest grid, visible in figure 2, which maps the power and interest a stakeholder group has on the project and its outcomes (Solitaire Consulting, 2021).

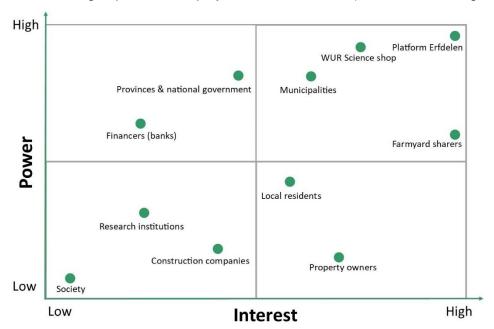


Figure 2.4 Power-interest grid project

The complete analysis and a broader power-interest grid for implementing farmyard sharing initiatives is shown in appendix 1. A short explanation of the power and interest for the most relevant stakeholder groups is given below.

The WUR Science shop is the commissioner of the project and for this reason, has a high interest and power. Platform Erfdelen commissioned the WUR Science Shop for this research and for this reason has even higher interest and power. Platform Erfdelen will benefit from this research since the project team will help improve how municipalities support farmyard sharing. The WUR Science shop benefits from this because this project has a broader positive impact on society, which is a requirement they have for projects they take on (F. Langers, personal communication, May 13, 2022).

Municipalities also have relatively high interest and power since, they are responsible for laws, regulations and policies and therefore can facilitate or hinder these initiatives. They will benefit from this research since the project team will provide a way to standardise and simplify the implementation of farmyard-sharing initiatives, which makes the process less costly and more efficient. Farmyard sharers (initiators) will also benefit from the easier implementation.

All four of these stakeholder groups will be closely managed throughout this consultancy project.

Local residents/farmers and property owners have high interest, but low power. Property owners of former farms will possibly want to sell their property (Nieuwe Oogst, 2021) and by making the implementation of farmyard sharing more convenient it might be easier to sell their parcels. Local residents/farmers might be both positive and negatively affected. The sold plots of land will change

from agriculture use to residential area examples of negative effects is that will be more difficult to expand their farms and it might also cause more traffic (Provincie Utrecht, 2014).

Financers and provinces and national government have high power but low interest. The laws and regulations made by the governmental bodies determine what is possible and what is not, and the financers (for possible initiatives) will determine if initiators will have funds for implementing their plans (Rijkswaterstaat, n.d.-b).

Research institutions, construction companies and the society in general have relative low power and interest. Since they do not have a direct influence on the project and no direct interest.

Platform Erfdelen, WUR Science shop, Farmyard sharing initiators and municipalities will be closely managed during this project. Meaning these people should be engaged within the project and great efforts must be made to satisfy them (Mind Tools, 2021). How this is done is discussed in chapter 3.2. Communication.

A second power-interest grid was made for implementing farmyard sharing initiatives in general. The grid is shown in figure 2.

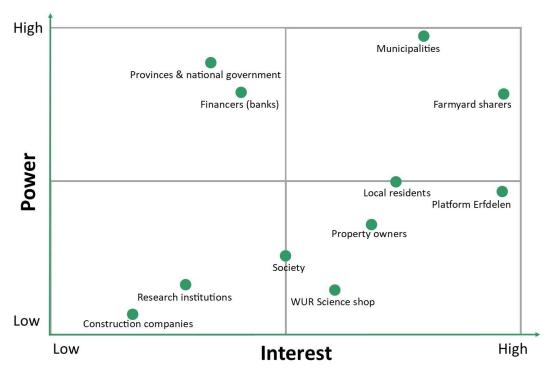


Figure 2. Power-interest grid implementing farmyard sharing initiatives

Municipalities and farmyards have high interest and high power for implementing the initiatives since both parties need to work together to implement a farmyard sharing initiative (Rijkswaterstaat, n.d.-b).

Local residents/neighbouring farmers have an average power and high interest. As forementioned, local residents/farmers might be both positive and negatively affected. The sold plots of land will change from agriculture use to residential area examples of negative effects is that will be more

difficult to expand their farms and it might also cause more traffic (Province Utrecht, 2014). They might try to make implementing the initiatives difficult because they do not them to be realized.

Property owners, platform Erfdelen and WUR Science shop have high interest but relatively low power. As mentioned before the property owners of former farms will possibly want to sell their property (Nieuwe Oogst, 2021) and because of the implementation of farmyard sharing it might be easier to sell their parcels. Platform Erfdelen helps people implement initiatives and therefore, has some power and high interest. Since the WUR Science shop is commissioned by Erfdelen, they have high interest as well, but the power is relatively low.

Society has an average interest and low power. Since they do not have a direct influence on the project, but the implementation of farmyard might be beneficial for the housing demand (Ministerie van Algemene Zaken, 2022).

Provinces, national government, and financers have high power and low interest. As forementioned, he laws and regulations made by the governmental bodies determine what is possible and what is not and the financers (for possible initiatives) will determine if initiators will have funds for implementing their plans (Rijkswaterstaat, n.d.-b).

Research institutions and construction companies in general have relative low power and interest. Since they do not have a direct influence on the project and no direct interest.

Appendix 2: Literature review keywords

Farmyard process

- CPO
- Splitting parcels
- Interaction between municipality & initiatives
- Sloopvoucher

Bottle neck/obstacles

- Incentives
- Sustainability
- Regulation
- Organizational structure
- Attitude
- Finance
- Subsidies for framers stopping
- Asbestos / other pollutions
- Protecting species

Policies

- VAB beleid
- Land use plan (bestemmingsplan)
- Wet Ruimtelijke ordening
- Rood-voor-rood

Laws & regulation

- Omgevingwet (old and new)
- Wet algemene bepalingen omgevingsrecht
- Omgevingsvisie
- Plattelandswet
- Geurwet
- Shrinking regions (need to find out a definition that is in line with the one of Fransje)
- Wet Natuurbescherming

Farm sharing (erfdelen) (who, where why)

- Types of initiatives
- How many utilities they share
- Stopping farms
- Small scale living
- Faal & succesfactoren document
- Sutstainable living
- Succesfull pilots Arneco is an example

Appendix 3: Digital questionnaire

Welkom in ons onderzoek! Ons doel is om het proces om erfdelen-initiatieven te realiseren effectiever en efficiënter te laten verlopen. Hiervoor willen wij graag de obstakels in kaart brengen, om vervolgens opties te onderzoeken om deze te omzeilen. Wij horen hiervoor graag over uw ervaringen met betrekking tot het realiseren van een erfdelen-initiatief.

Binnen deze questionnaire nemen wij uw privacy in acht en respecteren wij uw beslissing om vragen niet te beantwoorden. Deze enquête neemt niet meer dan 5 minuten van uw tijd in beslag. Heeft u vragen over de enquête? Neem contact met ons op via britt.trago@wur.nl

In ons onderzoek definiëren wij erfdelen-intitieven als initiatieven waarbij groepen mensen uit verschillende gezinnen ervoor kiezen om samen een huisvestingsproject op te zetten op een voormalige boerderij, met aandacht voor gemeenschappelijke voorzieningen.

- 1 Hoe bent u in contact gekomen met het concept erfdelen-initiatieven?
- 2. Welke stappen (met betrekking tot de overheid) heeft u ondernomen om een erfdelen project op te zetten? (in chronologische volgorde indien mogelijk)
- 3 In welke gemeente(n) heeft u deze stappen ondernomen?
- 4 Heeft u te maken gehad met obstakels bij het realiseren van een erfdelen project, die betrekking hebben tot de overheid (gemeente/provincie) en/of wetgeving?
- 5 [Afhankelijk van vraag 4] Zou u een beknopte uitleg kunnen geven over deze obstakels? (Niet verplicht)
- 6 [Afhankelijk van vraag 4] Hoeveel tijd hebben deze obstakels in het proces (naar schatting) in beslag genomen? (Niet verplicht)
- 7 [Afhankelijk van vraag 4] Heeft u ideeën over hoe de hiervoor genoemde obstakels kunnen worden opgelost? (Bijvoorbeeld, wat zou de gemeente beter kunnen doen naar uw idee?) (Niet verplicht)
- 8 Over welke gemeente- of overheidsprocessen was u tevreden bij uw erfdelen project? En/of welke 'best practices' zouden een voorbeeld voor anderen kunnen zijn? (Niet verplicht)
- 9 Heeft u nog verdere opmerkingen die belangrijk zijn om mee te nemen gedurende dit onderzoek? (Niet verplicht)

Als u uw e-mailadres geeft, dan wordt deze in een andere database opgeslagen dan de de ingevulde questionnaire. Dit om uw privacy in acht te nemen.

- 10 Mogen wij contact met u opnemen als wij uw antwoorden willen bespreken?
- 11 Wilt u op de hoogte worden gebracht van de onderzoeksresultaten?
- 12 [Afhankelijk van vraag 10 of 11] Laat hier uw e-mailadres achter:

Einde onderzoek

Bedankt voor het invullen van onze enquête! Hebt u vragen over de enquête? Neem contact met ons op via britt.trago@wur.nl

Appendix 4: Interview Guide for Municipalities

Interview guide [naam gemeente]

Datum, tijd en locatie interview: [...] [...]

Aanwezigen:

- [naam]
- [naam]
- [naam]

Taakverdeling:

- [naam + taak]
- [naam + taak]

Rede voor selecteren gemeente:

[...]

Achtergrondinformatie geïnterviewde(n):

• [naam]:

Werk: [ervaringen]
Opleiding: [educatie]

Bron: [bron]

Grijs gemarkeerde tekst heeft geen prioriteit, de andere vragen zijn relevanter.

Introductie en doel van interview (5 min)

- o Mogen we het gesprek opnemen?
- o Interviewers stellen zich kort voor
- Doel onderzoek: Een rapport/tool ontwikkelen die gemeenten en/of initiatiefnemers kunnen gebruiken om het proces omtrent het realiseren van erfdelen efficiënter te maken.
- Je mag op elk moment een vraag overslaan of besluiten om niet meer deel te nemen aan het interview.

Kennismaking met het onderwerp (15 min)

- Ik las dat in de gemeente x Voornamelijk x voorkomt, klopt dit?
 - Glastuinbouw/veehouderijen/akkerbouw
- o Is vrijkomende agrarische bebouwing een (opkomend) thema binnen de gemeente?

Introductie Erfdelen concept: "In ons onderzoek definiëren wij erfdeel-initiatieven als initiatieven waarbij groepen mensen ervoor kiezen om samen met andere initiatiefnemers een

huisvestingsproject op te zetten op een voormalige boerderij, met aandacht voor gemeenschappelijke voorzieningen."

- Heeft uw gemeente ervaring met mensen die op voormalige boerderijen willen wonen?
 - o Hoeveel aanvragen zijn er geweest?
 - o Hoeveel aanvragen zijn er succesvol gerealiseerd?
 - o Zijn er ook groepen/communities die contact zoeken voor een erfdelen project?
- o Wat is de visie van de gemeente over leegstaande agrarische bebouwing?
 - o En de visie over het transformeren van agrarisch land naar woonbestemming?

Het proces beter begrijpen (20 min)

- o Hebben jullie een structuur over hoe omgegaan wordt met initiatieven vanuit burgers?
- Zo ja, wat zijn de belangrijkste stappen in dat proces?
- Stel dat een groep zich meldt bij de gemeente met de wens om een specifiek stuk land te gebruiken voor Erfdelen:
 - o Wat zijn de (eerste) stappen die de gemeente dan zet?
 - Hoeveel tijd kosten deze stappen gemiddeld?
 - Welke persoon of afdeling gaat als eerste aan de slag?
 - Wat heeft de gemeente nodig van de initiatiefnemers?
 - o Wat zijn de vragen die de gemeente dan stelt?
 - Welke andere partijen zijn betrokken in het proces? (bijvoorbeeld provincie)
- Hoe verloopt de communicatie tussen initiatiefnemers en de gemeente bij dergelijke processen?
- Hoe verschilt jullie afhandeling van erfdeel projecten in vergelijking met grotere commerciële bouwprojecten?

De obstakels tussen initiatiefnemers en gemeenten beter begrijpen (10 min)

- Wat denkt u dat de drempels of obstakels zijn die het verwezenlijken van Erfdelen projecten vertragen of tegenhouden?
- o Wat is de aard van dit obstakel?
- Vanuit de enquête die we hebben gedaan onder initiatief nemers blijkt dat veel voormalige boerderijen/ locaties die zij aandragen worden afgewezen. Hoe kan iemand een geschrikte locatie herkennen?
- o Zijn er problemen bij het splitsen van agrarische percelen voor het realiseren van collectief wonen?
 - o Waarom is dit een probleem, waarom niet?
 - Wat is de rede om het terrein wel of niet te splitsen (voor de gemeenten en initiatiefnemers)?
 - o Waar lopen jullie tegen aan als dit gedaan dient te worden?
- Wat ziet u als voordelen voor de gemeente in het verwezenlijken van Erfdelen projecten?
 - o En nadelen?

o Ik kan mij voorstellen dat de behandeling van dit soort projecten relatief complex is. Heeft de gemeente de capaciteit om (meer) van dit soort complexere projecten te behandelen?

Specifieke karakteristieken erfdeel projecten

- Zijn er specifieke karakteristieken van erfdelen projecten die het proces vergemakkelijker of juist bemoeilijken?
 - o Welke maken het makkelijker?
 - o Welke maken het moeilijker?
 - Zijn er nog aspecten waardoor zulke projecten wenselijk zijn voor de gemeente?
 - Zijn er nog aspecten waardoor zulke projecten onwenselijk zijn voor de gemeente?
 - Voorbeeld van een karakteristiek:
 - Asbest
 - Geur of milieu cirkel
 - Flora & Fauna
- Zijn er bepaalde karakteristieken die maatwerk of extra uitzoekwerk van de gemeente vragen?
 - o Zijn er voorkeuren in de samenstelling van initiatiefnemers voor erfdelen?
 - Ouderen?
 - Families met kinderen?
 - Waar de mensen vandaan komen (eigen gemeente, randstad etc.)

Overkomen van obstakels (10 min)

- Zijn er obstakels die vrij eenvoudig weg te nemen erfdelen initiatieven te realiseren?
 (Laag hangend fruit)
 - o Welke zijn dat?
 - Waarom? Hoe kan het (volgens u) opgelost worden?
- Zijn er obstakels die complexer zijn?
 - o Welke zijn dat?
 - o Wat maakt deze zo complex?
 - o Is dit in handen van de gemeente (om te verbeteren)?
 - o Zo niet, wie dan?
 - o Hoe kan dit (volgens u) opgelost worden?
- o Wat kan er gebeuren om obstakel X te overwinnen?
- Uit de vragenlijst die we bij initiatiefnemers hebben uitgezet werd duidelijk dat X vanuit hun perspectief een obstakel is in contact met de gemeente. Hoe kijkt u hier tegenaan?
- o Is er een verklaring voor dit obstakel?
 - onduidelijkheid over mogelijkheden locatie
 - gemeente is niet altijd goed bereikbaar
 - meerdere huishoudens veroorzaakt verkeersproblemen (verkeersveiligheid)
 - o flexibele houding tegenover initiatiefnemers (betalingen etc.)
 - Capaciteit voor complex maatwerk?

Het eindproduct (5 min)

- Wij willen uiteindelijk een hulpmiddel of 'tool' opleveren die gebruikt kan worden om het proces rondom Erfdelen te versoepelen.
 - Waar zou de tool zich op moeten focussen zodat initiatief nemers een betere aanvraag kunnen doen, waardoor een aanvraag gerealiseerd kan worden?

Afronden (5 min)

- Mogen we alles wat vandaag besproken is gebruiken in ons onderzoek?
 - o Mogen we de naam van de gemeente noemen bij de resultaten?
 - o Mogen we benoemen dat we met u gesproken hebben?
 - Uw functietitel, of eventueel uw naam?
- Zou u ons eindproduct willen ontvangen?
- Kunnen we na het onderzoek nog aanvullend contact opnemen, indien we nog andere vragen hebben of verduidelijking nodig hebben?
- Heeft u nog iets wat u kwijt wilt of wil toevoegen?
- Wat vond je van het interview?

Appendix 5: Interviews

All interview minutes and transcript in the appendix file. The municipality and the initiators output in a different subfile.

Appendix 6: Questionnaire result

The questionnaire result is in the appendix file with name Survey Responses.xlsx.

Appendix 7: Additional steps overview

Table A7.1. Process details

Initiator (persona l)	Group	Farmyar d owner	Municipality	Province	State	Broker	Notary	Finance rs	Local community	Other possible allies
Research Erfdelen	Form main group	Check interest	Orienting conversation	Destination plan fit with landschapsbel eid	Destinatio n plan fit with state affairs	Explore suitable farmyar ds	Formalize organizati on of sharers initiatives	Mortga ge	Socialize informally	Health- care organizatio ns
Personal fit with Erfdelen	Set up collaboratio n organizatio n (CPO)	Discuss situation	Principeverzoek	Subsidies	Check/ap ply for subsidies	Purchas e mediati on	Formalize agreemen t for land use	Explore soon to be fir sale plots	Objections/sup port test	Other Erfdelen- projects
Location research	Letter of intent	Current destinati on plan	Destination plan change	Province can (help) buy land						Constructi on companies
Feasabili ty study	Agreements on parcel selection	Agreeme nt on landuse	Sound							Architect

Initiator (persona l)	Group	Farmyar d owner	Municipality	Province	State	Broker	Notary	Finance rs	Local community	Other possible allies
Attend meeting(s)	Collaboratio n agreements	Transfer of ownershi p	Air quality							Platforms for Erfdelen
Personal plan and vision	Finances		External safety							Sales advisor
	Create mutual plan and vision		Odor businesses							Project advisor
	Vlekkenplan		Soil quality							Bureau for changing destination plan
	Expand group		Vibrations							Appraiser
	General assemby meetings		Nature							Location advisor
	Working groups		Odor livestock							Nature developme

Initiator (persona l)	Group	Farmyar d owner	Municipality	Province	State	Broker	Notary	Finance rs	Local community	Other possible allies
										nt organizatio ns
	Constructio n		Health							
	Financial / legal		Soil quality							
	Estate planning		(Ground)water							
	Communicat ion / sociocracy		Heritage/archeolo gy							
			Energy							
			Cables and pipes							
			Wind nuisance							
			Light nuisance							
			Local policies							

Initiator (persona l)	Group	Farmyar d owner	Municipality	7	Province	State	Broker	Notary	Finance rs	Local community	Other possible allies
			VAB-beleid								
			Ruimte Ruimte	voor							
			Omgevingsw	et							
			Building regulations								
			Bouwbesluit								
			Bouwverord	ening							
			Welstandseis	sen							
			Permits								
			Omgevingsve ning	ergun							
			Parking test								
			Subsidies								

Table A.7.2. List of categorised process steps mentioned in questionnaire

Category	Name of step	Number of mentions
Location research	Talk with land owners	4
	Search for property	3
	Find suitable regions	1
	Hire paid advisor to search for locations	1
Group research		6
Erfdelen research	Collect information independently	4
	Asking what the gemeente has to offer	1
	Attend a Platform 31 meeting	1
	Check if Erfdelen is right for them	1
Defining one's project	Define vision	2
	Put up website	1
	Be part of CPO-vereniging	1
	Found a lobby	1
Defining plans	Create plans (financial, construction, landscape)	1
	Informal talk with member of political party	1
	Hire paid advisor to learn about process	1
	Try to secure financing	1
	Buy property	1
Involving government w/o commitment		3

Involving government w/ commitment	Official contact w/ municipality	11
	Submitting land use plan change	3
	Providing municipality w/ education	2
	Submitting a princiepeverzoek	2
	Requesting subsidy from province	1
	Contacting the province	1
	Requesting building permit	1
	Changing initiator plan following contact	1
	Getting in touch with nature development organisation following contact with government	1
Making plans without involving government		2

Table A7.3. Conditions collective living according to Noord-Brabantse Interim Omgevingsverordening (Provincie Noord-Brabant, 2022)

Condition of initiative	Explenation	Article
Small scale	It does not lead to urban development	
Fitting with desired development direction of the area	The development direction of an area contains: the activities and functions fitting of its surrounding; the effects the development of these activities and functions has on other aspects such as:	
	 Safety and health To get a safe and healthy environment value should be added by applying the lagenbenadering and the space must carefully be used vacant buildings quality of life urban and rural development and mobility how the quality of the area can be improved and how the existing buildings will be demolished. 	Article 3.80 Lid 1 And Article 3.40 Lid 1
A consideration regarding mobility was made	Among other things about the accessibility of facilities	Article 3.80 Lid 1
Fitting of regional agreements		Article 3.80 Lid 1
Demonstratable adding value to quality of environment	 This can be done by: Improving the quality of living and life Demolishing surplus buildings Development of nature and forests Taking climate measures Decreasing emissions of environmentally harmful substances Improving or maintaining culture-historical value 	

There is assigl innovation	o When the development is taking place at a culture-historical location then the physical compensation is focussed on conservation or improving the values and characteristics of it. It can be checked if something is a culture-historical building by looking at the "cultuurhistorische waardenkaart" - Sustainable construction - Contributing to a circular society The following needs to be taken into account: - Acceptable location - Physical compensation (aimed at improving the environmental quality equivalent to the compensation for a space-to-space lot - Possibility of a space-for-space lot has to be researched - When an environmentally harmful activity is stopped all rights and permissions (such as permits) present for this must be withdrawn.	
There is social innovation, self-realization and social-societal quality	Such as increasing social cohesion, self-reliance and accessibility to vulnerable groups;	
The concept is legally and factually guaranteed, with the		

possibility of temporary collective living;		
Executable regarding future sustainability and economic development		
The urban and rural design is taking the quality of the environment into account	And the structures of the area and its surroundings are also taken into account.	
In the case of extension of build environment, elsewhere an equivalent building must be demolished and emission- and/or animal permissions must be nullified legally and factually		
Experts regarding environmental quality are involved in developing the plan	Among which an expert working at the province of Noord-Brabant	

Demonstratable adding value to quality of environment	 This can be done by: Improving the quality of living and life Demolishing surplus buildings Development of nature and forests Taking climate measures Decreasing emissions of environmentally harmful substances Improving or maintaining culture-historical value When the development is taking place at a culture-historical location then the physical compensation is focussed on conservation or improving the values and characteristics of it. It can be checked if something is a culture-historical building by looking at the "cultuurhistorische waardenkaart" Sustainable construction Contributing to a circular society 	Article 3.80 Lid 1 And Article 3.78 lid 1 c, 2 a en b, and lid 2 d
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	 The following needs to be taken into account: Acceptable location Physical compensation (aimed at improving the environmental quality equivalent to the compensation for a space-to-space lot Possibility of a space-for-space lot has to be researched When an environmentally harmful activity is stopped all rights and permissions (such as permits) present for this must be withdrawn. 	
There is social innovation, self-realization and social-societal quality	Such as increasing social cohesion, self-reliance and accessibility to vulnerable groups;	
The concept is legally and factually guaranteed, with the possibility of temporary collective living;		
Executable regarding future sustainability and economic development		
The urban and rural design is taking the quality of the environment into account	And the structures of the area and its surroundings are also taken into account.	Article 3.80 Lid 1
In the case of extension of build environment, elsewhere an equivalent building must be demolished and emission-and/or animal permissions must be nullified legally and factually		
Experts regarding environmental quality are involved in developing the plan	Among which an expert working at the province of Noord-Brabant	

Appendix 8: Project management

Niels Versluijs is an MSc Management Economics and Consumer Studies student, specialising in Business Administration. He has a background in the agricultural world and is a partner in an agricultural family business. His interests lie in the supply chain and innovations in the agricultural sector, such as farmyard sharing initiatives. He wants to learn about multi-stakeholder engagement in the public sector. As a manager, he wants to gain experience and find the combination of fine group collaboration while keeping the end result in mind.

Britt Trago combines her MSc International Development with the MSc Organic Agriculture. She is inspired by the interaction between social and ecological dimensions that in our current society play maybe even a bigger role than before. She chose this topic because in this project this interaction between social structures and the ecological aspects is very present. She would like to learn how policy making could help to create projects that can improve certain ecological aspects, like in this case the Farmyard lands.

Callan Stinkens is a MSc student in Tourism, Society and Environment. He has a background in facility management, teaching and currently works in IT. In his previous working environments, he has had the role of project leader for improving IT-systems, that required a lot of communication skills to find out how to best facilitate specific needs. He also works as a volunteer project leader for a foundation that helps improve living situation for children in Bosnia & Herzegovina. He is on a personal quest to find ways to make it easier to create opportunities for sustainable and affordable housing initiatives. He would like to learn how his specific set of skills can attribute in achieving this goal. For this project he has taken on the role of controller.

Raven Valentijn is a MSc Urban Environmental Science student following the business management and organization thesis track. She followed her Bachelor Environmental Science at HAS University of applied sciences and has since then gained knowledge of nature and environmental laws and legislation, conducting interviews among others with farmers, and designing a facilitation tool. She would like to learn what farmyard initiatives currently exists and what municipalities can do to facilitate people in implementing new farmyard initiatives.

MSc student Urban Environmental Management Luca van Til is mostly interested in land use and city planning. During her Bachelor Global Sustainability Science at Utrecht University she focused on governance, societal changes, and climate adaptation. Due to previous courses, Luca has experience with environmental law, policy-making, and spatial planning. She wants to learn about the policy problems within the farmyard sharing, available solutions, and improve upon consultancy report writing. Luca grew up in a farmhouse shared by four generations of family.

Bart Schreuder studies Economics and Governance within the MSc Management Economics and Consumer Studies. His main interests stem from wondering how the society we live in works or doesn't work. This has motivated him to pick a BSc and MSc that focusses on both economics and governance. His experience from courses lies in agricultural and environmental economics, law, and governance. He picked this project because of its societal relevance and the opportunity to learn more about the workings of Dutch municipalities and spatial planning regulations.

Lorenzo Margiotta is a MSc Urban Environmental Management student following the land use planning thesis track. During his Liberals Arts & Sciences bachelor's at University College Utrecht he focused on human geography and political science. He picked this project because he was interested in how old agricultural land could be used more innovatively, and he is interested in the policy barriers that interfere with these initiatives.

Meng Liang is from China and is a MSc Organic Agriculture student. He finished a Bachelor of Environmental Horticulture science at Montana State University. Due to course selection, he has expertise in farms, greenhouses, soils, and statistics. He chose this project because he wanted to understand the future development of the sharing farmyard project.