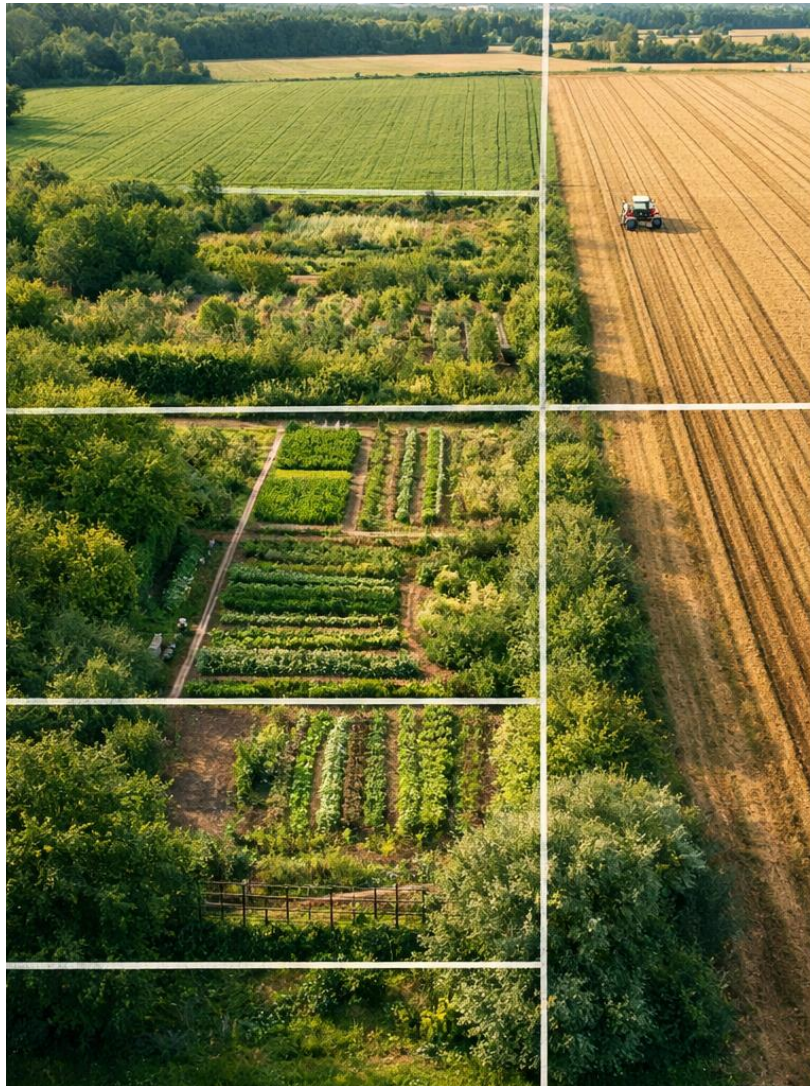


# Farming without a Future:

A Study of Land Access for Agroecological Farmers within Sustainable Land Tenure Arrangements in Noord-Brabant

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Master's Thesis for the Environment and Society Studies programme  
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January 2026

## Colophon

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|--------------------------|------------------------------------------------------------------------------------------------------------------------------------------|
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## **Abstract**

Agroecology (AE) has increasingly taken hold in the Netherlands as a sustainable alternative to conventional agriculture, yet agroecological farmers are constrained by limited access to land. The prevailing land tenure arrangements often exclude agroecological farmers and provide insufficient prospective land security, which is essential to make long-term investments in the soil and social-ecological relations. Using an instrumental case study design, this thesis investigates how agroecological principles for land tenure, developed by AE farmer collective ‘Toekomstboeren’, align or misalign with sustainable tenure models employed by public lessors in the province of Noord-Brabant. Then, the Policy Arrangement Approach (PAA) is used as an analytical-explanatory framework to examine how the interplay of actors, rules, resources, and discourses shape this (mis)alignment. The research draws on observations and semi-structured interviews with public lessors in the province of Noord-Brabant, and is supplemented by documents and webpages from main governmental land and tenure institutions such as the ‘National Enterprise Agency’ (RVO), the ‘Central Real Estate Agency’ (RVB), the ‘Land Registry’ (Kadaster), and the ‘State Forestry Service’ (Staatsbosbeheer). The results indicate that the way sustainable tenure is currently implemented by public lessors mainly misaligns with agroecological tenure principles. Firstly, though public lessors share specific sustainability ambitions with agroecological farmers such as improved soil health, water quality, and biodiversity, agroecological farmers are structurally disadvantaged in the allocation of land. Agroecological farmers seem to lack legitimacy in the eyes of public lessors, as they are not considered ‘agricultural businesses’. Secondly, the reliance on standardized certificate-focussed bidding processes neglects the diverse nature of agroecological farming. Third, the prevalence of the short-term liberalized tenure contract prevents long-term land security and inhibits what agroecological farmers can do on their rented lands. While these results are context-specific to the province of Brabant, and thus limited in generalizability, the PAA analysis revealed broader dynamics in Dutch land governance, which could be transferable to future studies. The PAA part of the results indicated that the misalignments are rooted in a ‘productivist path dependency’, characterized by the discourse that land is a financial asset. This path dependency is further reinforced by asymmetric distributions of agricultural knowledge and legitimacy, which favor conventional farmers and sideline agroecological farmers. The thesis concludes with three key take-aways. First, the agroecological movement should prioritize public recognition and legitimacy before seeking institutionalisation into public tenure policy. Second, the limits of tenure reform as a policy instrument within a capitalist agrarian structure should be recognized. Third, overcoming path dependency in the context of (agricultural) land governance requires that transformational actors (agroecology advocates) mobilize their agency to either alter or introduce new discourses, and possibly form new coalitions.

**Keywords:** land governance; land access; sustainable tenure; agroecology; policy arrangement approach (PAA)

## Preface

This Master's thesis marks the end of my six-year career as a student. After my Bachelors in International Relations and Philosophy, which laid the groundwork for my academic skills and knowledge, I realized I wanted to apply my knowledge to a more concrete topic I felt passionate about. After a six month internship at Unicef, where I researched how climate change is affecting children in the Netherlands and the Dutch Caribbean islands, I increasingly became interested in the question why we have not been able to mitigate climate change. Somehow I stumbled upon Jason Hickel's *Less is More* and before I knew it, I was a full-on 'degrowth', inspiring me to pursue the Master Environment and Society Studies in Nijmegen.

During the course *Rethinking Sustainable Economies* I became especially interested in the topic of land access and its key role in sustainability transitions. From a philosophical point of view I intuitively felt that it does not make sense to talk about land as something separate from ourselves, something to control, and something to exploit. After all, land is the basis for every human activity. It therefore seems logical that we ought to take care of land, as that in turn would mean taking care of ourselves. I was thus glad to discover Karl Polanyi, who argued that some elements of society such as land, labor, and money were never meant to be dictated by the demands of the market. During the programme I also discovered agroecology, a holistic and sustainable form of agriculture, which possibly provides an alternative to the conventional mode of farming which is causing a number of environmental hazards. Having never been particularly interested in agriculture, agroecology quickly captured my curiosity because it was in line with my intuitive belief that we should take care of land, rather than exploit it. Agroecological farmers share this intuition as they aim to farm in a way that collaborates with nature, thus creating a reciprocal relationship with land. Combining my conviction regarding land, and my growing interest in agroecology, I decided to dedicate my thesis to land access for agroecological farmers. Or rather, the lack of land access that agroecological farmers are currently faced with.

Almost one year later, as this research has come to an end, I have learned so much about a topic which I had never even thought about before starting this Master's programme, and dare I say, I have become a bit of an expert. Of that I am proud. However, the writing of this thesis has not been without struggle. In the first place, doing qualitative empirical research was new to me. Conducting interviews, transcribing, and coding text were things I had to learn and I often felt bewildered and incompetent at first. Then, being the perfectionist that I am, the number of times I have revisited and rewritten different parts of this thesis is something I prefer not to think about. In light of these challenges, I am especially grateful to the people who have supported me in writing this thesis. In the first place I want to thank my thesis supervisor, Maria Kaufmann, for her critical feedback and reminding me that I was on the right track when I doubted myself. Our feedback sessions were always lighthearted and every time I felt reassured and motivated afterwards. Secondly, I would like to thank my internship supervisor, Eliane Bakker, for introducing me to the world of Dutch agroecology and involving me with Toekomstboeren's practical activities. I really enjoyed sparring together, and your passion for agroecology, as well as that of other members of the land working group, was truly infectious. I am also grateful to all the interviewees who made time for me and shared key insights for my research. Without all of you, this thesis would not have been possible. Lastly, I am grateful to my dearest friends and thesis buddies: Floryn, Luka, Vera, Heske, and Thijs. Whether it was writing together in the study library, listening to each other's struggles, or giving each other feedback, each one of you made writing this thesis more enjoyable. I would also like to thank my girlfriend Myrthe for all her emotional support during this process, but also for giving me the necessary kick in the butt from time to time.

To you, the reader, I hope this thesis sparks an interest in the importance of land, and how its governance plays a key role in the sustainability transitions to come. Thank you for reading, and enjoy!

Viktor Bruyn, Nijmegen, 12<sup>th</sup> of January 2026

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# 1. Introduction

## **1.1 Research problem**

The agricultural industry is widely regarded as one of the main drivers pushing the earth's planetary boundaries (Rockström et al. 2016; Campbell et al. 2017). Agricultural production contributes to climate change by being responsible for 31% of global greenhouse gas emissions (IPCC, 2007) and roughly 70% of global fresh water is for agricultural use, thus contributing to water scarcity (UN-Water, 2015). Moreover, the use of pesticides and chemicals are detrimental for ecosystems and human health (Conway and Pretty 2013). More specifically, there is consensus that 'conventional' agriculture is responsible for these issues (Talukder et al. 2020; Altieri and Nicholls 2020; Campbell et al. 2017). 'Conventional agriculture' has been defined as "capital-intensive, large-scale, highly mechanized, with monocultures of crops and extensive use of artificial fertilizers, herbicides and pesticides, with intensive animal husbandry" (Beus and Dunlap 1990, p. 594). Of course, what counts as 'conventional' is not black-or-white as there may be farming systems with different varieties of these general characteristics (Sumberg and Giller 2022). Nevertheless, it is safe to say that the *dominant* mode of farming (in the 'Global North'), regardless of the specific adjective in front of it, has been responsible for the sustainability challenges that the agricultural industry is now facing.

As a response, agroecology (AE) has increasingly taken prominence in Europe and the Netherlands (Wezel et al., 2024.; Verkuil et al. 2024). In simple terms, agroecological farmers apply farming practices that "contribute to a more environmentally friendly, ecological, organic or alternative agriculture" (Wezel et al. 2009, p. 511). Additionally, agroecology takes a holistic approach to sustainability, meaning it takes into account the ecological, economic, and social aspects of the food system (Gliessman, 2018). According to AE scholars (Bezner Kerr et al. 2023; Gliessman 2016; Altieri and Nicholls 2012; Giraldo and Rosset 2018), agroecology thus has the potential to transform the dominant food system. Other 'established' organizations such as the Food and Agriculture Organization of the United Nations (FAO) recognize that AE can play a 'critical role' in the transition towards a more sustainable agriculture, without transforming it completely (FAO, 2018).

Exact data on the number of agroecological farmers in the Netherlands is lacking because an internationally recognized certification for agroecology currently does not exist (Verkuil et al., 2024). Agroecology should therefore be seen as an umbrella term and its growth in the Netherlands is thus scattered and encompasses different 'schools' of farming (Oppedijk van Veen et al., 2019). Especially 'community supported agriculture' (CSA) and 'food forests' have gained popularity in recent years (Oosterbaan and Kuiters, 2009; RVO 2024). Food forestry is a polycultural method where different layers of fruits and plant species are mixed, contributing to biodiversity and food security (Netwerk Voedselbosbouw, n.d.; Gauly et al. 2025). CSA's, while it can take many forms, consist of a mutual commitment between a producer and a community of consumers, where the consumers pay a subscription in exchange for local and seasonal produce (Sulistyowati et al. 2023). CSA's thus emphasize the social and economic pillars of agroecology, although they also align with ecological goals such as improving soil quality and biodiversity (Egli et al., 2023). The Dutch CSA Network currently has more than 50 formal members, though the Network estimates that there are roughly 300 CSA initiatives in the Netherlands<sup>1</sup>. Besides food forests and CSA's, organic farms have increased by 14,6% between 2013 and 2017 (Oppedijk van Veen et al., 2019) and 6% of Dutch farmers identified as 'fully nature-inclusive' in 2019 (Verkuil et al., 2024, p. 2), indicating a shift to agroecological values. Lastly, in 2022, a total of 66 organisations and 6 educational institutions were identified as being part of the Dutch agroecology movement (Wezel et al., 2024). These developments indicate that the agroecological movement is taking hold in the Netherlands, and is slowly presenting itself as a possible alternative to conventional farming.

Despite its increasing presence, agroecology's wider adoption in agricultural practice seems far on the horizon as major changes in policies, institutions, and research are still needed (Altieri and Nicholls 2020; de Molina 2013). One of the key obstacles for agroecology to take off is that aspiring agroecological farmers have difficulties gaining access to land (Goris et al. 2024; Wittman & James 2022). The average price of agricultural land in the Netherlands in 2024 was €85.300 per hectare

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<sup>1</sup> This information was provided by the Dutch CSA Network via email. CSA is not a formally recognized term so it is currently not possible to establish a number of registered CSA's.

(Kadaster 2025), making Dutch arable land one of the most expensive in Europe (figure 1.1). Farmer interest groups advocating for better land access for small-scale agroecological farmers argue that this makes it impossible for first generation farmers to buy land (Goris et al. 2024; Bakker et al. 2023).

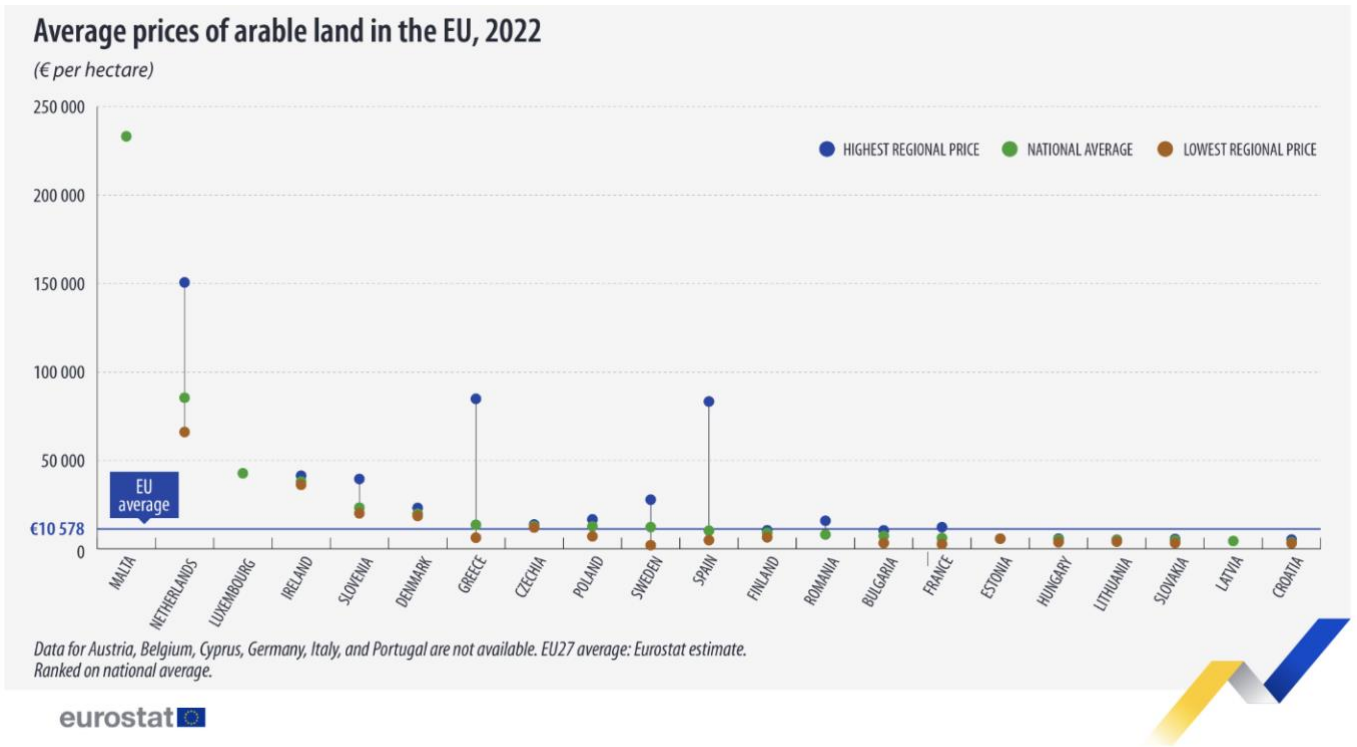


Figure 1.1: Average prices of arable land in the EU in 2022. Source: (Eurostat 2024)

The alternative for farmers who are unable to buy land is to lease land, also known as tenure. According to the FAO, “land tenure systems determine who can use what resources for how long, and under what conditions” (FAO, 2002). Simply put, land tenure provides the opportunity for farmers to use land without having to buy it, but in exchange certain conditions can be demanded by the landowner. However, land tenure agreements in the Netherlands currently do not cater to the needs of agroecological farmers. Liberalized short-term tenure contracts made up roughly 90% of all new land tenure contracts in 2024 (RVO, 2025). These contracts prevent agroecological farmers from having a secure future (Goris et al. 2024). This is problematic because land tenure security is essential to motivate farmers to invest in sustainable land practices (Akram et al. 2019; Krčilková & Janovská 2016; Sklenicka et al. 2015). This is especially the case for agroecological farmers because their practices are heavily embedded in the local landscape, and thus often need time to experiment with investments in soil or crops (Rotz et al. 2019; Goris et al. 2024). This insecurity has been exacerbated even further in recent years due to pressures from other land planning objectives such as housing and infrastructure, especially in combination with land speculation (Buitelaar 2021; Goris et al. 2024).

In response to land insecurity for agroecological farmers, grassroots farmer collectives such as Toekomstboeren have been calling for transformation of agricultural land and tenure arrangements to better accommodate the unique characteristics pertaining to agroecology (Toekomstboeren, 2019). These efforts culminated in the 2022 report ‘*Vision on tenure and agroecology*’ together with the University of Wageningen and the Federation for Agroecological Farmers. In this report several principles were developed to incorporate agroecology in land tenure contracts (Toekomstboeren, 2022). The question that arises is *how* to integrate agroecological principles in Dutch land tenure and thus make tenure lands more accessible to agroecological farmers.

## 1.2 Research aim and research question(s)

Recognizing the need to make Dutch agricultural land use more sustainable, and agroecology as a possible alternative to do so, improving land access for agroecological farmers is essential. This thesis thus addresses the problems faced by agroecological farmers in gaining access to land, specifically in the domain of land tenure. This thesis thus does not explore the possibility of improving land access through ‘ownership’. Even more fundamentally, it should be recognized that land access goes beyond the comparison between ‘ownership’ and ‘tenure’, as they both take for granted a private property model of ownership (Rotz et al. 2019). This inherently neglects discussions of collective ownership alternatives (Ostrom 2015). This is discussed and reflected upon throughout this thesis. For the purposes of this research however, it is clear that improving tenure is where Dutch agroecological farmers currently stand to gain the most in terms of land access (Goris et al. 2024). Additionally, this study focusses on *public* lessors and is geographically bound to the province of Noord-Brabant. This mainly has to do with practical choices explained in the methodological section, however an additional reason is that the state remains the ‘main’ actor within land politics (Pierrri et al. 2025), as governments ultimately set the rules in which market and civil society actors operate, and can also have an exemplary function (Gerber and Gerber 2017). This exemplary function is present in the province of Noord-Brabant as public lessors in this region widely follow the province in its ambitions to create a ‘sustainable tenure’ model. This model gives equal, or sometimes even preferred consideration to sustainable farming practices in relation to tenure prices (Noord-Brabant, 2025). The aim of this thesis is twofold. The first is to explore how these sustainable tenure arrangements by the province, and smaller public lessors within the province, align or misalign with agroecological principles for tenure. To account for ‘agroecological principles for tenure’ this study uses the 2022 report ‘*Vision on tenure and agroecology*’ by farmer’s collective ‘Toekomstboeren’. The second aim is to understand where this (mis)alignment stems from. The Policy Arrangement Approach (PAA) is used as a theoretical lens which helps put into perspective how the interplay between actors, rules, resources, and discourses result in the established level of (mis)alignment. In doing so, the research also explores opportunities to bridge misalignment. These aims are embodied by the following questions:

### Central research question:

“How do agroecological principles for land tenure (by farmer’s collective ‘Toekomstboeren’) align or misalign with sustainable tenure models in the province of Noord-Brabant and what explains this (mis)alignment?”

### Subquestions:

1. *How can sustainable tenure models by public lessors in Noord-Brabant be characterized in terms of allocation procedures and sustainable land use?*
2. *How do sustainable tenure models by public lessors in Noord-Brabant (mis)align with the agroecological principles for tenure by farmer’s collective Toekomstboeren?*
3. *How do policy arrangements explain the established level of (mis)alignment?*

## 1.3 Scientific and societal relevance

As the agroecological movement is growing, the question of whether agroecological principles can be institutionalized into government policies is gaining prominence (IPES 2016; Giraldo & McCune 2019). In the domain of land access, several articles on agroecological grassroots initiatives have called for more research on how these initiatives interact with established policies and perspectives on access to land (Perrin and Baysse-Lainé 2020; Beckett and Galt 2014; Buizer et al., 2016). In particular, Buizer et al. (2016) note that “researchers should not approach forms of landscape-based initiatives as panaceas, but that they should look critically into the (often implicit!) tensions arising when these initiatives meet with established policies” (Buizer, et al., 2016, p. 460). This research thus aims to explore the possible tensions that arise between local agroecological needs for land access and existing land tenure institutions. Where previous studies, such as the one by Goris et al. (2024), have mapped

key needs of Dutch agroecological farmers, the main contribution of this research is to uncover possible barriers on the side of tenure institutions. Conceptually, this research also explores how these barriers relate to broader institutional path dependencies in Dutch (farm)land governance, as well as what this means for the literature on agroecological transition in policy.

In terms of societal relevance, the outcomes of this research are primarily in the interest of agroecological farmers and organisations, and government actors in the policy domain of land tenure. On the one hand, exploring how government actors engage with the needs of agroecological farmers reveals how public land institutions perceive agroecology. This may in turn shape lobby strategies for Dutch agroecological networks and coalitions such as the Dutch Federation of Agroecological Farmers and Agroecology Network Netherlands. On the other hand, government actors are increasingly aware of the pressing need for more sustainable land tenure arrangements, in light of aims for a more ‘nature-inclusive’ agriculture (Ministerie van Landbouw, 2023) (Doorn, Geertsema, et al., 2025). As such, this research may provide insights for governmental actors at different levels on how to incorporate agroecological knowledge in their sustainable tenure models. Lastly, the research was accompanied by my work at my internship ‘Toekomstboeren’ (*Future farmers*). Toekomstboeren is a farmer’s collective which unites agroecological farmers, and aims to make the agroecological movement more visible in the Netherlands (Toekomstboeren, n.d.). During this time, Toekomstboeren was in the incipient stages of developing a lobby strategy to strengthen the position of agroecological farmers in Dutch tenure arrangements. At the end of the internship, I presented practical recommendations as a result of this research to both farmers and policy-makers during a policy dialogue on the topic of land access. The outcomes of these discussions will be used in the development of Toekomstboeren’s lobby strategy.

## 2. Literature review

In order to understand the relation between agroecology and land tenure in the Netherlands, a few key debates need to be introduced. The first section reviews the notion of agroecological transition, and different views on how to achieve this. The second section discusses the parallel existence of two different conceptualizations of land governance by the main ‘protagonists’ of this thesis: the agroecological farmer and the public lessor. The third section provides contextual information about land access and governance in the Netherlands.

### **2.1 Perspectives on governing the agroecological transition**

Agroecology is gaining prominence in the worlds of farming, ecology, and politics, and is therefore an awkward phenomenon to categorize as belonging to a particular domain (Giraldo and Rosset 2018). According to Wezel (2009), agroecology can be considered a science, a social movement, and a practice (Wezel et al. 2009). This notion is now widely accepted in the agroecological literature (Bezner Kerr et al. 2023; Altieri and Nicholls 2020; Palomo-Campesino et al. 2021; Gliessman 2018; Sachet et al., n.d.) and by the FAO (FAO, n.d.). However, opinions on how to govern the transition from industrial agriculture towards agroecology differ. Some warn that agroecological social movements should remain vigilant towards public-private partnerships, fearing that ‘institutionalized agroecology’ would incur bureaucracy and profit-seeking (Giraldo and Rosset 2018). These scholars often emphasize the ‘social movement’ aspect of agroecology, arguing that it should hold on to its position of a grassroots movement countering the capitalist, productivist status quo (Rosset and Martínez-Torres 2012; Giraldo and Rosset 2018). Others contend that in order to achieve food system transformation, interaction with the government and market is unavoidable and necessary (Borras et al., 2015). A third strand of agroecological scholars argue that besides scaling up as a movement, or further embedding agroecology in government policies, agroecology must first gain legitimacy among a broad array of audiences (Montenegro de Wit & Iles 2016). Much like industrial agriculture has woven deeply into market and government institutions, it should be investigated how agroecology can be legitimized, accepted, and internalized into broader assumptions about what agriculture is, and what it could be (Montenegro de Wit & Iles 2016).

Regardless of the position one takes, it is clear that agroecology is increasingly taking on a political dimension and is slowly becoming more visible to policy-makers (de Molina 2013; Charrieras et al., 2024; Giraldo & McCune 2019; Wezel et al., 2020). The best European example is France, where the ‘Agroecological Project for France’ was launched in 2012 (Charrieras et al., 2024). Since then, the term ‘agroecology’ has taken hold in French politics and media. Despite this recognition, agroecology practitioners have concluded that the French agroecological undertaking lacks meaning because it is still framed in conventional agricultural narratives (Charrieras et al., 2024; Gonzalez et al., 2018). This reflects a key issue at the intersection of agroecology and policy. Namely that “along its translation into some public policies, agroecology is suffering from path dependency effects” (Gonzalez et al. 2018, p. 15). Often, agroecological principles are taken and translated according to already existing rationalities and concepts of public institutions (Gonzalez et al. 2018). These failures to incorporate agroecology into public policy are so common that it has been coined as ‘the problem of the state’ (Jonas 2024). At the heart of this problem lies the dichotomy between ‘transformative agroecology’, the way agroecology is envisioned by practitioners in the field, and ‘conformist agroecology’, an adaptation of agroecology suited to the institutional status quo (Sachet et al. 2021; Giraldo and Rosset 2018). The following table gives an overview of the main differences between the two:

|                       | Transformative agroecology                                                                                                                                                                                                                                                             | Conformist agroecology                                                                                                                                                                                       |
|-----------------------|----------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|--------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|
| Vision                | Agroecology is the alternative to industrial agriculture and is part of the struggle to challenge and transform monoculture, input dependency, and existing power structures. Facing the problem and vulnerability of conventional agriculture, it looks to transform the food system. | Agroecology offers tools to fine-tune industrial agriculture and conform to monoculture, input dependency, and power structures. It looks for adaptation to the problem created by conventional agriculture. |
| Approach to food      | Food sovereignty and security                                                                                                                                                                                                                                                          | Food security                                                                                                                                                                                                |
| Agroecology as...     | An interconnection of science, a set of practices, and social movements                                                                                                                                                                                                                | A portfolio of sustainable practices                                                                                                                                                                         |
| Disciplinary          | Interdisciplinary/transdisciplinary of social, anthropological, and natural sciences                                                                                                                                                                                                   | Multidisciplinary of natural sciences (based on agronomic sciences)                                                                                                                                          |
| Social sciences scope | Promotes the use of critical and interdisciplinary methodologies and participatory action research (PAR)                                                                                                                                                                               | Promotes the use of a rapid rural appraisal (RRA) and participatory rural appraisal (PRA) for contextualization                                                                                              |
| Main actors           | Social movements, civil society organizations, and scientific councils such as via Campesina, SOCLA, and Landless Workers’ Movement (MST)                                                                                                                                              | Institutions such as the FAO, World Bank, CGIAR, and government bodies                                                                                                                                       |

Figure 2.1: Dichotomy between ‘transformative’ and ‘conformist’ agroecological views. Source: (Sachet et al., 2021, p. 3)

Importantly, this thesis does not necessarily intend to make the case for one or the other. However, it should be acknowledged that this research is focussed on how *governmental* lessors can *adapt* agroecology into their sustainable tenure policy. This focus on policy adaptation runs the risk of conformist agroecology. Therefore, practical recommendations that follow from the results should be carefully considered in light of this dichotomy, in order to prevent a repetition of the agroecological project in France.

## 2.2 Land governance: private property versus the commons

Whereas ‘governance’ is sometimes understood as an abstract process of complex relations and communication, a defining feature of ‘land governance’ is that it is always in relation to something material (Buizer et al., 2016). As Hall (2013) notes, “land is indispensable to almost all human activity” (Hall 2013, p. 9). Therefore, because land is neither replaceable nor importable, its governance immediately raises questions of power, and causes increasing competition between stakeholders over access to it (Azadi 2020; Wittman and James 2022; Fernandes and Reydon 2024; Hull 2024).

Many definitions of land governance exist, but in simple terms it can be defined as “the politics of who gets what rights and access to which land, for how long and what purposes, and of who gets to decide” (Borras et al., 2015, p. 603). Importantly, land governance regimes are not only comprised of actors and rules, but also of discourses about what land means in relation to a given society, and what to use it for (Wittman & James 2022; Buizer et al., 2016). The most important discourse underlying land governance is the ontological debate between land as property and land as ‘relational’ (Wittman &

James 2022). Land as property follows from the Lockean Western-liberal understanding that the relation between land and people is contractual (Wittman & James 2022). Here, the distinction between ‘possession’ and ‘property’ should be observed. ‘Possession’ is simply the physical control of resources, whereas ‘property’ is a title granted to an individual or a collective by the state (Gerber & Gerber, 2017). Private property is typically governed by formal institutions, including legislative frameworks and land markets, accompanied by virtual and physical boundaries (Wittman & James 2022). Property titles thus open up the possibility to commodify land through sale and tenure for example (Gerber & Gerber, 2017). As a result, the value of land is not determined by its natural qualities, but by its exchange value on the market (Goris et al. 2024).

By contrast, agroecological discourses on land are rooted in a ‘relational’ ontology (Wittman and James 2022). The relational ontology of land governs many indigenous land systems (Robin 2019; Morrison 2011; Whyte 2018; Wittman and James 2022) and is characterized by “the belief that humans do not manage land, but instead can only manage our behaviours in relation to it, informed by values of interdependency, respect, reciprocity and responsibility” (Morrison, 2011, p. 99). In this paradigm, westernized frames of land governance are critiqued as being insufficient to enable meaningful land reform and land access (Borras et al., 2015). Concepts like ‘tenure security’ are considered to be stuck in a paradigm of property-driven ownership, which enables commodification of land, and ignores social relationships and harmony between human and nature (Borras et al., 2015). Agroecological discourses on land therefore increasingly focus on ‘land sovereignty’, as opposed to ‘land governance’. ‘Land sovereignty’ proposes to democratize land control, “where access to, control over and use of land is categorically biased in favor of non-corporate and non-elite social classes and groups” (Borras et al., 2015, p. 610). This relational ontology results in a land governance model known as ‘the commons’. The commons views land as a shared resource, and can be managed by communal groups, a voluntary association, but also by local, regional, or national governments (Ostrom and Hess, 2007). Here, the value of land does not lie in exchange value, but rather in intrinsic or community-defined needs (Ostrom 2015).

### **2.3 Land access in the Netherlands**

As stated in the introduction, the Netherlands has one of the highest land prices in Europe. An obvious reason for this is the high population density, combined with the fact that the Dutch agri-food system is strongly embedded in the broader economy (Aarts and Leeuwis 2023). The Netherlands has approximately 1,85 million hectares of arable land, constituting more than half of the total land surface (Vijn et al., 2023). Yet, aside from the spatial and demographic conditions, the Netherlands is distinct from other European countries in terms of the approach to governing farmland. Since the 1960s, the land market has been characterized by neo-liberal policies with little to no regulation (Silvis and Voskuilen, 2018; Aarts and Leeuwis 2023). As a result, the Dutch land market currently suffers from a high degree of land concentration, meaning that increasingly more land is owned by a few large corporations (Van der Ploeg et al., 2015). Between 1990 and 2015, the number of small farms (under 10 hectares) has decreased by 56%, while the number of large farms (over 100 hectares) has increased roughly 3.5 times (Eurostat, 2022). This process, also referred to as ‘farm scale polarization’ (Akram-Lodhi 2008) has resulted in the erosion of small scale farmers with less capital. Subsequently, large landowners who often rent out their land have a powerful position in the land market (Swinnen et al. 2016) because land is strongly heterogeneous (Jellema et al., 2023). Soil type, as well as its quality, varies across regions and must be carefully evaluated in light of the intended land usage. This heterogeneity causes the seller to have numerous options to sell, whereas the buyer usually has specific land requirements and is thus forced to conform to the going market price of the most relevant parcel (Jellema et al., 2023). Essentially, this results in a comfortable position for the landowner, and a precarious position for those seeking land. Another major factor complicating agricultural land prices is that it is not only determined by the estimated agricultural value, but also by other (future) development plans, such as housing and industrial sites (Buitelaar 2021). This speculative component causes farmland to become even more expensive. As a result of high land prices, tenure prices have also shot up. In 2023 the Dutch average tenure price has been estimated at €914 per hectare, making it the highest in Europe (see *figure 2.2*).

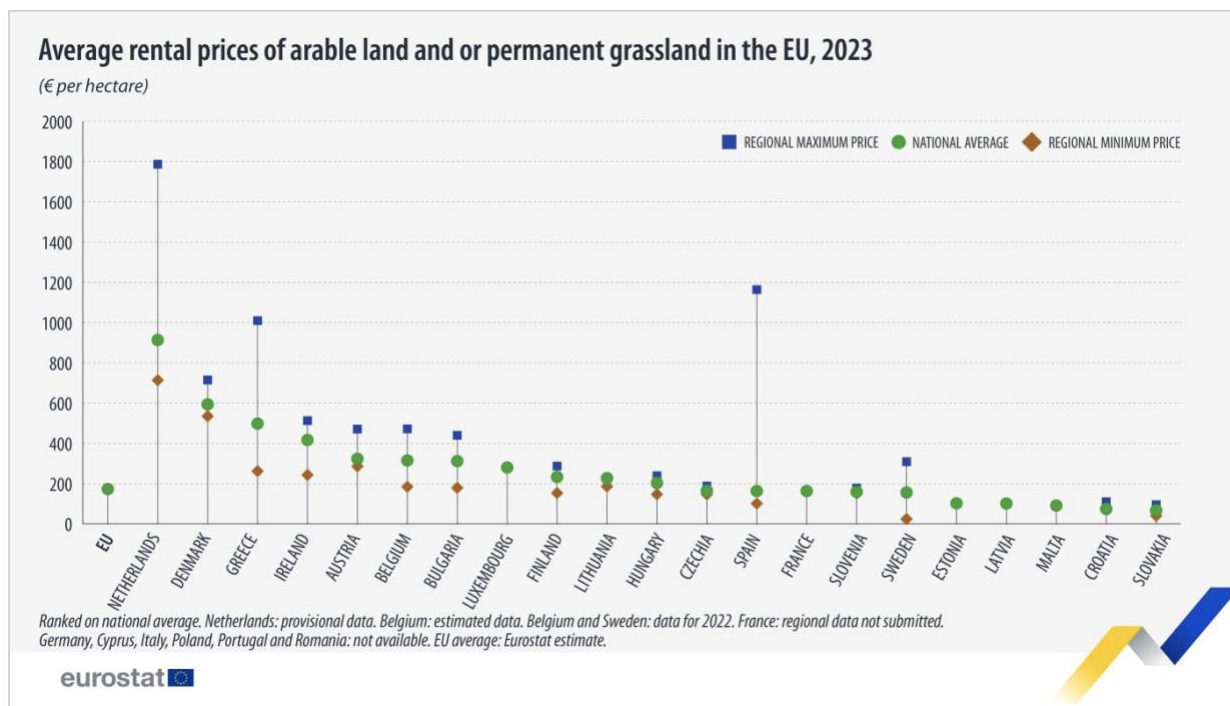


Figure 2.2: Average rental prices of arable land in the EU in 2023. Source: (Eurostat, 2025)

As a result of privatization, rising land prices, and land concentration, grassroots land cooperatives like ‘Land van Ons’ and ‘Aardpeer’ have started emerging. These type of cooperatives are reinventing land tenure models by focussing on long term biodiversity and soil health, with a financial model largely based on citizen’s contributions and shared ownership, thereby improving land access for small-scale sustainable farmers (Land van Ons, n.d.). However, a more interesting development for the purposes of this thesis is that Dutch governments are reconsidering land relations as well. For example, the province of Zeeland has inquired into the transferability of the Safer model from France (Spijkerboer, 2024). Safer is a regulatory agency mandated by the French government to buy, sell, and lease farmland, thereby ensuring that agricultural land remains destined for farming practices and safeguards fair agricultural land prices (Safer, n.d.). Moreover, in 2023, upon request by multiple stakeholders such as the LTO, the NAJK, the FPG, and the BLBH<sup>2</sup>, the Dutch minister of agriculture agreed to reform land tenure legislation (Ministerie van Landbouw 2023; LTO 2023). A proposal for a revised land tenure law was expected to be submitted by the end of 2025 (Ministerie van Landbouw, 2024), however due to political shifts at the time of writing, this proposal is unlikely to be presented soon.

### 3. Theoretical Framework

#### 3.1 Agroecological principles for land tenure

La Via Campesina (LVC), the largest international peasant movement, has long called for state-led land reforms in order to make land more accessible for small-scale agroecological farmers (EuroVia, 2021; LVC, 2000). In the Netherlands, the interests expressed in land tenure reforms by both civil society and governmental actors suggest that here too, more government intervention is required than has previously been thought. As the Dutch voice of LVC, Toekomstboeren, together with the Federation for Agroecological Farmers and Wageningen University have jointly made a number of principles for integrating agroecology in public land tenure (Toekomstboeren, 2022; Goris et al., 2024). These

<sup>2</sup> LTO = Land- en Tuinbouworganisatie Nederland (‘Dutch Farmers Association’), NAJK = Nederlands Agrarisch Jongeren Kontakt (‘Dutch Agricultural Youth Contact’), FPG = Federatie Particulier Grondbezit (‘Federation of Private Land Ownership’), BLHB = Bond voor Landpachters en eigen-grondgebruikers (‘Association for Land Leaseholders and Users’).

principles were developed and tested with a farmer-led action research group, including twenty members of agroecological associations (Goris et al. 2024). This has led to the formulation of the following ‘agroecological principles’ for land tenure.

- 
- 1 There are criteria in lease contracts for ensuring soil quality.
  - 2 Long-term contracts are the norm to improve the soil quality (and thus the ecological, social, and monetary value of the land). That is why our proposal that career lease becomes standard with first right to new career contract/purchase by successor(s) farm. Cultivation lease lapses to prevent farmers failing to invest in soil quality.
  - 3 Lease for sustainable agriculture is not only guaranteed through existing certification labels.
  - 4 All costs of sustainable land management are included in the lease price assessment.
  - 5 Smaller plots than 1 hectare are also eligible for career lease and lease price review.
  - 6 Investments in woody plants (trees and shrubs), soil improvement, biodiversity, and water management can be earned back within the lease term or are transferable.
  - 7 A lease is transferable to farm, rural workers, and/or citizens' initiative, regardless of whether they have family ties to the previous tenant.
  - 8 Barter leases among farmers are possible.
  - 9 Lease to an organized group of farmers and citizens, now often in foundations or associations, is easily possible.
  - 10 Public landowners have an example function and provide standard career leases with sustainability clauses.
  - 11 New leased land of all types of landowners must be publicly announced.
  - 12 The tenant has the right to sustainable living-workspace to be realized on leased land for agricultural activities.
  - 13 The owner can only make rules in all reasonableness regarding use, view, and installation, as these rules can get in the way of contemporary, sustainable agricultural techniques, and way of life. Unwritten rules are not legally valid.
- 

Figure 3.1: 13 agroecological principles for revising Dutch land tenure regulations. Source: (Goris et al., 2024, p. 7)

These principles reflect key aspects of agroecology, covering not only ecological recommendations (e.g. principles 1 & 6) but also social (e.g. principles 7 & 9) and economic (e.g. principles 4 & 5) relations. A few important caveats should be made with regards to these principles. First, a key feature of agroecological principles is that though they are formulated generically, in practice they are applied locally, which means that there is always diversity in how, or how many principles are applied (Wezel et al. 2020). Therefore, these agroecological tenure principles may be more or less relevant depending on the local and national context. Second, because many of these principles were formulated in conjunction with farmers (Goris et al. 2024), many of them reflect *practical* difficulties from their experiences, without calling for more fundamental land reform of the private property model of ownership. Third, although agroecology takes a holistic approach to sustainable farming, not *all* aspects at the intersection of land access and sustainable land use are currently reflected by these principles. For instance, guidelines with regards to animal rights, but also principles on how to improve land access for marginalized groups such as young farmers, women, or migrants are currently absent from these principles. However, considering the limited scope of this thesis, and the absence of other agroecological principles specifically for tenure, this set of principles forms the basis for the analysis of (mis)alignment with sustainable land tenure by public lessors.

### 3.2 Policy Arrangement Approach

This research draws on the Policy Arrangement Approach (PAA) in order to analyze the institutional dynamics in the Netherlands in the policy domain of sustainable land tenure, and how these dynamics interact with agroecological needs for land tenure. The PAA was developed in order to understand stability and change in environmental policy arrangements, in the context of evolving governance structures of modern society (van Tatenhove et al., 2000; Liefferink, 2006). Its particular strength is the ability to understand how policy processes are shaped by broader socio-political and institutional structures, and in turn, how these policy processes can affect these broader structures (Wiering et al. 2018; Liefferink, 2006.; Driessen et al. 2012). In the context of this research, the PAA is thus useful because it helps explain how there might be structural barriers preventing agroecology from being

embedded with land tenure policy, but simultaneously offers a strategic perspective into how this can change.

A ‘policy arrangement’ can be defined as “the temporary stabilization of the content and organization of a particular policy domain” (van Tatenhove et al., 2000, p. 54). The content and organization of a policy arrangement is structured into four dimensions, represented by *figure 2.3*.

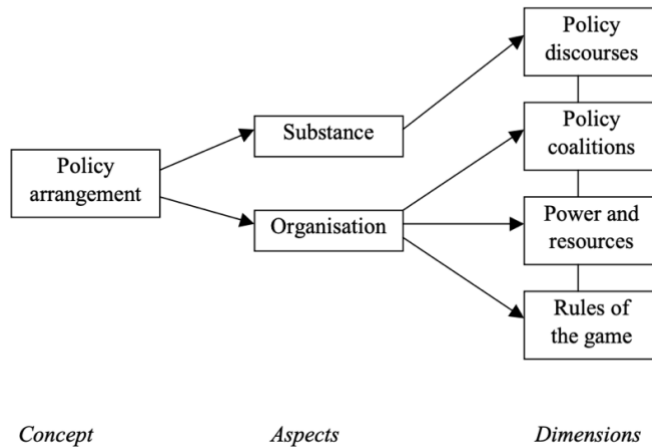


Figure 3.2: Scheme of a ‘policy arrangement’. Source: (van Tatenhove et al., 2000, p. 56)

An important assumption of the PAA is that these dimensions do not operate in a vacuum, but are deeply interrelated where change in one dimension often causes change in others (Liefferink, 2006). The PAA thus subscribes to the notion of the ‘duality of structure’ (Giddens, 1984), meaning that actors have the ability to influence the structure (i.e. actors have agency), but the structure in turn influences how actors behave (Wiering et al., 2018).

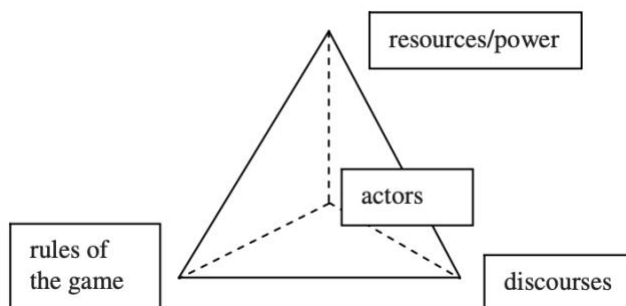


Figure 3.1: The interrelatedness of the PAA’s captured by a tetrahedron. Source: (Liefferink, 2006, p. 48)

The figure above shows how the actors are situated at the heart of the model as it is only through day-to-day practices by policy actors that the other dimensions find expression (Liefferink, 2006). At the same time, the dimensions at the outer angles are also interacting with each other. The PAA thereby distinguishes itself from other popular policy analysis theories such as the Multiple Streams Framework (Kingdon, 1984), which assumes complete independence of each policy ‘stream’ (Zahariadis et al., 2024). The reason for choosing the PAA over other theories is that it combines concepts from other policy analysis theories, thus offering a more holistic analysis of a particular policy domain (Liefferink, 2006). Other considered theories were Institutional Theory (Scott 1987; DiMaggio & Powell 1983), the Multiple Streams Framework (Kingdon, 1984), Policy Network Theory (Marsh & Rhodes, 1992), and Multilevel Governance Theory (Marks, 1993). Despite these theories having their own strengths, I opted for a more ‘open-ended’ theoretical framework in the PAA, keeping in line with the more exploratory aim of this thesis. Before collecting the data, I did not know how sustainable tenure by public lessors would align with the agroecological principles. Only after establishing the level of (mis)alignment could the PAA then be used as an analytical-explanatory framework to help explain *why* that level of (mis)alignment exists. Lastly, the PAA accounts for more hybrid forms of governance, as opposed to

more ‘rigid’ assumptions of Institutional Theory and Multiple Streams Theory, thus making it more apt at analyzing contemporary environmental governance issues (Driessen et al. 2012; van Tatenhove et al., 2000).

### **3.3 Operationalisation**

The goal of the operationalisation is to “translate the theory into measurable variables” (Thiel, 2014a, p. 45). As such, for each subquestion a definition of the relevant concepts is provided. Then, where relevant, a translation of the concept to specific ‘real world’ indicators is given. Finally, the operationalisation is summarized in a simplified conceptual model.

#### Operationalizing RQ1: *How can sustainable tenure by public lessors in Noord-Brabant be characterized in terms of allocation procedures and sustainable land use?*

To answer the first RQ, the term ‘sustainable tenure’ needs to be deconstructed. To do so, this thesis uses the definition of ‘land governance’ provided in the literature review: “the politics of who gets what rights and access to which land, for how long and what purposes, and of who gets to decide” (Borras et al., 2015, p. 603). This definition is operationalized into five main themes: ‘eligibility’ (*who*); ‘allocation’ (*how*); ‘rights’ (*which rights*); ‘duration’ (*for how long*); and ‘sustainable land use’ (*what purpose*).

#### ***Eligibility***

‘Eligibility’ refers to *who* is considered eligible to participate in the allocation process. For example, individuals, cooperations, businesses, or other legal entities.

#### ***Allocation***

‘Allocation’ is the process of *how* to determine who is the most suitable tenant for a specific plot of land. Through this process the lessor can steer how this land will be used because the allocation process essentially filters ‘unwanted’ tenants in light of the intended land use. How this allocation takes place depends on the national context. In the Netherlands, certain legislation stipulates fundamental principles on how public land should be governed, such as the ‘general principles of good governance’ (Central Government, n.d.). However, within the boundaries of these general principles, the design of the allocation process specifically for farmland tenure is largely up to the lessors themselves.

#### ***Rights***

‘Rights’ in the context of land tenure refers to what the tenant can do with that land for the duration of the contract. For example whether the tenant can ‘transfer’ the parcel to a family member or temporarily exchange that land with another farmer. These rights are usually dictated by the type of tenure contract that the public lessor decides to issue.

#### ***Sustainable land use***

Once a tenant is allocated land, the landlord may impose rules and requirements in light of the intended land use. In the case of sustainable tenure, the goal is to farm in a sustainable manner, so the landlord may for example prohibit the use of chemical inputs, or the cultivation of intensive crops. Importantly, what constitutes ‘sustainable farming’ is up to the lessors themselves.

#### ***Duration***

An important aspect for sustainable land use on rented lands is the *duration* of tenure, because investments in for example biodiversity and soil health are only noticeable after a significant number of years (Carolan 2005).

#### Operationalizing RQ2: *How do sustainable tenure practices by public lessors in Noord-Brabant (mis)align with the agroecological principles for tenure by farmer’s collective Toekomstboeren?*

In order to answer the second RQ, the agroecological principles put forward by Toekomstboeren need to be categorized into the sustainable tenure themes. Secondly, (mis)alignment needs to be operationalized. This was achieved by assigning each agroecological principle one of three ‘codes’: A (alignment); M (misalignment); or P (potential). Assigning these codes to the agroecological principles was done after the empirical data was collected, rather than asking each interviewee whether or not they implemented each agroecological principle. Finally, these codes are qualitatively substantiated. *Table 1* gives an overview of how RQ2 was operationalized.

- A = Alignment. The proposed agroecological principle is currently implemented in sustainable tenure models.
- M = Misalignment. The proposed agroecological principle is currently absent in sustainable tenure models.
- P = Potential for alignment. The proposed agroecological principle is currently absent, but there is potential for more alignment. For example, because interviewees express a willingness or desire to make the move to the principle in question.

*Table 1. Measurement guide (mis)alignment. Source: Author.*

| <b>AE principles for tenure</b>                                                                                                                                                                                                                | <b>Sustainable tenure theme</b> | <b>Alignment (A, M, P)</b> | <b>Qualitative explanation</b> |
|------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|---------------------------------|----------------------------|--------------------------------|
| 1. There are criteria in lease contracts for ensuring soil quality                                                                                                                                                                             | Sustainable land use            |                            |                                |
| 2. Long-term contracts are the norm to improve the soil quality (and thus the ecological, social, and monetary value of the land)                                                                                                              | Duration                        |                            |                                |
| 3. Lease for sustainable agriculture is not only guaranteed through existing certification schemes                                                                                                                                             | Allocation                      |                            |                                |
| 4. All costs of sustainable land management are included in the lease price assessment                                                                                                                                                         | Allocation                      |                            |                                |
| 5. Smaller plots than 1 hectare are also eligible for career lease and lease price review                                                                                                                                                      | Eligibility                     |                            |                                |
| 6. Investments in woody plants (trees and shrubs), soil improvement, biodiversity, and water management, can be earned back within the lease or are transferable                                                                               | Rights                          |                            |                                |
| 7. A lease is transferable to farm, rural workers, and/or citizens' initiative, regardless of whether they have family ties to the previous tenant                                                                                             | Rights                          |                            |                                |
| 8. Barter leases among farmers are possible                                                                                                                                                                                                    | Rights                          |                            |                                |
| 9. Lease to an organized group of farmers and citizens, now often found in foundations or associations, is easily possible                                                                                                                     | Eligibility                     |                            |                                |
| 10. Public landowners have an example function and provide standard career leases with sustainability clauses                                                                                                                                  | Sustainable land use            |                            |                                |
| 11. New leased land of all types of landowners must be publicly announced                                                                                                                                                                      | Allocation                      |                            |                                |
| 12. The tenant has the right to sustainable living-workspace to be realized on leased land for agricultural activities                                                                                                                         | Rights                          |                            |                                |
| 13. The owner can only make rules in all reasonableness regarding use, view, and installation, as these rules can get in the way of contemporary, sustainable agricultural techniques, and way of life. Unwritten rules are not legally valid. | Sustainable land use            |                            |                                |

Operationalizing RQ3: How do policy arrangements explain the established levels of (mis)alignment?

The following sections define the PAA dimensions as well as other important concepts in relation to land tenure, and then translates them to ‘indicators’ and real world examples. However, the term ‘indicator’ is not used in the strict methodological sense here, as they do not capture empirical assets that can be given a value. Rather, these indicators serve as analytical categories on which to ‘hang’ codes that emerge from the empirical data.

### ***Actors***

The actor dimension refers to all actors participating in the policy arrangement, and how they interact with one another (Lieberink, 2006). These actors can be classified in different ways. A typical classification in environmental governance is between state, market, and civil society (Steurer 2013), but policy actors often also act in coalitions based on shared policy discourses or resources (van Tatenhove et al., 2000). The first important actor type in this research are state actors, namely public lessors such as provinces, municipalities, and waterboards. However, it is important to note that the land tenure domain in the Netherlands is diffused, extending to market and civil society lessors as well. The second important actor type in this research is the other side of the tenure equation, namely the farmers who seek tenure land. Third, an important actor type are those actors who are not necessarily directly involved in tenure, but do have an important role in shaping agricultural land policies, such as national land governance institutions and farmer interest groups (for both agroecological farmers and conventional farmers).

### ***Rules of the game***

The rules of the game “delineate a policy domain, i.e. they define the possibilities and constraints for policy agents to act within that domain” (van Tatenhove et al., 2000, p. 61). These rules can be classified as being ‘formal’ or ‘informal’, where the former are clearly fixed and stated in legal documents and the latter are more ambiguously part of the ‘predominant political culture’ (van Tatenhove et al., 2000). Although subject to change, this political culture is often quite rigid (Lieberink, 2006). Examples of formal rules in the policy domain of land tenure may be tenure laws, certification schemes, and bidding processes. An example of an informal rule could be the eligibility criteria that public lessors maintain.

### ***Power and resources***

Power, in the context of the PAA, can be defined as “the asymmetrical distribution of resources (structural phenomenon), revealing itself in relations of autonomy and dependency between actors (relational phenomenon)” (Tatenhove et al., 2000, p. 60). Power in this sense thus not only refers to who ‘has the most’ of a particular resource, but also how these actors use their position in relation to other actors in order to leverage their relative position of power. What constitutes the most relevant resource depends on the policy domain, and can take on different forms such as money, legitimacy, land, or expertise (Lieberink, 2006). In this research, the first important resource is ‘knowledge’. More specifically, it refers to the extent to which actors are knowledgeable about agroecology and sustainable agriculture more broadly. For example, how this affects the type of sustainability criteria in tenure contracts. The second important resource is ‘political legitimacy’, which in this context refers to which actor has the highest status in the domain of sustainable land use. Those with the highest legitimacy have the power to weaponize and alter both ‘rules of the game’, such as legal documents, as well as the relevant discourses (Lieberink, 2006).

### ***Natural-spatial conditions***

The above-mentioned resources omits one obvious resource in the context of this research, namely farmland itself. This research particularly draws on the notion of ‘natural-spatial conditions’ (Buizer et al., 2016). That is, there are certain natural-spatial conditions of land that “draws attention to perceived physical problems in specific geographical areas” (Buizer et al., 2016, p. 451). For instance, the presence of forests in the landscape, the soil type, or the proximity of land to a nature reserve may all be factors that influence “who is involved in its governance, the type of issues or conflicts arising, or the type of resources and know-how required to manage the landscape” (Buizer et al., 2016, p. 452). Physical conditions of land may thus be said to ‘foreground’ other resources.

### ***Policy discourses***

A policy discourse can be defined as “a specific ensemble of ideas, concepts, and categorisations that are produced, reproduced and transformed in a particular set of practices and through which meaning is given to physical and social realities” (Hajer, 1997, p. 44). Lieberink (2006) adds that discourses may influence the policy arrangement at two levels. The first is the way that actors make assumptions about ‘general’ modes of governance in society, often referring to the roles of government, market, and

civil society (Lieverink, 2006). At this level, discourses may be considered to ‘underly’ the prevailing rules of the game (Lieverink, 2006). The second level is more substantive in nature, and refers to dominant ideas about the specific policy arrangement at stake (Lieverink, 2006). These discourses may revolve around “the character of the problem, its causes and possible solutions” (Lieverink, 2006, p. 58). Examples of these discourses may be paradigms with regards to how land should be governed, what constitutes sustainable agriculture, perceptions of how the sustainability issues in Dutch agriculture came about, and its possible solutions.

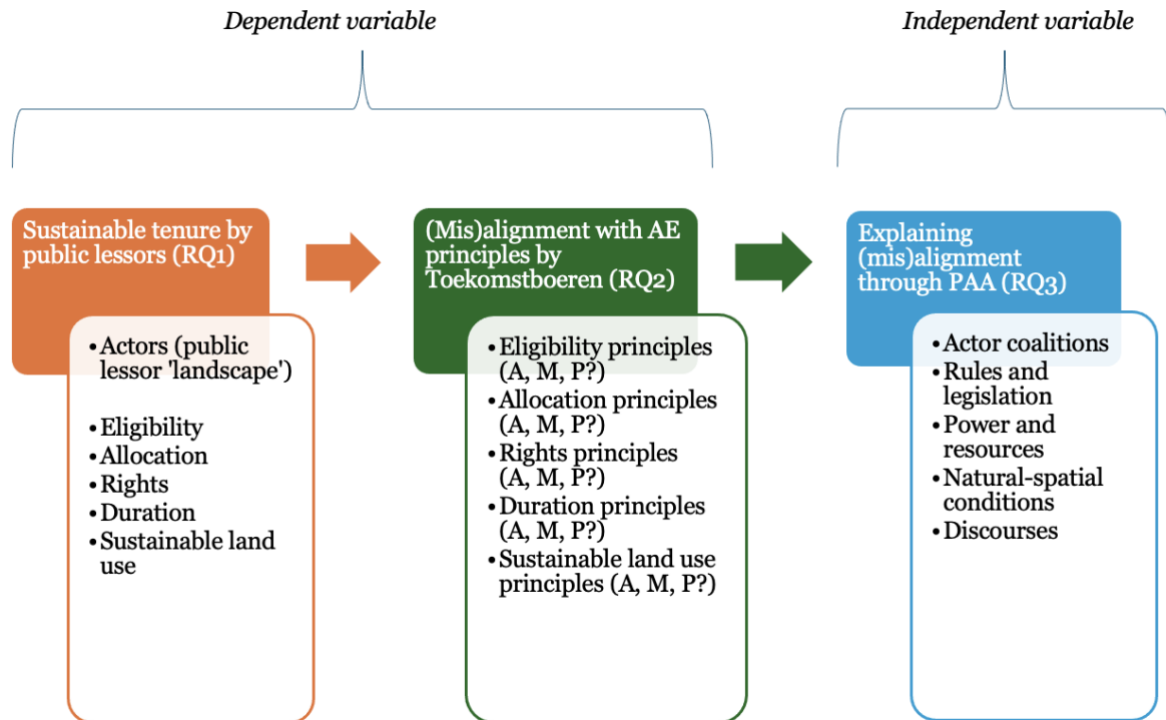
### ***Path dependency***

Another important concept related to the PAA is that of path dependency, which refers to policies where “preceding steps in a particular direction induce further movement in the same direction” (Pierson, 2000, p. 252). In other words, path dependencies help explain why self-reinforcing mechanisms exist in a particular policy domain, and why it is so difficult to change a certain path once it has been ‘chosen’ (M. Wiering et al. 2018).

| <b>Dimension</b>    | <b>Indicators</b>                            | <b>Examples / explanation</b>                                                                                                                                                                                                                                                                                                   |
|---------------------|----------------------------------------------|---------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|
| Actors              | ‘Individual’ actors                          | Public lessors, farmer interest groups, land institutions                                                                                                                                                                                                                                                                       |
|                     | Coalitions                                   | Based on shared resources / policy discourses e.g. around ‘productivist agriculture’                                                                                                                                                                                                                                            |
|                     | Interaction patterns                         | Are actors/coalitions cooperating or conflicting?                                                                                                                                                                                                                                                                               |
| Rules of the game   | Formal rules                                 | Legislation<br>Policy procedures<br>Certification schemes<br>Bidding/allocation processes                                                                                                                                                                                                                                       |
|                     | Informal rules                               | Routines of action<br>Political culture                                                                                                                                                                                                                                                                                         |
| Power and resources | ‘Finances’                                   | E.g. lease prices                                                                                                                                                                                                                                                                                                               |
|                     | ‘Legitimacy’                                 | Level of political influence/recognition                                                                                                                                                                                                                                                                                        |
|                     | ‘Knowledge’                                  | Level/characterization of knowledge on sustainable land use                                                                                                                                                                                                                                                                     |
|                     | ‘Natural-spatial conditions’                 | Type of soil<br>Proximity to nature areas, e.g. Natura2000                                                                                                                                                                                                                                                                      |
| Discourses          | Discourse level 1: Governance assumptions    | Which actors/mechanisms are perceived to be involved in problems and solutions of land access and agricultural sustainability crises? E.g. ‘market mechanisms’ or ‘government intervention’                                                                                                                                     |
|                     | Discourse level 2: Policy-specific paradigms | Paradigms on land governance e.g. ‘land as private property/financial asset’<br><br>Paradigms on sustainable agriculture e.g. ‘productivist agriculture’ or ‘agriculture vs nature’<br><br>Paradigms on agriculture in general in terms of what constitutes being a farmer e.g. ‘farming as family business’, ‘tidy landscapes’ |

Table 2. Operationalisation of PAA dimensions for land tenure, adapted from (Wiering and Arts 2006; Liefferink, 2006)

### 3.4 Conceptual model



Conceptual model. Source: author

This conceptual model summarizes what is being researched as each block reflects one of the research questions. The first block gives a descriptive account of what sustainable tenure looks like in terms of the sustainable tenure themes. The actors are also briefly discussed here to give an account of the public lessor landscape in the province of Noord-Brabant. The second block analyses how sustainable tenure arrangements by public lessors align or misalign with the agroecological principles by Toekomstboeren, given the measurement tool developed by the researcher. The third block then explains why the established level of misalignment exists through the PAA as an analytical-explanatory framework. As such, the first two blocks form the dependent variable, as this is the ‘outcome’ being researched (Thiel 2014b), while the third block is considered the independent variable as the PAA dimensions ‘influence’ this outcome. Importantly, this is a simplified version of reality. In practice, aspects of the PAA dimensions are embedded in the first block as well. However, for the purpose of clarity, these concepts have been demarcated as indicated in the model. Lastly, the PAA is not a ‘complete’ explanatory theory, especially given its highly complex and interrelated nature. It should thus be acknowledged there are probably more ‘independent variables’ than the ones included in this research.

## 4. Methodology

### 4.1 Research philosophy

This research is aligned with the ontological position of bounded relativism, which holds that several realities exist, but within certain cultural, moral, or cognitive boundaries (Moon and Blackman 2014). As introduced in 2.2, questions of land governance vary across time and space, and depend on “historically determined structural and institutional conditions and the alignment of social forces within the state and in society” (Borras et al. 2015, p. 614). For instance, what land is and what it should be used for depends on whether you ask John Locke in the 17<sup>th</sup> century, or the Aboriginal and Torres Strait Islander peoples of Australia. Flowing from these different conceptualizations, there are many different views on how to govern land sustainably as well. Epistemologically, this research is thus most aligned

with constructionism, which states that meaning is “created from interplay between the subject and the object” (Moon and Blackman, 2014, p. 1169). That is, the researcher recognizes that knowledge about the world is not something that can be objectively and consistently ascertained, but is rather in constant engagement with the interpreter. This allows for multiple ‘truths’ about the same real world phenomenon. In line with the ontological and epistemological assumptions, the philosophical underpinning of this research is interpretivism, which holds that there are multiple realities and meanings in the world, which are co-created by, and dependent on the researcher (Guba and Lincoln, 1994). Implications hereof are discussed in 4.6.

## 4.2 Research strategy

Given the exploratory nature of the research question, as well as the philosophical underpinnings, a qualitative research strategy is most appropriate (Thiel 2014). This research adopts an instrumental case study research strategy to facilitate analysis of the level of alignment between agroecology and sustainable land tenure. Often exploratory or explanatory in nature, case study research has proven to be an effective method to investigate complex issues (Harrison et al. 2016), allowing for in-depth analysis of non-numerical variables (Flyvbjerg 2006; Thiel 2014a). Considering agroecology still faces institutionalized misrecognition (Altieri and Nicholls 2012), in-depth case studies are useful to investigate why this is the case, and how this reveals itself in the policy domain of land tenure (Perrin and Baysse-Lainé 2020). As recommended for qualitative research designs, the research employs multiple data collection procedures in order to achieve research triangulation (Creswell and Poth, 2018). The predominant data collection method were semi-structured interviews, supplemented by document analysis and observations.

## 4.3 Case study selection

This research focuses on the province of Noord-Brabant as an instrumental case study. Setting the boundaries of the case was particularly difficult in the case of this research, considering the highly diverse and multi-layered nature of Dutch land governance. The choice to bound the case geographically to the province of Noord-Brabant was based on three reasons. First, Noord-Brabant is a front runner when it comes to sustainable land tenure policy (Pont, 2024). The province has been implementing increasingly more sustainability requirements in tenure contracts since 2017, and introduced a special ‘sustainable tenure’ model since 2025 (Noord-Noord-Brabant, n.d.-b). Considering agroecology has only just scratched the surface of the policy domain in the Netherlands, an interest in sustainable land tenure practice was thus a useful selection criterion for the purposes of this research. Second, Noord-Brabant is one of the provinces where a large number of farmland hectares is publicly owned (28.000 ha), only outnumbered by the province of Flevoland (33.500 ha) (Kadaster, 2024). Based on these first two reasons, the choice for Noord-Brabant can be said to be based on a *critical* case selection as Noord-Brabant has a “strategic importance in relation to the general problem” (Flyvbjerg, 2006, p. 229). The fact that Noord-Brabant has a lot of publicly owned land, as well as the fact that much of this land is increasingly used for sustainability purposes, gives the province a strategic edge in light of the research aim. Although case selection is ideally guided by theoretical arguments, a pragmatic approach is almost always needed (Thiel 2014), which also applied in this research. Thus, the third reason for this case was that the internship organisation of the researcher had established loose relations with policy entrepreneurs in the region, which facilitated the setting up of interviews. Although I hereby make the case for the relevance of Noord-Brabant, it should be acknowledged that similar research would presumably be equally interesting for other provinces. Though a comparative approach between different regions may have been interesting, I chose to analyse only one province to have a clearly delineated focus of study, facilitating more in-depth analysis.

## 4.4 Data collection and analysis

### *Data collection*

Data collection consisted of document analysis, semi-structured interviews and observations. In the literature review stage, several key documents and websites were identified. For the theoretical part of the literature review, main search engines that I used were Web of Science, the Radboud University database, and Google Scholar. Key documents included tenure laws, government letters, reports by the ‘Central Real Estate Agency’ (RVB) and the ‘Land Registry’ (Kadaster), and websites of main governmental tenure bodies such as the State Forestry Service (Staatsbosbeheer) and the ‘National Enterprise Agency’ (RVO). Analysis of these documents and webpages allowed me to understand the basic tenure arrangements in the Netherlands, and map the relevant actors.

In order to get in-depth insights, the main form of data collection were semi-structured interviews. Semi-structured interviews are suitable for investigating complex issues through studying individuals’ perceptions and opinions, without limiting interviewees in their responses (Knott et al. 2022; Kallio et al. 2016; Thiel 2014a). Previous research investigating the process of translating agroecology into policy also indicates that interviews with policy actors have proven to be valuable (Ajates Gonzalez et al., 2018). In light of the case study of Noord-Brabant, which has only recently made the shift to sustainable tenure, semi-structured interviews were extra relevant because public information was sometimes limited or not available yet. Interviewees were contacted based on a combination of purposeful and snowball sampling approaches (Creswell & Poth 2018; Knott et al. 2022). The main criterion for selecting the purposeful interviewees was some indication of engagement in sustainable land tenure. This was usually found on the websites of lessors. Additionally, the document “Aan de slag met duurzame gronduitgifte” by the ‘Green Development Fund’ (Groen Ontwikkelfonds Noord-Brabant)<sup>3</sup> provided ‘good practice’ lessors when it comes to sustainable tenure. These mainly included regional and local level lessors such as waterboards and municipalities. Snowballing of interviewees took place in later stages of data collection, either through previous interviews or through the network of the internship organisation. Importantly, I did not conduct interviews with agroecological farmers because for the aim of this research (focussing on the ‘side’ of public lessors), their interests were deemed accurately reflected by the agroecological principles, as well as previous research (Goris et al. 2024).

The interview questions were divided into two main topics: ‘concrete tenure practices’ and ‘institutional dynamics’. The first topic aimed at capturing the most important features of sustainable tenure practices, and how they align/misalign with the agroecological principles. These questions thus served the first two RQ’s. Importantly, not every agroecological principle was discussed one by one explicitly. Rather, questions were asked openly in relation to the key themes of tenure. The second topic explored broader tenure dynamics, reflecting on institutional barriers such as laws, resources, and competing interests. This topic thus served the third RQ. Each topic started with one open-ended question, and supplemented with probing questions to stay on track (Knott et al. 2022) (*see appendix I for full interview guide*). Finally, four observations formed the last pieces of data. These observations were discovered through my internship organisation and interviews.

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<sup>3</sup> <https://www.duurzamegronduitgifte.nl/handreiking-aan-de-slag>

Table 3: Overview of interviewees

| Name                                            | Short description                                                                                         | Number of hectares for lease | Job title interviewee                                  | Name in research |
|-------------------------------------------------|-----------------------------------------------------------------------------------------------------------|------------------------------|--------------------------------------------------------|------------------|
| <b>National tenure actors</b>                   |                                                                                                           |                              |                                                        |                  |
| Staatsbosbeheer (State Forestry Service)        | Manages forestland and conservation areas nation-wide. Leases land for 'nature-inclusive' farming.        | 40.000 ha                    | Coordinating advisor nature-inclusive agriculture      | ST               |
| <b>Regional tenure actors</b>                   |                                                                                                           |                              |                                                        |                  |
| Province of Brabant (1)                         | Offers different forms of tenure including 'nature tenure' and 'sustainable tenure'                       | 3000 ha                      | Coordinator real estate management                     | BR1              |
| Province of Brabant (2)                         | <i>Idem</i> ^                                                                                             | 3000 ha                      | Project lead biological & nature-inclusive agriculture | BR2              |
| Grondkamer Zuid (Land Registry Southern Region) | Oversees tenure in the interests of agriculture. Each Land Registry is an independent administrative body | n.a.                         | Secretary Land Registry Southern Region                | GR               |
| De Dommel (Waterboard)                          | Regional waterboard offering 'sustainable tenure'                                                         | 2000 ha                      | Senior advisor land affairs                            | DD               |
| <b>Local tenure actors</b>                      |                                                                                                           |                              |                                                        |                  |
| Municipality of Cranendonck                     | Maintains a similar 'sustainable tenure' model to the province                                            | 185 ha                       | <i>anonymous</i>                                       | CR               |
| Municipality of Land van Cuijk                  | <i>Idem</i> ^                                                                                             | 335 ha                       | Advisor land affairs                                   | LvC              |
| Municipality of Heusden                         | <i>Idem</i> ^                                                                                             | 620 ha                       | Account manager agricultural business                  | HE               |
| Municipality of Bergeijk                        | Offers tenure with obligatory sustainability criteria                                                     | 1000 ha                      | Land steward                                           | BE               |
| Municipality of Vught                           | Offers tenure with sustainability criteria, has an internal commission for allocation                     | 300 ha                       | Councilor spatial development                          | VU               |

Table 4: Overview of observations

| Event name, location & date                                                      | Short description                                                                                                                                                                                                                                    | Organisations & participants                                                                                                                                                                                 | My role                                                                                                                                              | Name in research |
|----------------------------------------------------------------------------------|------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|--------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|------------------------------------------------------------------------------------------------------------------------------------------------------|------------------|
| ‘Rooting Deeper Festival’<br>Ede<br>31-05-2025                                   | AE festival and farmer’s market, including several workshops related to AE, including one on access to land.                                                                                                                                         | AE farmers;<br>Toekomstboeren;<br>Dutch AE Network;<br>Federation of Agroecological Farmers;<br>Extinction Rebellion;<br>Reclaim the Seeds;<br>A SEED Europe;<br>International members from La Via Campesina | Observer                                                                                                                                             | Obs1             |
| ‘Online bijeenkomst duurzame gronduitgifte’<br>Online<br>19-06-2025              | Online conference on sustainable tenure by the learning network ‘Sustainable Land Allocation’ (Duurzame Gronduitgifte). Different presentations were given on how to integrate sustainability in land allocation.                                    | Policy makers (municipalities, waterboards, & province of Brabant);<br>LBPSight (consultancy firm);<br>BPD (project developer);<br>GOB (advisory board for ‘green development’)                              | Observer                                                                                                                                             | Obs2             |
| ‘Regeneratieve landbouw & (erf)pacht’<br>University of Wageningen<br>26-06-2025  | Academic workshop on regenerative agriculture and tenure. Though not specifically focussed on AE, this observation provided deeper insights on tenure law, as well as valuable comments and opinions from professionals in the field of land tenure. | Lawyers;<br>Municipal advisors;<br>Land stewards                                                                                                                                                             | Observer                                                                                                                                             | Obs3             |
| ‘Herfstconferentie Toekomstboeren: Van Wortel tot Wet’<br>Randwijk<br>14-11-2025 | Conference where farmers and policymakers discussed possibilities on how to incorporate agroecology into policy. Themes included: land access, seeds, and human (farmer’s) rights.                                                                   | AE farmers;<br>Policy makers & advisors (municipalities & province of Gelderland);<br>NGO advocates                                                                                                          | Participant – I gave a workshop where I presented results of my thesis & discussed recommendations with other participants during a group discussion | Obs4             |

### Data analysis

In order to manage and organise the data, the interview recordings were first transcribed using either Microsoft Teams or Word, and edited manually. Transcribing usually took place on the day of the interview in order to note emergent ideas and establish initial codes. Interviews were also already analysed in the course of data collection, as data analysis of interviews is often an iterative process (Knott et al. 2022). Coding and analysis took place in Atlas.ti. To answer the question of (mis)alignment, codes were categorized into the themes of land tenure: ‘eligibility’; ‘allocation’; ‘rights’; ‘duration’; and ‘sustainable land use’. Data concerning the explanatory part of the research question were openly coded, looking for the major categories that emerged from the research (Creswell and Poth, 2018). The indicators of the PAA operationalisation were initially used as general guides to structure the codes, but were expanded with other dominant codes as the research progressed. Once an exhaustive list of codes was achieved, the axial coding phase began, in which general patterns among the codes were identified (Thiel 2014a). Finally, some other categories were added to the coding scheme which did not necessarily answer the RQ’s, but were used for non-theoretical parts of the thesis, such as practical recommendations (see appendix 2 for final coding scheme).

#### **4.5 Validity and reliability**

Internal validity concerns whether the researcher has achieved to measure what was intended to be measured (Thiel 2014). The operationalisation of each research question, accompanied by schematic tables and the conceptual model were carefully constructed to give a comprehensive overview of the entire research, thereby contributing to internal validity. Additionally, the multitude of data collection methods aimed to gather a diverse range of empirical data, resulting in research triangulation. Lastly, feedback from peers, the thesis supervisor, and the internship organisation aided in sharpening the aim of questions and the clarity of writing.

External validity concerns the degree to which particular research can be generalised (Thiel 2014). Given the highly context-dependent nature of land governance, especially in relation to varying institutional and natural-spatial conditions, external validity is limited. As regions differ in terms of soil type, the concentration of different farmer types, and different tenure arrangements, similar studies could produce different results. Additionally, considering Noord-Brabant is a frontrunner in sustainable tenure practice, the perspectives from this research may not be representative for other provinces. Nevertheless, within the Netherlands this research may still be generalizable to a degree as the broader contributions of this thesis, especially with regards to path dependencies in Dutch farmland governance, can still be of interest for future studies on tenure in the Netherlands as a whole. A limitation herein was the choice to limit the research to one instrumental case study. Typically, qualitative research may ensure validity by seeking out differences and similarities from several perspectives (Noble & Smith 2015), however due to methodological choices and time constraints this research refrained from a comparative case study approach.

Reliability concerns whether the research is consistent, and thus the extent to which it is repeatable (Thiel 2014a). Reliability has been strengthened by justifying the major theoretical and methodological choices, most notably in choosing the PAA as a theoretical framework and in choosing Noord-Brabant as a case study. As Liefferink (2006) notes, the PAA is merely a tool and should be adapted, and possibly supplemented by other relevant concepts, depending on the research question (Liefferink, 2006). Because the operationalisation adapted the PAA to the context of land governance more generally, this approach could be repeated for other regions in the Netherlands.

#### **4.6 Ethics and positionality of the researcher**

The interpretivist philosophy underlying this research produced a challenge for me as a researcher, because the research question itself pre-supposes a bias towards agroecology as part of the solution to the sustainability issues faced in agriculture. This was challenging because the study is not centered on the perspective of the agroecological farmer, but rather the perspectives of the public lessor and the policymaker. These perspectives do not always share the same language, and may produce inconsistencies or contradictions, which meant there was the risk of confirmation bias (Thiel 2014a). Nevertheless, subjectivity was minimized by asking mainly open questions during interviews, and focussing specifically on the experiences of the lessors. Furthermore, full disclosure was granted to my interviewees in terms of what my research entails, and their wishes in terms of referencing and anonymity (where applicable) were respected. Finally, I critically evaluated the collected data in light of the broader debates in the literature. By returning to these debates, my findings did not reflect my own opinions.

### **5. Results**

The results are structured into three sections. 5.1 first gives an overview of public lessors in the province of Noord-Brabant and then describes each tenure theme one by one. Each section first describes the practices by public lessors and then discusses how they (mis)align with agroecological principles. As such, 5.1 answers the first two research questions. Sections 5.2 and 5.3 explain why this (mis)alignment exists through the PAA dimensions, thus answering the third research question.

## 5.1 Sustainable tenure by public lessors and (mis)alignment with AE principles

### 5.1.1 Mapping the actors

The main public tenure actors can be categorized along three levels: the national, the regional, and the local. On the national level, the largest provider of public land tenure, with 53.000 hectares, is the State Forestry Service (Staatsbosbeheer) (SFS), the main nature-protection agency in the Netherlands (Staatsbosbeheer, n.d.). Upon request from the Dutch ministry of agriculture, the SFS has additionally been tasked with leasing 'nature-designated' land for agriculture in light of the ambitions to make Dutch agriculture more 'nature-inclusive' (Staatsbosbeheer, n.d.). The second national actor is the Central Government Real Estate Agency ('Rijksvastgoedbedrijf') (RVB). The RVB manages different kinds of real estate, among which 41.000 hectares of farmland (Rijksvastgoedbedrijf, 2024), but unfortunately was not able to provide an interview. On the regional level, the province of Noord-Brabant is the main actor, with roughly 3000 hectares of farm and forest land (Noord-Noord-Brabant, n.d.). Another important actor, despite not being a lessor, is the Land Registry (Grondkamer). The Land Registry is divided into five regions, each of which is in charge of reviewing tenure contracts that are submitted in that particular region (RVO, 2025). The Land Registry is made up of both tenant representatives (farmers) and lessor representatives in order to facilitate a fair balance when reviewing the contracts (GR). On the local level, municipalities are collectively the second largest actor, with 46.000 hectares nation-wide (Kadaster, 2024). In Noord-Brabant, the municipalities make up 41% of publicly owned farmland (Kadaster, 2024), thus playing a significant role. Additionally, waterboards are increasingly playing a large role in tenure in order to reach their water goals. Water boards that have become active in tenure include 'Noord-Brabantse Delta', 'De Dommel', 'Noord-BrabantWater', and 'AA en Maas'.

Importantly, public tenure actors are only few amongst the totality of tenure actors in the Netherlands. Among market lessors are private landowners and real estate agencies for example. Additionally, civil society lessors are increasingly taking hold in the Netherlands as well, mostly in the form of 'sustainable land funds', often taking on the legal entity of a cooperative (De Koe 2025) (Obs 2). Land cooperatives such as Land van Ons, Aardpeer, and Lenteland buy land with citizen's contributions, and subsequently lease that land exclusively to small-scale farmers whose farming practices have positive ecological effects (Poll 2025).

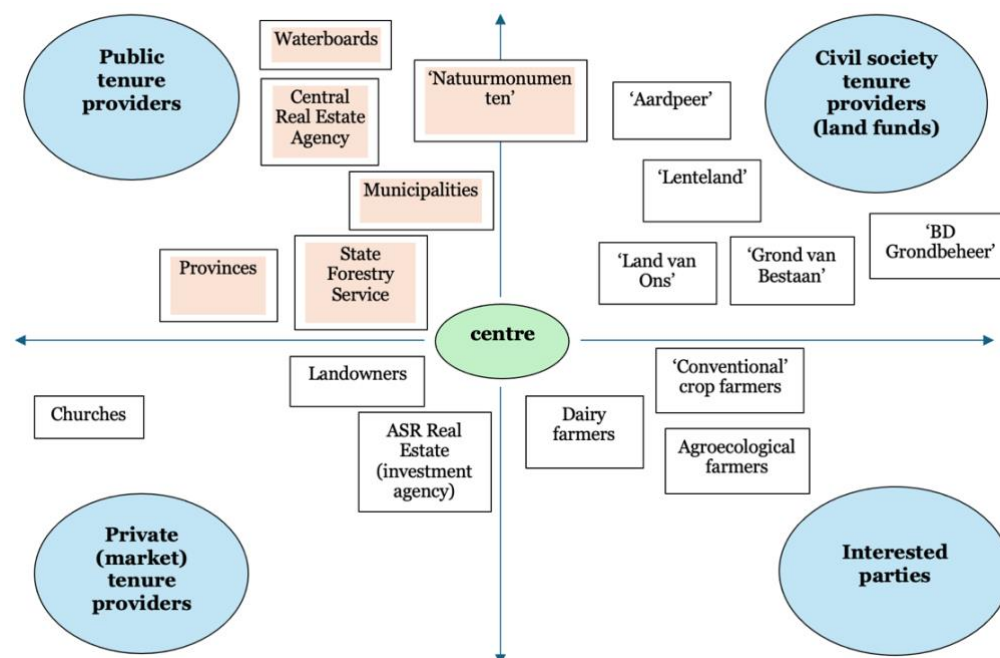


Figure 5.1: General overview of actors in Dutch land tenure<sup>4</sup>. The shaded actors are the focus of this research. Source: Author

<sup>4</sup> This overview is not exhaustive, it only gives a general indication of some of the most important actors. These actors were compiled mainly through analysis of policy documents and online searches.

### 5.1.2 Eligibility: the importance of being an ‘agricultural business’

A critical rule to be eligible for tenure which was frequently cited, is that the tenant has an agricultural business (‘bedrijfsmatig agrarisch bedrijf’) (GR, CR, LvC, BE). As the interviewee from Bergeijk said: “*Also if you look at the legislation of tenure, it has to be an agricultural business, and often there is already a discrepancy that, well, smaller private persons and such... how businesslike is that?*” (BE). Whether this is a formal or informal rule balances on a blurred line. On the one hand, tenure law indeed states that being an agricultural business is a pre-requisite for being eligible for land tenure (Art 7:311 BW). This is subsequently defined as “a complex of economic activities, aimed at profit, through agricultural practices” (Nysingh 2021). On the other hand, although being an agricultural business is a prerequisite by law, the definition provided often results in a low threshold for when a farmer can be considered an ‘agricultural business’ (DeHaan 2016; SWDV 2017; Nysingh 2021). Nevertheless, public lessors often automatically consider a cooperative, or a foundation, or farmers who have additional jobs not to be an agricultural business. Instead, they are sometimes referred to as ‘hobby farmers’ or ‘porch farmers’ (VU, LvC, BE). For example, when discussing a small farmer foundation, the interviewee from the municipality of Land van Cuijk said: “*We deliberately don’t put them in tenure because they are a foundation. So then they don’t meet the requirements of a full-fledged agricultural business, so we try to circumvent that in that way*” (LvC). This makes it difficult for agroecological initiatives to be eligible for tenure because they often do not have a purely commercial incentive (Obs1). This stands in stark contrast with the ‘family farms’ that lessors typically associate with being agricultural businesses (BE). As a result, many agroecological initiatives do not fit the ‘standard’ farming picture in the eyes of lessors (BR2), thereby excluding them from being able to participate in the allocation process in the first place.

| Relevant agroecological principle(s) for theme ‘eligibility’                                                               | (Mis)alignment | Qualitative explanation                                                                                                                                                                    |
|----------------------------------------------------------------------------------------------------------------------------|----------------|--------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|
| 9. Lease to an organized group of farmers and citizens, now often found in foundations or associations, is easily possible | M              | Public lessors often automatically question the ‘businesslike’ nature of an agroecological foundation or association. Therefore, these groups are currently often not eligible for tenure. |

### 5.1.3 Allocation: bidding systems with certificates

Once tenants fulfill the eligibility requirements, they enter into the allocation procedure. This is done openly and publically, in accordance with the principle of equality under law, as the interviewee from the province explained: “*With governments the equality principle must be applied, so you cannot arrange things informally [...] so everyone can apply for our tenure lands*” (BR1). This principle applies to all public lessors. In terms of the allocation process itself, most lessors use a bidding system where sustainability certificates play a key role (ST, BR2, CR, VU, LvC). A bid usually consists of a monetary value, and a sustainable farming certificate which can ‘amplify’ the monetary value. For example, the most common and ‘valuable’ certificate is Skal, issued by an independent organization which monitors biological agricultural activities (Skal Biocontrole, n.d.). The Skal certificate is worth 1,62 so a bid of €1000 becomes €1620. The candidate with the highest bid ‘wins’ the parcel. There are a variety of other certificates such as ‘On the Way to Planetproof’ and ‘Beter Leven’, each with their own ‘amplification value’. Many of these certificates are recommended and certified by Wageningen university and Stichting Milieukeur (ST, HE). These certificates are a key component of the allocation process, as the interviewee from the province revealed: “*From next year onwards it will even be the case that farmers who do not possess a certificate, then you don’t participate at all anymore. Unless there is absolutely nobody who makes a bid with a certificate, then you still have a chance. But if you don’t have anything at all, you’ll simply be eliminated in the first round*” (BR2). Such a reliance on the use of certificates prevents agroecological farmers from winning the allocation procedure because a certificate for agroecology does not exist (Verkuil et al. 2024). In theory, agroecological farmers could apply for a Skal certificate but many do not because it can be expensive and time-consuming (Obs4) (Toekomstboeren 2022).

On top of the certificates, some lessors such as the State Forestry Service and the municipality of Vught also focus on the motivation and dedication of the farmer (ST, VU). This might sound

beneficial for agroecological farmers, as it gives them an opportunity to make their case outside of the official bidding system. However, these interviewees explained that motivation letters are often evaluated based on ‘expected change’. For example the SFS interviewee said: “*We mainly want to see that the entrepreneur shows ambition, but we also have businesses who are already very biodynamic. Well, those businesses are going to show very little ambition because they already have the bar so high. We really want to challenge the entrepreneur: put on paper what you are going to do the coming 12 years*” (ST). This quote reveals that the SFS is focused more on giving a platform to conventional farmers who want to transition to more sustainable farming, rather than giving a platform to the already ‘exemplary’ agroecological farmer. This denies agroecological farmers a chance to be allocated land because there is no way for them to ‘prove’ their value outside of the bidding system.

| <b>Relevant agroecological principle(s) for theme ‘allocation’</b>                                 | <b>(Mis)alignment</b> | <b>Qualitative explanation</b>                                                                                                                                                                     |
|----------------------------------------------------------------------------------------------------|-----------------------|----------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|
| 3. Lease for sustainable agriculture is not only guaranteed through existing certification schemes | M                     | Lease for sustainable agriculture is almost exclusively determined through certification schemes. Where individual assessment does play a role, preference is often given to conventional farmers. |
| 11. New leased land of all types of landowners must be publicly announced                          | A                     | This principle is guaranteed by law.                                                                                                                                                               |

#### 5.1.4 Duration: short-term liberalized tenure

Almost all lessors lease their land for a short period (BR1, DD, VU, LvC, BE, HE, CR). How this is arranged per lessor varies, however most lessors split their tenure contracts in shorter terms or use contracts shorter than six years (ST, BR2, LvC, HE, VU). For example in the municipality of Vught: “*With us it is three plus three years, so that the farmers do have some future perspective. Because if you lease year to year, then they are just going to exhaust the soil, they will not take care of it*” (VU). This has mixed implications for agroecological farmers. On the one hand, the fact that lessors almost exclusively use short-term contracts directly opposes the agroecological need for standardized long-term contracts. Agroecological practices need long-term land security for the same plot of land because without it, the farmer cannot develop a sustainable business model (Obs1)(Obs4). On the other hand, lessors are aware that short-term contracts are futile if they genuinely want to make land use on their tenure parcels more sustainable. This was further underscored by the municipality of Bergeijk: “*Now we have three times one year, but I expect that that will maybe just become four or five or six years [...] because you just notice right? A farmer who has that land for one year? He puts some mais on it, does not take care of it, no lime, just inject a lot of fertilizer, and a year later they are gone*” (BE). For this reason, municipalities such as Vught and Cranendonck would be open to longer tenure durations (VU, CR).

| <b>Relevant agroecological principle(s) for theme ‘duration’</b>                                                                  | <b>(Mis)alignment</b> | <b>Qualitative explanation</b>                                                                                                                                                                                |
|-----------------------------------------------------------------------------------------------------------------------------------|-----------------------|---------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|
| 2. Long-term contracts are the norm to improve the soil quality (and thus the ecological, social, and monetary value of the land) | P                     | Currently, short-term contracts are the norm. However, some public lessors are aware that this is not conducive to sustainable land use and are therefore open to the possibility of longer tenure durations. |

### 5.1.5 Rights: Limited transferability & possibilities for activities on leased land

In order to understand this tenure theme, a basic understanding of tenure contracts needs to be introduced. There are currently two types of tenure contracts that are most common in the Netherlands: ‘regular tenure’ and ‘liberalized tenure’. Regular tenure is characterized by relatively long tenure periods, automatic extension, and maximum prices, thus making these arrangements rather favorable for tenants, but unfavorable for lessors (Silvis and Voskuilen, 2018). By contrast, liberalized tenure offers the tenant limited rights. *Figure 5.2* shows the main differences between them.

| <b>Rights</b>                                                                                       | <b>Regular tenure</b>                                                         | <b>Liberalized tenure</b>                                                                                    |
|-----------------------------------------------------------------------------------------------------|-------------------------------------------------------------------------------|--------------------------------------------------------------------------------------------------------------|
| Duration                                                                                            | Fixed<br><br>Either >6 years or >12 years<br><br>Typically long-term          | Fixed<br><br>Either <6 years or >6 years<br><br>Majority are <6 years, contracts for 1 year are not uncommon |
| ‘Continuation right’ (automatic contract renewal)                                                   | Yes                                                                           | No                                                                                                           |
| Price regulation                                                                                    | Yes<br><br>Maximum lease price determined yearly per region by the government | No<br><br>Parties involved are free to determine lease price                                                 |
| ‘Substitution right’ (the tenant can choose a family member as a substitute tenant)                 | Yes                                                                           | No                                                                                                           |
| ‘Co-tenancy right’ (the tenant can share the tenancy with a family member)                          | Yes                                                                           | No                                                                                                           |
| ‘Preferential right’ (in case the land is opted to be sold, the tenant has first right of purchase) | Generally yes, exceptions may apply                                           | No                                                                                                           |

*Figure 5.2: Differences between regular and liberalized tenure*<sup>5</sup>. Adapted from source: (RVO, 2024)

In absolute numbers, regular tenure is still the most common contract because these contracts extend automatically until a farmer resigns, but 90% of new tenure contracts are liberalized contracts (RVO, 2025). The preference for liberalized tenure was also present among the interviewed public lessors. For example the interviewee from Vught said: “*Our council has determined in the past that all regular tenure that becomes free will be made liberalized tenure [...]. We won’t go to court or anything to force it, but in good consultation, this is what we aim for*” (VU). The preference for liberalized tenure can be explained by the fact that tenure is often seen as a ‘temporary’ tool, in light of other governance purposes (BR1, CR, VU). When discussing regular tenure, the interviewee continued that: “*It is more in favor of the tenant, with different sorts of rights and duties, and for a government that is often... yeah, less handy because land management is partly strategic management. So if that land is stuck in regular tenure, then you cannot do a lot with it*” (VU). The importance of other governance purposes will be elaborated upon in 5.2.

Additionally, interviewees from the province and the municipality Heusden also mentioned that small scale farmers often do not acquire the necessary permits to create an adequate working environment. For example, the interviewee from Heusden, who herself had to reject requests by initiative ‘Heerenboeren’ said: “*They ended up with us, but then I ran into a lot of things. Firstly, getting the land is difficult enough, and then they also wanted to build things for example to store machinery. Then it often goes wrong, or at least you ‘crash’ on the spatial... because that does not fit within our*

<sup>5</sup> It should be noted that other tenure contracts exist but are less significant. Generally, other contracts have different mixes of these rights.

*spatial possibilities*” (HE). In sum, the prevalence of the liberalized tenure model, together with the limited permits available for rented land limit what farmers can do with the land that they lease.

| Relevant agroecological principle(s) for theme ‘rights’                                                                                                          | (Mis)alignment | Qualitative explanation                                                                                                                    |
|------------------------------------------------------------------------------------------------------------------------------------------------------------------|----------------|--------------------------------------------------------------------------------------------------------------------------------------------|
| 6. Investments in woody plants (trees and shrubs), soil improvement, biodiversity, and water management, can be earned back within the lease or are transferable | M              | Not possible within liberalized tenure                                                                                                     |
| 7. A lease is transferable to farm, rural workers, and/or citizens’ initiative, regardless of whether they have family ties to the previous tenant               | M              | Not possible within liberalized tenure                                                                                                     |
| 8. Barter leases among farmers are possible                                                                                                                      | M              | Not possible within liberalized tenure                                                                                                     |
| 12. The tenant has the right to sustainable living-workspace to be realized on leased land for agricultural activities                                           | M              | On leased land, public lessors often do not or can not provide the necessary permits for tenants to create the necessary living-workspace. |

### 5.1.5 Sustainable land use: prohibitions & the ‘definitional issue’ of sustainable tenure

All the interviewed public lessors work with a sustainable tenure model which prohibits the use of certain chemical inputs (BR1, DD, CR, LvC, HE, BE, VU). The most common obligation is the prohibition of the use of glyphosate, a chemical which kills weeds but in the process also degrades the soil. Many lessors also include other prohibitions, like the municipality of Heusden: “*We also rule out crops that demand a lot from the soil. So for example, planting trees is not allowed on our parcels, as well as potatoes and bulbs*” (HE). Other common prohibitions include artificial fertilizers and other chemical pesticides (VU, DD, CR).

Despite the consensus on the prohibition on chemical inputs, opinions differ on what actually constitutes ‘sustainable’ tenure. In the first place, the question of what is considered sustainable is always on a relative scale, as the interviewee from the Land Registry pointed out: “*That ‘Beter Leven’ certificate, the requirements and obligations that that certificate brings to the table? That is possibly already a level of sustainability which a SKAL-farmer frowns upon. The SKAL-farmer will say, ‘you are only a sustainable farmer when you are a SKAL-farmer’*” (GR). In the second place, there are concerns that some sustainability measures are at odds with each other. For example, one of the most common measures is to mow grass later in the summer. This allows for meadow birds’ nests to flourish longer, which is a major goal of the Meadow bird Covenant in the region. However, if done so consistently, mowing later in the summer might give room for one type of grass to become dominant, which is disadvantageous for the biodiversity (BR1). This evokes a sentiment that ‘it can never be perfect’, and that any measure always involves trade-offs. Thirdly, the interviewee from Cranendonck mentioned that different tenants complain that some sustainability measures are more favorable to a specific category of farming: “*You also see for example that some farmers say we only have sustainability requirements that are applicable to arable farmers, but then the arable farmers say we only have requirements that apply to dairy farmers, and so on*” (CR). This all points to a fundamental tension underlying sustainable tenure, which is that it is difficult to determine what actually determines ‘sustainable’ land use. Some public lessors (HE, BE, VU) consider the carbon footprint of the distance a farmer has to drive to the parcel an important aspect: “*And then we also have the distance, because we had farmers travelling thirty kilometers. I mean, why? So we also want to decrease travel movements, keep the chain as short as possible*” (VU). Logically, waterboard the Dommel mainly focusses on water quality (DD). Only the province of Noord-Brabant seemed to have a diverse range of sustainability ‘targets’ within their tenure policy: “*Well, you could actually say the aspects of sustainability we consider important? Well, soil, water, nitrogen, and biodiversity*” (BR2). This is one of the few tenure themes where agroecology, and sustainable tenure by public lessors align.

| Relevant agroecological principle(s) for theme 'sustainable land use'                                                                                                                                                                          | (Mis)alignment | Qualitative explanation                                                                                                                                            |
|------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|----------------|--------------------------------------------------------------------------------------------------------------------------------------------------------------------|
| 1. There are criteria in lease contracts for ensuring soil quality                                                                                                                                                                             | A              | All public lessors have criteria in their tenure contracts which ensure soil quality, and other sustainability targets.                                            |
| 10. Public landowners have an example function and provide standard career leases with sustainability clauses                                                                                                                                  | A              | All public lessors have criteria in their tenure contracts which ensure soil quality, and other sustainability targets.                                            |
| 13. The owner can only make rules in all reasonableness regarding use, view, and installation, as these rules can get in the way of contemporary, sustainable agricultural techniques, and way of life. Unwritten rules are not legally valid. | M              | Sustainability requirements that public lessors impose are legally determined within the contracts. This offers little flexibility for deviating from these norms. |

## 5.2 How Policy Arrangements affect (mis)alignment

### 5.2.1 Power and resources

#### *Lack of agroecological legitimacy and competition with other farmers*

One of the most significant findings of this research is that agroecology lacks recognition and legitimacy in the eyes of lessors. In the first place, the term 'agroecology' seemed to bring some issues. Most lessors had a limited perception of agroecology or were only vaguely familiar with the term (BR1, DD, BE, ST, HE, VU). For example, the interviewee from De Dommel said "*I was familiar with the initiatives, but I did not know you could hang all of them onto that name*" (DD). In fact, most interviewees had heard of initiatives which could be classified as agroecology such as Heerenboeren, and other CSA's and food forests, but had not made the link to those initiatives being agroecological. This could be seen as a natural result of the lack of internal agricultural knowledge mentioned in the previous section, but also reflects a more common tendency in the field of 'sustainable agriculture'. During the third observation, a workshop on regenerative agriculture and tenure law, one of the speakers pointed out that confusion may arise due to the numerous terms that are used in this field. Terms such as 'biological agriculture', 'agro-forestry', 'circular agriculture', 'nature-inclusive agriculture', and 'agroecology' are sometimes used interchangeably (Obs3). The confusion that may arise as a result is not arbitrary. Governments desire clear definitions in order to develop a policy on it, and sometimes, the use of a certain term may even be of importance for securing subsidies (VU, Obs3).

Aside from the terminology, lessors who were familiar with agroecology deemed it to be especially valuable in terms of 'social cohesion'. For example the province stated that "*In terms of community, it is also a huge pre. And that is also often important for a municipality, at least if they are smart*" (BR2). Some municipalities reiterated this notion of agroecological initiatives having specifically a social contribution to the community (VU, HE), however AE's agricultural potential as an alternative way of farming was widely absent. Agroecological initiatives are often not considered to be professional farmers, but rather people who are 'involved' in farming. A frequently mentioned reason for this is the claim that agroecological initiatives lack a profitable business model. Across all levels of lessors, interviewees mentioned that their tenants should be able to make a decent living of their land, often implying that agroecological practices are incapable of doing so (BR1, BR2, VU, ST). When discussing an agroecological initiative in the region, the interviewee from Vught said: "*It is commendable, but it is mainly hobbyism from a couple of city people. They lived in the city between the concrete, and they wanted a food forest, but they have no clue what that means or entails, etcetera.*" (VU). In addition to economic viability, a lack of agro-scientific proof with regards to the environmental

benefits of agroecology was also cited. During the third observation, there was some skepticism about whether the effects of regenerative farming can really be measured, with one attendee even claiming that intermediary soil checks did not indicate improved soil health (Obs3). The fact that the intended outcomes of agroecological practices are not easy to measure presents a serious challenge for lessors, who prefer easy and objective measurable indicators (BR2, LvC, BE, DD), the general idea being “*the more concrete, the better*” (Obs3).

This already meager recognition of AE is worsened by the fact that agroecological farmers are also in competition with established conventional farmers. The interviewee from Cranendonck revealed that other farmers expressed dissatisfaction with biological farmers being allocated land, sometimes claiming “*those [biological farmers] are not even real farmers*” (CR). This places especially local lessors in a difficult position. On the one hand, they see the value of agricultural transition, but on the other hand, they still want to cater to their own local farmers, who have often been there for decades. For example the interviewee from Heusden said: “*We also work with that distance criteria [...]. And we put that under the denominator of ‘sustainability’, but actually it was also a way to help our farmers in Heusden*” (HE). The interviewee continued that “*we should not ask too much from our farmers, because actually all farmers in our region are conventional and it is unrealistic to think they will all transition to biological*” (HE). As a result, especially the smaller municipalities seem to prioritize their local farmers when allocating land.

Consequently, the notion of transitioning conventional farmers to de-intensified practices seems more important to lessors than providing land to an agroecological farmer. This sentiment was prevalent among all levels of lessors, best captured by the following quote by the interviewee from De Dommel: “*It is immediately such a big label: ‘biological farmer’. I feel that it goes all-in. But a relatively conventional farmer who does want to transition or who wants to ‘have a taste’, I believe we should offer them room. And that does not make you a biological farmer, but if we don’t help them forward they will never get there of course*” (DD). The interviewee from the province of Noord-Brabant maintained a similar logic: “*If you want to keep 15.000 farmers in this region, those 200 sustainable businesses that want to go very far? Fine, we all know those, the textbook examples. But the other 14.800...*” (BR). In short, these quotes show that conventional farmers seem to be in the priority seat when it comes to the allocation of governmental land. Partly because conventional farmers still constitute the overwhelming majority of farmers who apply for tenure. But also because lessors seem to think it is more important to help conventional farmers ‘de-intensify’ their farming, rather than platforming agroecological farmers who already embrace a low-input approach to farming.

### ***Lack of ‘internal’ knowledge on sustainable agriculture***

Another obstacle for integrating agroecology in public tenure is that governments usually do not possess internal agricultural knowledge. The first way this finding reveals itself is the fact that all governments essentially ‘outsource’ the monitoring of sustainable land use through the heavy reliance on sustainability certificates. The use of certificates is a very deliberate choice for many lessors because that way another institution is responsible for monitoring whether the land is actually used sustainably or not (BR, DD). As the interviewee from De Dommel put is: “*Right now we deliberately outsource it [allocation], just to get a very black-or-white screening. Like you either meet the requirements or you don’t, because you get a lot of discussion, and it is very difficult to be objective, especially with these business plans [...] and those certificates just make it very tangible and verifiable*” (DD). In doing so, a lot of trust is placed in the institutions which underly these certificates, most notably the University of Wageningen, and Stichting Milieukeur. The downside is that the use of these certificates excludes ways of sustainable farming for which certificates do not yet exist and for which these institutions still need to collect more scientific evidence. Secondly, at the local level especially, when asked how they comprised their sustainability criteria, municipalities claimed they consulted other parties such as the ZLTO (Southern Farmer’s Association), the ANV (Agrarian Nature Association), smaller environmental agencies, and advisory agencies such as LBPSight (CR, LvC), further underscoring the absence of internal knowledge. Some municipalities such as Vught do have an internal ‘board’ that decides which tenant gets allocated the land, but these boards are very small and are comprised of retired farmers rather than experts on sustainable agriculture (VU). Lastly, the ways that the sustainability criteria are comprised can be characterized as reactionary. When asked where municipalities based

their sustainability criteria on, interviewees almost unanimously claimed to follow the province of Noord-Brabant in their allocation procedure (DD, LvC, HE, BE).

### ***The limitations of public tenure: other governance purposes & work capacity***

The first clear difficulty in *public* land tenure is the fact that agriculture is just one of many topics within the domain of land governance. Municipalities and provinces have a wide array of other ‘spatial claims’ such as housing, infrastructure, or nature conservation. This became especially clear in the case of the province. The land that the province leases is always bought with a specific target in mind. Once that target is in sight, the land gets ‘rebounded’ (BR1). As such, agricultural land tenure is often an intermediary tool, in order to reach a larger goal in spatial development (BR1, BR2, LvC, BE, CR). As the interviewee from Cranendonck put it: “*There is a huge surge of spatial claims right now, so it is the question how tenure lands are going to fit into that picture [...] Maybe in ten years time we might not even have tenure at all anymore*” (CR). In their own way, other governance purposes also applies to other public lessors. For example, waterboard ‘De Dommel’ buys and exchanges land with the sole purpose of achieving their water goals (DD), and the SFS only leases land adjacent to its nature reserve areas in order to progress their nature conservation goals (ST).

This also points to another phenomenon described by some interviewees, namely the ‘integrality’ of planning objectives. This is best exemplified by the following quote from the second interviewee from the province: “*And the complex thing is, you know? Clean water is not something you create with just water, but especially with the land surrounding it [...] So the target of 15% biological agriculture we have formulated for the province of Noord-Brabant? You could call that a target [...] but actually it’s a tool to accomplish the underlying goals of water quality, but especially those of nitrogen reduction*” (BR2). Additionally, during the first observation, a policymaker from the municipality of Arnhem stated that one of the most significant obstacles she encountered in making land policy more sustainable was a lack of consideration for policy integrality. She explained that policymakers from certain policy areas are more flexible in sustainable transition thinking than others, which makes it difficult to implement sustainable measures across the board (Obs1). In short, public lessors buy, own, and lease land with various goals in mind, which clouds a vision of a clear path to take care of the land in the long run (VU, CR).

The final factor limiting *public* land tenure, especially at the local level, is the fact that work capacity of public lessors is limited. In the municipality of Bergeijk for example, the interviewee was the only person who processed all the applicants’ requests, as well as the only one who monitored the tenant’s land use practices. Moreover, when answering the question of whether more customization was possible in terms of allocation to agroecological farmers, many interviewees responded that they already have their hands full with the current sustainable tenure allocation systems (BR1, BR2, DD, CR). The general consensus is that implementing the certificate-based allocation procedure already asks a lot from public servants: “*If you simply lease to the highest bidder, they get it, and that’s it. That is much easier than the process that we have now set up. Certificates have to be checked, calculations need to be made, and land must be registered with Skal, well you name it. All of that requires more capacity*” (BR2). Some lessors therefore indicated that they would be in favor of longer tenure contracts as it would make the allocation process less frequent and therefore less time consuming (CR, VU).

### **5.2.2 Actor coalitions – protectors of the status quo**

A discussion of land tenure would not be complete without mentioning the role of influential actors in the domain of land tenure, and the agro-industry more broadly. Firstly, many lessors mentioned the Land Registry as a significant obstacle in facilitating more sustainable land tenure arrangements. To reiterate, the Land Registry is responsible for reviewing and approving tenure contracts. Lessors claimed that the Land Registry favor the interests of the tenant and are reluctant to approve sustainability requirements (BR1, DD, LvC, CR, Obs3). As the interviewee from De Dommel put it: “*Parties involved should be able to make voluntary agreements that contribute to sustainability, and the Land Registry too often plays an obstructive role in that*” (DD). A frequently mentioned example was the prohibition on glyphosate. In 2022, the province of Noord-Brabant submitted a request for the prohibition on the use of glyphosate, which the Southern Land Registry initially rejected, as it was deemed to be ‘excessive’. Because the province insisted on this prohibition, they took it up with the Central Land

Registry, who ultimately approved the request, after which the Southern Land Registry conceded. In my interview with the Land Registry, the interviewee was aware of this criticism but refuted that in practice, the Land Registry approves most tenure contracts including those with far-reaching sustainability requirements (GR). The interviewee further expanded on the notion of ‘excessiveness’ as one of the main criteria for reviewing tenure contracts: *“The Land Registry is not necessarily for the most sustainable application of something. So we just ask the question: is the measure for the tenant adequately clear and is it not too excessive in terms of meddling with their business operations”* (GR). In this regard, there seemed to be disagreement between the experiences of lessors and the Land Chamber. However, if the Land Chamber indeed is reluctant to approve sustainability criteria, this could prove to be an issue for agroecological farmers, whose sustainability measures are often more far-reaching than the ones currently present in sustainable tenure models.

Moreover, the lobby from livestock feed companies, retailers and suppliers, and other actors from the agro-industry such as the LTO were also mentioned as actors with a lot of lobbying power (VU, LvC, ST). How this lobbying power was exercised in practice was a topic that often remained only at surface level, for example: *“It is also due to the LTO, who of course have a huge lobby. A lot of power, so they are able to stop many things, even though we urgently need a new vision”* (VU). Additionally, when discussing the role of the Land Chamber, the interviewee from the SFS said: *“We see that the agro-lobby is very strong and good at that, to force their hand. They do that very well, I cannot deny. But the question is whether that serves us as a society.”* Whether or not there are actual linkages between the Land Registry and the LTO is not clear, though it was vaguely implied.

### **5.2.3 Natural-spatial conditions**

As Buizer et al (2016) note, physical conditions of land may ‘foreground’ other factors of land governance (Buizer et al. 2016). This also applies to land tenure arrangements, as indicated by almost all lessors during the interviews. The type of landscape affects what type of farming can be practiced on a particular plot of land, and therefore also affects key aspects of tenure such as which sustainability measures are most appropriate or the lease price. As the first interviewee from the province stated *“In North-Holland they have dunes of course, but also surrounding land. Yes, they have very different demands and wishes than we do. We don’t have plots of land in groundwater protection areas”* (BR1). Additionally, differences in the type of soil has implications for what type of farming can take place on that soil, which requires more specialized treatment in terms of how that land is allocated in tenure (BR2). The municipality of Vught added that they are sometimes limited in what they can offer their tenants because much of their land is located in or close to nature conservation areas, such as the Natura2000 areas: *“we facilitate it [agroecological initiatives] but we don’t encourage it [...], also has to do with the fact that 90% of our tenure lands are in the Gement. That is very fertile agricultural land, but there is also a water catchment area, and it is a meadow bird area, so there are no trees allowed. So therefore we also don’t allow agro-forestry for example”* (VU). On the other hand, tenants with the State Forestry Service can *only* lease plots of land that are right next to a forest or nature area protected by the SFS (ST). Thus, to a certain extent, lessors are always limited in what they can offer farmers due to the physical conditions of certain plots of land.

### **5.2.4 Rules and legislation**

#### ***The Didam ruling***

A key piece of legislature for publicly owned land is the *Didam ruling*. This ruling, enforced by the Dutch Supreme Court in 2021, holds that newly available governmental real estate must enter a public selection procedure (Dutch Government, 2024). In theory, this procedure strengthens fairness and transparency because it announces when a new piece of land becomes available, which should give all potential interested parties an equal chance (Dutch Government, 2024). In practice however, this means that tenants with short-term contracts have no prospective land security, because when the contract ends there is no guarantee that the tenant will get a new contract for the same plot of land (Bakker, 2024). Additionally, the *Didam-ruling* has also made matters more difficult for lessors, because one-on-one leasing used to build a relationship with the tenant, whereas now this continued relation is not

guaranteed. As the interviewee from De Dommel explained: *“It used to be the case that you built a relationship with your tenant, it was used as a kind of glue. By leasing more publicly you are actually losing that relationship with your tenant. And in a way, it is more fair and transparent, but it also makes it more difficult to get a grip on who your tenants are”* (DD). In other words, prior to the *Didam* ruling, public lessors could extend a tenure contract ‘informally’ to the same tenant, which enabled mutual trust between lessor and tenant. Now, even short-term plots of land are legally required to be open to any new interested tenants. This has decreased trust between lessors and tenants, which is essential for sustainable land use on rented lands (Carolan 2005). Due to the absence of trust, lessors are forced to come up with complicated systems such as the heavily certificate-focussed bidding procedure. Ultimately, this is more work for the lessor (BR2). For the agroecological farmer, it is the combination of increasingly more liberalized short-term contracts by governmental tenure actors and the implications of the *Didam* ruling, that prevents prospective land security.

### **Absence of an overarching tenure framework**

Another major limitation of public land tenure is that there is no one-size-fits-all legislature, which enables different regional and local governments to adopt widely different sustainability measurements in their tenure contracts, if any at all (BR1). This has a few important implications. First, the absence of overarching binding legislature may work disheartening for municipalities who make a lot of effort to include sustainability requirements. As the interviewee from Vught said *“if my neighboring municipality does not do it, and they still go the old-fashioned way with chemicals, artificial fertilizer, you name it, then we still don’t make a lot of progress”* (VU). In turn, these inconsistencies are problematic for farmers because it is almost impossible to keep track of all the different tenure policies that are maintained by all the different types of lessors (DD). Second, this lack of continuity and consistency in tenure policy is reflective of an overall lack of vision for the future of agricultural lands (VU, CR). As the interview from Cranendonck stated: *“Part is also political, that that vision on the landscape is not landing. What do we want exactly with our agricultural lands? It is simply not there.”* (CR). As a result of the short-term and fluctuating agricultural policies from the cabinet in recent years, both lessors as well as tenants do not know what can be expected (BR2, VU, DD, CR).

Moreover, the role of the national government was mentioned as an obstacle. The interviewee from the province explained that the ‘real’ incentive to take sustainability steps in agriculture comes from the EU, mainly in the form of mandatory water and biodiversity targets (BR2): *“And those targets, like the KRW, it always comes from the EU, and then there is always the question, well the Hague is in between. And of course, we just had a cabinet who just went to the EU to say, well can we maybe not comply with a few things?”* (BR2). As such, the national government was described as being an obstacle in between the European and the regional levels of government, even with the cabinet making demands in Brussels to not have to comply with some requirements (BR2).

Finally, as a result of lacking top-down policy, municipalities are also free to design their land tenure policy. This also causes the politics on the local level to influence to what degree sustainability measures are taken up in tenure arrangements. Like the interviewee from Bergeijk said: *“If the board wants it, it is possible, is what I always say”* (BE). Other lessors also mentioned ‘the political color of the board’, the ‘political climate’, or ‘support from the council’ as obstacles to make tenure more open to agroecology, or sustainable agriculture more broadly (DD, VU, LvC, BE, CR).

## **5.2.5 Discourses**

### **Recognition of productivist agriculture as the problem**

During the interviews, there seemed to be consensus that the reason for the sustainability crises in agriculture today is the result of decades of agricultural intensification, steered by productivist science and policy (ST, VU, BR2). As the interviewee from Vught pointed out: *“We have simply learned [...] after the Second World War ‘never hunger again’ and we need to make sure that there is always enough food and simply production, production, production. Try reversing that, that takes two generations”* (VU). The interviewee from the SFS added that *“for almost three generations the government policy, the science has all been focused on intensification. And there is no light switch to turn it off. There were all kinds of programmes to help farmers intensify. Likewise, we will also need all kinds of programs to*

*make sure it can go differently*” (ST). These quotes show how public lessors are aware of the necessity for change in the agricultural sector, and indeed explain why they implement a ‘sustainable tenure’ model at all. More importantly, this discourse of productivist agriculture as the main problem is shared by the agroecological narrative (Obs1). This recognition for change in agriculture seems promising, but at the same time these statements indicate that programmes to de-intensify agriculture are currently lacking or insufficient.

### ***Land as financial asset & the belief in market mechanisms***

When asked how agroecology could be further integrated into tenure, an overall belief in market mechanisms was present amongst lessors. As previously mentioned, one of the reasons why lessors are hesitant to allocate land to agroecological farmers is skepticism towards the profitability of their business models. In line with this belief, many interviewees stated that once it is obvious that agroecology can be profitable, then it will naturally become more popular for both farmers and lessors (BR1, BR2, VU, ST, LvC, Obs3). As the first interviewee from the province explained: *“You can do that in two ways right? Either the economic route, so say Skal-products become so popular that everybody wants Skal-products? Well, scarcity on the market, price goes up, fantastic. Then one can start to make money of it. It is the laws of the economy really”* (BR1). During the second observation, the importance of the market was reiterated once more. When a participant asked about the future outlook of sustainable land funds, the speaker responded that attracting capital is one of the main challenges, despite strong interest from farmers (Obs2). He also noted that in this area ‘the costs precede the benefits’, and that sustainably managed agricultural land first needs to be recognized as a financial asset (Obs2). In that sense, the market was still revered as the way to manage land more sustainably. Civil society lessors such as Land van Ons and Aardpeer are commended for their efforts to prioritize sustainable land use, but are not considered to be capable of scaling up due to limited investment potential, informal governance, and market pressures (Obs2) (Jellema et al., 2023). These perceived limitations reveal the fundamental belief that land *governance* is dominated by the land *market*, and that the government and civil society have to act ‘in accordance with’, or ‘react to’ market mechanisms.

Furthermore, plots of land were often discussed in economic terms, such as ‘land being scarce’ (HE). The second interviewee from the province explained that for people actually working in the land allocation department, the most important factor is still whether the farmer will be profitable or not: *“if a biological farmer makes a bid of €1000 and wins from a conventional farmer who bids €1500, then you have €500 in loss. In the program of \*\*\*, they call that loss right? From the perspective of our department [agriculture & nature] we don’t call that loss, we say that is a farmer who contributes to our water quality goals. It is an investment. But that is a different way of thinking and that takes time before you get everybody on board with that.”* (BR2). This quote is revealing because it shows a dual mindset. On the one hand, the interviewee from the department of agriculture and nature (in cooperation with the GOB) are trying to make sustainability more of a priority in the allocation of land. This is already evident in the fact that Skal-farmers are given (or will soon be given) priority with some lessors (DD, LvC, BR1). On the other hand, the land management department is stuck in the belief that land must be profitable, causing them to be hesitant to take a financial loss in order to get an ‘environmental win’.

## ***5.3 Dynamics of policy arrangement***

Where the previous sections looked at the policy dimensions separately, this section aims at synthesizing the dynamics between them. This is where the main bottlenecks for agroecological alignment in tenure policy are identified, as well as the emerging cracks of opportunity.

### ***5.3.1 The productivist path dependency***

In line with broader land governance literature (Salman and Mori 2023), the dominance of particular stakeholders have led to institutionalized path dependency in Dutch tenure arrangements, in favor of ‘conventional’ or ‘productivist’ agriculture. Interviewees indicated that the strong voices of the LTO lobby and the Grondkamer share a discourse of a productivist agriculture, making sure that tenure policy

remains in the interest of the status quo. As several interviewees expressed, this path dependency started in the second half of the 20<sup>th</sup> century, a time when modernization, scale enlargement, and intensification were deemed to be in the collective interest and were thus heavily promoted and subsidized (Aarts and Leeuwis 2023; Runhaar 2017). This productivist agricultural discourse also spilled over into land governance, making profit the most important factor of land use (BR2). This also explains why the short term liberalized tenure contract became the dominant model since it came into existence in 2007. This model is compelling for lessors because it provides a lot of control, while simultaneously still enabling short-term profitable land use for the farmer. Here, the interviews also highlighted a problem for public lessors with regards to resources. Namely, the fact that governments do not possess the necessary internal knowledge of local sustainable agriculture, such as local pest control, or alternative fertility management (LvC) (Carolan 2005). Consequently, especially municipalities consult ‘conventional’ agricultural organisations such as the ZLTO when making their sustainable tenure rules. Together, the institutionalized discourse of ‘land as financial asset’, and the lack of knowledge by public lessors creates a feedback loop which reinforces institutional dependence on conventional notions of sustainable agriculture. Agroecological farmers, who have a much more holistic view of sustainable agriculture, are therefore marginalized as they do not have the necessary certificates for example. Additionally, current rules of the game such as the Didam-ruling and the fixed duration of six years for liberalized contracts further impose difficulties for both the lessor and the tenant.

The productivist path dependency also naturally produces skepticism towards agroecology’s viability as an alternative way of farming because of widely different farming norms. The norm in ‘conventional’ farming is to produce a certain number of a product (often monocultures), within a certain amount of time, for as little as costs as possible, often using mechanization and various chemical inputs to achieve this (van der Ploeg et al. 2019). The practice of increasing production has become a key, almost defining feature of what constitutes a ‘good farmer’ in productivist farming culture (Burton 2004). Agroecology radically challenges these norms. For example the centrality of natural processes, the importance of farmer autonomy, the ongoing learning of structuring labor processes, and diversified production (van der Ploeg et al. 2019). These norms require more time, and ultimately challenge broader supply chains (Obs3). In other words, within a productivist agricultural system, it is very difficult for agroecology to be considered economically viable, which reinforces the idea that it is ‘risky’ or not even considered agriculture at all.

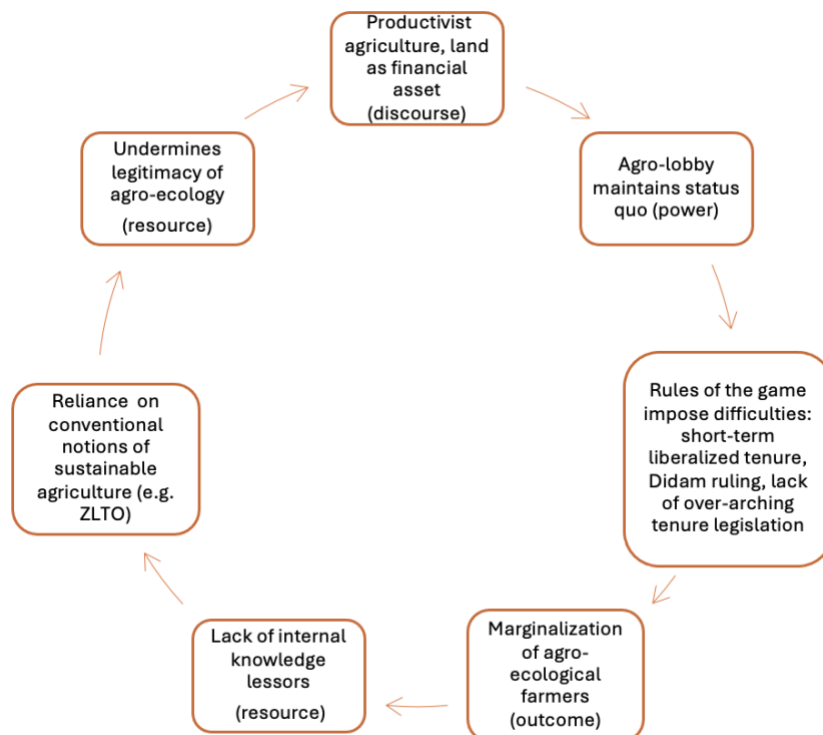


Figure 5.2 Visual representation of productivist path dependency within Dutch tenure. Source: Author

### 5.3.2 Emerging cracks of opportunity

Although the barriers seem overwhelming, several developments point to the possibility for more agroecological alignment in sustainable tenure. Firstly, several lessors recognized that genuine sustainable land use cannot be accomplished with short-term tenure, as this does not stimulate sustainable investments and soil use (VU, CR, ST). Therefore, especially municipalities seemed to be open to the idea of longer tenure contracts (VU, CR, ST). This does however cause friction with the multitude of land planning objectives of public lessors. Especially the province and waterboards favor short-term tenure as they often need that land for other purposes in the future. As such, it should be recognized that longer contracts would not be welcomed by all public lessors. Nevertheless, the potential willingness for longer tenure duration could provide a powerful opportunity for agroecological farmers and lobby groups because the desire for longer tenure contracts is something that is also shared by conventional farming groups, such as the LTO (CR) (LTO 2023). Secondly, there is a gradual tension between economic profitability and environmental goals in land allocation among lessors. This was most evident in the case of the province where one interviewee from the land planning department viewed tenure mainly as a source of temporary income (BR1), whereas the other interviewee (BR2) emphasized that sustainable tenure can serve as an investment in the soil quality and biodiversity. This notion of prioritizing ‘ecological returns’ is reinforced by the growing discourse on the need for moving away from productivist agriculture, which was also shared by the interviewees of the SFS and the municipality of Vught. This shifting discourse is in line with agroecological farming values, which could result in more awareness of the relevance of agroecology among lessors. Thirdly, although agroecology still lacks legitimacy as a serious alternative to conventional farming, it is gaining gradual recognition, albeit framed in a narrative of advancing ‘social cohesion’ in local communities. If agroecological proponents would focus on the ‘social’ component of agroecology, this could give lessors the much needed clarification on what distinguishes agroecology from biological farming for example. As the interviewee from Vught put it: “*call a spade a spade*” (VU). Especially some municipalities were open to the idea of granting land to agroecological farmers via other avenues than tenure (BE, VU, CR). This could potentially circumvent the whole allocation process of tenure all together.

## 6. Conclusion & Discussion

### 6.1 Answering the research questions

The aim of this thesis was two-fold. The first aim was to gauge the level of agroecological alignment with public tenure in the province of Noord-Brabant, reflected by the first two RQ’s:

1. *How can sustainable tenure models by public lessors in Noord-Brabant be characterized in terms of allocation procedures and sustainable land use?*
2. *How do sustainable tenure models by public lessors in Noord-Brabant (mis)align with the agroecological principles for tenure by farmer’s collective Toekomstboeren?*

Section 5.1 of the results indicated that most agroecological principles currently misalign with the sustainable tenure models by public lessors in Noord-Brabant. In terms of eligibility, agroecological farmers are currently not considered agricultural businesses in the eyes of lessors, which often excludes them from the allocation process. Second, with regards to allocation, agroecology’s need for alternative and individual evaluation methods is opposed by the dominance of a standardized bidding system favoring established sustainability certificates, where agroecological farmers often fall short. Third, when agroecological farmers are able to secure land despite the allocation challenges, their possibilities in terms of rights are very limited, and short term liberalized contracts prevent prospective land security. However, because some lessors indicated that they would be open to longer tenure duration, the agroecological principle of longer tenure contracts seems to have potential. Finally, with regards to sustainability criteria, agroecology’s holistic focus on social cohesion and economic solidarity is often

too abstract for lessors, who only consider land use to be the way that sustainability is supposed to be enacted in agriculture. This often causes agroecological farmers to not be taken seriously as a real contender for agricultural land in the first place (the eligibility factor again). However, obligatory sustainability criteria, for example the prohibition on chemical pesticides, is one of the few aspects where sustainable tenure aligns with the agroecological principles.

The second aim was to identify how policy arrangements affect this (mis)alignment, reflected by the third RQ:

3. *How do policy arrangements explain the established level of (mis)alignment?*

Sections 5.2 and 5.3 of the results indicated that the predominant misalignment is the outcome of a relatively stable policy arrangement of land tenure, where the interplay between actors, resources, rules, and discourses mutually reinforce a tenure system which is unreceptive of agroecological ideas and practices. The basis of this policy arrangement is rooted in a discourse of productivism, where land is seen as a financial asset which should produce profit. Public lessors thus automatically frame 'sustainable tenure' in a productivist and market-oriented lense. Agroecology is not rejected outright, but is immediately translated into discursive categories suited to the logic of public lessors, such as profitability (having a profitable business model) and measurability (easily measurable indicators of sustainable land use). By default, agroecological farmers often cannot be 'evaluated' along these categories, and thus automatically lack legitimacy in the eyes of public lessors. The distribution of power and resources further exacerbates this lack of legitimacy. Public lessors often lack the knowledge and capacity to operationalize sustainability in their tenure policy, which results in the heavy reliance on sustainability certificates and outsider knowledge, often consulting conventional farmer interest groups such as the (Z)LTO. This reinforces dependence on existing notions of sustainable agriculture, and undermines the holistic and place-based practice of agroecology, for which a certificate does not exist. Moreover, certain rules of the game within the tenure system prevent public lessors from making tenure more sustainable. For example the liberalized tenure contract which only facilitates short-term tenure, but also the obligation to allocate public land transparently, which increases competition among farmers and decreases trust between lessors and tenants. Finally, the lack of certain rules, in the form of overarching tenure legislation, also does not incentivize all lessors to implement sustainability requirements which would benefit agroecological farmers. Figure 6 summarizes all the results together.

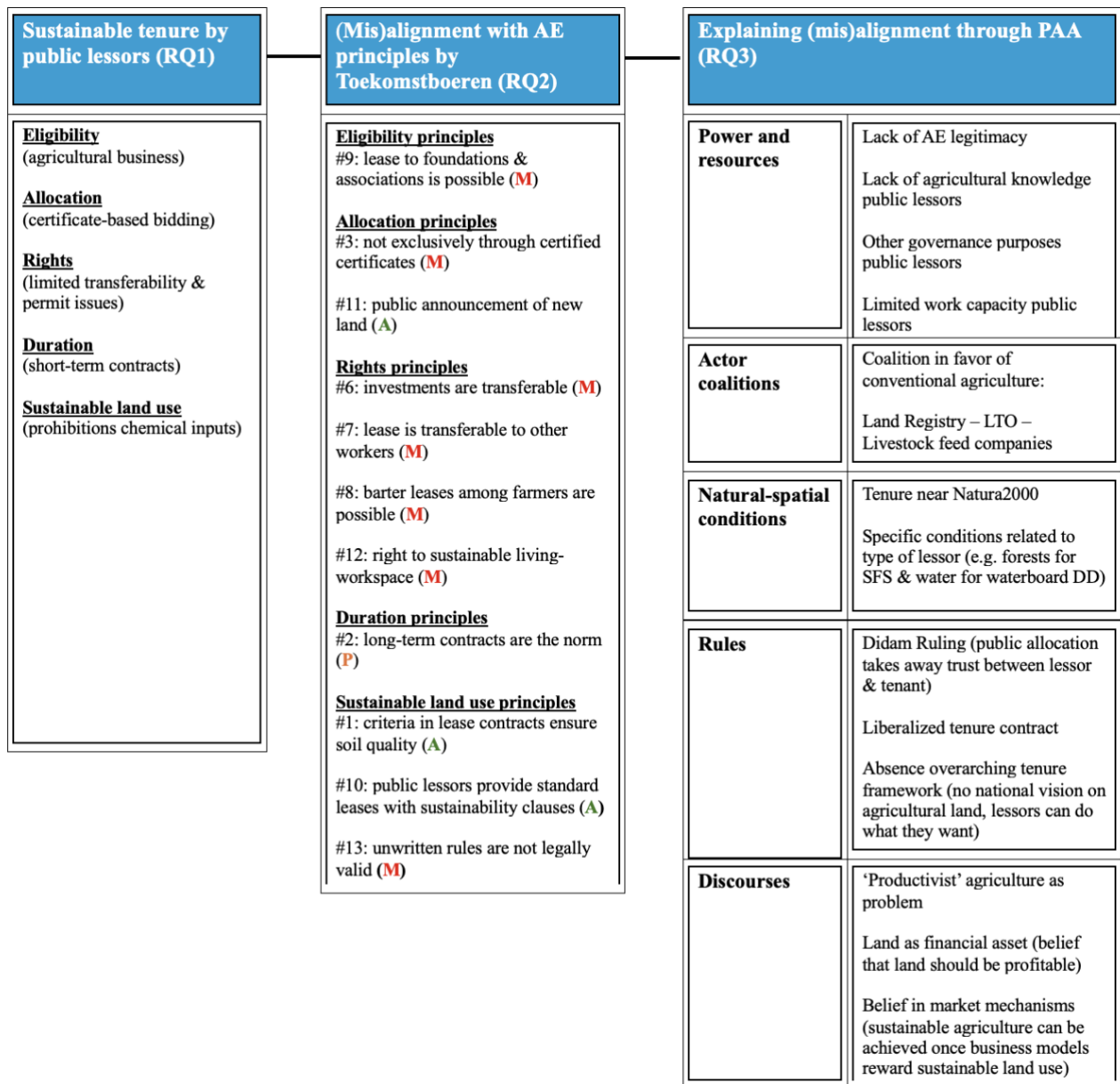


Figure 6: Summary of results. Source: Author

## 6.2 Situating the results in the literature

### 6.2.1 Legitimizing agroecology as the path forward

Results section 5.2.1 revealed that public lessors do not recognize agroecology as ‘real farming’. As such, this thesis aligns with previous research (Perrin and Baysse-Lainé 2020; Montenegro de Wit and Iles 2016) in that different farming models not only compete in access to land, but in the first place compete for legitimacy and public support. Interviewees talked about agroecological initiatives with a sense of charity, and especially municipalities seemed to be enthusiastic about the social benefits agroecology could have for the community. However, interviewees also expressed worries about agroecology’s economic viability and often did not consider them ‘agricultural businesses’.

The ‘cracks of opportunity’ in 5.3.2 do suggest that there are possibilities for agroecological adaptation into tenure policy at the present moment, however it should be acknowledged that some of these possibilities would likely not result in transformative agroecology (*see 2.1*). Rather, premature adoption into government policy without the necessary public legitimacy could result in conformist

agroecology, as the French example has demonstrated. This thesis thus supports the notion that enhancing legitimacy should be the priority of the agroecological movement, rather than seeking institutionalisation into public policy, or hanging on too tightly to the role of a social movement avoiding public and private partnerships all together. Being recognized as a genuinely viable alternative to conventional farming is essential if agroecological farmers are to be granted land on a structural level.

Additionally, this thesis suggests that the different perspectives on agroecological transition are arguably not mutually exclusive. In the Netherlands, where rural planning is highly deliberative, while values regarding land use are diverse, governments have a crucial role to play in the allocation of land (Boonstra & Brink, 2007). As Giraldo and McCune put it: “we cannot concentrate on the state, but neither can we ignore it” (Giraldo and McCune 2019, p. 803). It could therefore be argued that if a wider agricultural transition to more agroecology is to take place, integration of agroecological principles in public land tenure is a necessary precondition. To this extent, besides acquiring legitimacy, accelerating agroecological transition perhaps requires some concessions. For example, in Germany the term ‘agroecology’ itself has been omitted by agroecological movements, opting instead for the term ‘communal agriculture’. This has allowed for wider support and acceptance, without infringing on the actual practice of agroecology (Obs1). A similar approach could be adopted by Dutch agroecological lobby groups if the term ‘agroecology’ causes persistent confusion among governments.

Finally, the worries expressed by interviewees should be acknowledged and point to the work that still lays ahead for agroecological practitioners, scientists, and lobby groups. The local-knowledge narrative of agroecology may be appealing for short-term mobilization but currently falls short when addressing complex issues. For instance, it is unclear what the consequences would be for production and supply chains if agroecology would indeed become more mainstream (Jansen 2015) (Obs 3).

### ***6.2.2 The limits of tenure reform in a capitalist ‘agrarian structure’***

Results section 5.2.5 demonstrated that lessors in the province of Noord-Brabant are stuck in a private property-based land governance paradigm. Although governments are attempting to intervene in tenure relations through the sustainable tenure model, market interests are still relied upon as the main means to regulate land relations. The emphasis on a profitable business model for tenants, as well as the continued belief that sustainable land use is best stimulated by market mechanisms shows how land is currently seen more as an investment opportunity than as a site for producing food in a healthy and sustainable manner. This echoes the idea that farmland governance has become inextricably linked with ‘lands’ profitability as both a productive and a financial asset’ (Fairbairn 2014, p. 785).

Importantly, this is to no fault of the lessors, but rather the broader tenure framework that is currently in place. Lessors feel that current policies and tenure models do not facilitate sustainability measures. The results indicated a lack of an overarching vision of agricultural lands, but also the dominance of the liberalized tenure model, and the frequently repeated claim that the Land Registry sometimes rejects tenure contracts with sustainability clauses, ostensibly without solid grounds. This underscores the notion that tenure security is not something that can only be granted by the lessor, but rather relies on broader institutional, economic, and political conditions (Holland et al., 2022).

It should therefore be recognized that reforming tenure would arguably not constitute a transformational change for improving land relations for agroecological farmers. Tenure rights are essentially rights of ‘access’, but in the private property model of land governance that does not equate to ‘control’ of land (Pierri et al. 2025). Rather, the way tenure is designed, and the land distribution that follows from this design underpin what Alain de Janvry has labelled the ‘agrarian structure’ (de Janvry 1981). This structure is not only comprised of a system of access (both ownership and tenure) but also of a system of social relations – “the modes of production and their corresponding social class composition” (de Janvry 1981, p. 385). Many critiques have been raised against state-led land reforms within a capitalist agrarian structure (Boras et al., 2015) and historically, capitalist agrarian structures have rarely been reformed from ‘within’, because the agrarian structure continues to favor the dominant capitalist social order (de Janvry 1981). Therefore, it could be argued that even if agroecological farmers are granted more land security through tenure reform, land itself would still be at risk of being exploited and commodified. An ontological paradigm shift from land as financial asset, to land as ‘relational’ would arguably be necessary to realize more fundamental land reform (Wittman & James 2022; Borrás et al., 2015; Gerber & Gerber 2017).

Nevertheless, recent agroecological literature has shown that land reforms within property driven land governance models can still be leveraged towards promoting agroecology, for instance in the case of Scotland's Land Reform Bill (Calo et al., 2023). This bill reformed property law to facilitate easier land access for local communities, and additionally places legal responsibilities on landowners to disclose how they use the land and how that relates to public interests such as addressing climate change and nature restoration (Scottish Government, 2024). This example shows that it is worthwhile to pursue land reform within a private property model of land governance. As such, pushing for land reform itself can still be useful as an important driver for social change, as reforming capitalist land relations is a matter of politics, rather than one of policy (Wittman and James 2022; de Janvry 1981). If anything, the current struggles in accessing land by not only agroecological farmers, but any small-scale farmer that is currently marginalized by the capitalist agrarian structure, point out that land reform should be back on the *political* agenda, even if it is 'dead' as a *policy* issue.

### **6.2.3 Reflections on the PAA: overcoming path dependency in land governance**

This research makes two contributions to the PAA as a theoretical framework for land governance. First, this thesis aligns with Salman and Mori (2023) in that overcoming path dependency in land governance asks especially that actors make use of their agency in order to influence the more structural dimensions (Salman and Mori 2023). As the results added up, it became increasingly clear that the misalignment between agroecological principles and tenure policy cannot be attributed to separate dimensions, but should rather be considered in the context of a broader set of productivist agricultural ideas and policies. The question then, is whether and how this path dependency can be overcome. Socio-technical (STS) and social-ecological (SES) perspectives often focus on the importance of external shock events (Geels and Schot 2007; Ostrom 2009) which cause disruption in the system, leading to change (M. Wiering et al. 2018). However, 'shock events' in the context of land governance are difficult to pin down, as land is a 'constant' resource which is easily taken for granted (Wittman and James 2022). Changing land tenure in favor of agroecology thus demands that transformational actors make use of their agency. In light of this, an important dynamic during the interviews was that public lessors sometimes did not grasp the intention and values of agroecology. This can be attributed to the 'incommensurability' (Tuck and Yang 2012) between the relational discourse of land that agroecological farmers maintain, and the private property discourse of land that public lessors maintain. As such, 'demanding' that agroecological tenure principles be implemented, without first shaking deeply rooted discursive assumptions is likely to result in a 'dialogue of the deaf' (M. Wiering et al. 2018). One way agroecological policy entrepreneurs can decrease the 'incommensurability gap' is to highlight the 'sub-optimality' (Torfing 2009) of current land governance, for example by highlighting to tenure actors how it currently does not stimulate sustainable soil use, or how it excludes aspiring farmers from accessing land. Another approach is to start a new discursive story line (M. Wiering et al. 2018), inviting other actors to join alternative ideas and policy concepts more in favor of agroecology. Importantly, this discourse should be relatively ambiguous in order to convince actors with different interests (Kaufmann et al. 2016). This is important as land governance actors with mainly economic goals often tend to have more access to resources and social networks than 'transformative' actors with social or sustainable aims (Andriamihaja et al. 2021; Salman and Mori 2023). Secondly, this thesis has highlighted that the sustainable tenure model by the province of Noord-Brabant is currently constrained by national legal and discursive frameworks. For example, the finding that there is a lack of national vision for agricultural land, or a lack of an overarching tenure framework. Dutch tenure governance thus finds itself in a site of constrained experimentation, where subnational public lessors (most notably the province of Noord-Brabant) are experimenting with sustainable tenure models, but remain limited by the national government. As such, the dynamics between multiple levels of government deserve special attention if the PAA is to be used in the future to analyze land governance.

## 6.3 Practical recommendations

### 6.3.1 For agroecological lobby groups

The first recommendation for agroecological lobby groups in the Netherlands is to evaluate how to best ‘sell’ the agroecological project to governments. The findings of this research suggest that governments are currently unable to incorporate agroecology into their policies because there is a lack of understanding what it is exactly. Especially the social component that CSA’s emphasize causes governments to question whether agroecological initiatives qualify as agriculture or something ‘in between’ agriculture and community-building. One of the recommendations that came out of this research was therefore to give ‘agroecology’ a separate planning title (VU, BE, CR). In addition to ‘infrastructure’, ‘housing’, ‘agriculture’, and so on, a separate title could be introduced to give agroecology its own place, as being a mix between ‘nature’ and ‘agriculture’. Importantly, this term should be clear and specific enough for governments, without losing the defining attributes that separate agroecology from biological farming for example. This recommendation was briefly discussed during the final observation (Obs4), which caused mixed opinions. Though there was general optimism about giving agroecological farmers their own place within land planning, some policymakers on the municipal level warned for administrative and legal obstacles of such a new title (Obs4). Additionally, a policymaker from the province of Gelderland raised the concern that the effectiveness of such an AE title should be carefully considered in light of the size and governance purpose of different lessors. These concerns should be further investigated by agroecological lobby groups.

The second recommendation is to find out where agroecological principles for tenure may align with conventional farmer interest groups (e.g. the LTO), as is the case on the matter of contract duration. As the discussion pointed out, by finding points of alignment with resourceful actors, agroecological lobby groups could leverage their relatively weak political standing to gain momentum. This was also underscored during the final observation, where participants agreed that the agroecological movement should seek common ground with conventional farmers and lobby groups, rather than seeing them as ‘enemies’ (Obs4).

### 6.3.2 For public lessors

First, public lessors could investigate which parcels of land are not desirable by conventional farmers, and evaluate whether they would be suitable for an agroecological farmer. The interviewee from Bergeijk mentioned that there are sometimes smaller parcels (less than one hectare), with weird shapes, which conventional farmers deem to be unproductive (BE). These parcels of land might be of interest to an agroecological farmer. Additionally, the province of Noord-Brabant and some municipalities have chosen to allocate 15% of agricultural lands to biological agriculture, in line with the national target (Rijksoverheid, 2023). Since agroecological farmers are by default biological, municipalities could also consider following the 15% biological benchmark, and allocate these parcels to agroecological farmers.

Secondly, one interviewee highlighted the importance of not ‘forcing’ tenants too much with very specific sustainability demands (BE). A reference was made to the tenure model by waterboard Noord-Brabant Water, who offers tenants a wide range of sustainability measures from which tenants can pick those measures that fit their business (Noord-Brabant Water, n.d.). Lessors could adopt this more voluntary model as well, and incorporate agroecological principles so that agroecological farmers could make their ‘hypothetical bid’ worth more.

Thirdly, in order to align more with AE’s collective approach to land, collective tenure rights could be explored. There are no ‘ideal types’ of tenure that fully embrace collective or private systems (Ostrom and Hess, 2007.; Pierri et al. 2025). Rather, a mix of both is usually present. Experimenting with different degrees of transferability or use rights may be conducive to sustainable land use, while still maintaining ultimate allocative authority as public lessor. Examples of advantages of collective rights include the sharing of risks (such a climate hazards), or that local problems are effectively dealt with relatively low costs (Ostrom and Hess, 2007). These are advantages that both tenants and landowners may benefit from.

## 6.4 Future research

Future research can look into how agroecological actors can best capitalize on the ‘cracks of opportunity’ presented here. Some suggestions are: 1) using the agents of change framework to analyse the interactions between agents of change (agroecological actors) and the actor in which change is desired (tenure actors) (Andriamihaja et al. 2021); 2) going beyond actors (who) and agency (how) and explore triggers (‘when’) and leverage points (‘where’) of overcoming path dependency in Dutch land governance more broadly (Salman and Mori 2023); and 3) exploring the best legitimation strategies for agroecological actors to gain more legitimacy and public support in the Netherlands (Chowdhury et al. 2021; Van Oers et al. 2018). As an alternative pathway, which was not discussed in much detail in this thesis, future research could also focus on scaling up the emerging land cooperatives in the civil society sphere. These cooperatives generally share agroecological discourses and visions, so scaling up these initiatives could also improve land access for agroecological farmers. A final line of future research could look into how lobby power by conventional agricultural organisations is exercised to influence sustainable tenure models, as this research only observed it at surface level.

## 6.5 Limitations

The first limitation of this study was the choice for a single instrumental case study. The choice to solely focus on the province of Noord-Brabant provided deep insights, but also resulted in highly context-specific results. Therefore, the results may not be generalizable to other provinces and countries. A comparative case study approach between provinces may have been interesting to see where differences emerge. The second limitation was the fact that this thesis focussed exclusively on *public* tenure, thus omitting tenure by private land owners and civil society land cooperatives. This turned out to be especially limiting due to how complicated public tenure is, whereas private tenure actors are not constrained as much, for example because they do not have other governance purposes to consider. In practice, agroecological farmers currently have more success in finding tenure with private land owners and in the civil society sphere. This proved to be difficult during some interviews because some public lessors simply did not have any agroecological farmers as tenants. This caused some interview questions to be underrepresented or discussed as a hypothetical. The final limitation was the somewhat rushed nature of the interviews. The theoretical framework was changed multiple times after most interviews were completed, which caused some missed opportunities for interview questions.

## Bibliography

- Aarts, Noelle, and Cees Leeuwis. 2023. "The Politics of Changing the Dutch Agri-Food System." *Journal of Political Sociology* 1 (1): 1. <https://doi.org/10.54195/jps.14922>.
- Ajates Gonzalez, Raquel, Jessica Thomas, and Marina Chang. 2018. "Translating Agroecology into Policy: The Case of France and the United Kingdom." *Sustainability* 10 (8): 8. <https://doi.org/10.3390/su10082930>.
- Akram, Nida, Muhammad Waqar Akram, Hongshu Wang, and Ayesha Mehmood. 2019. "Does Land Tenure Systems Affect Sustainable Agricultural Development?" *Sustainability* 11 (14): 14. <https://doi.org/10.3390/su11143925>.
- Akram-Lodhi, A. Haroon. 2008. "Land, Markets and Neoliberal Enclosure: An Agrarian Political Economy Perspective." In *Market-Led Agrarian Reform*. Routledge.
- Altieri, Miguel A., and C. I. Nicholls. 2012. "Agroecology Scaling Up for Food Sovereignty and Resiliency." *Sustainable Agriculture Reviews* 11: 1-29. [https://doi.org/10.1007/978-94-007-5449-2\\_1](https://doi.org/10.1007/978-94-007-5449-2_1).
- Altieri, Miguel A., and Clara Inés Nicholls. 2020. "Agroecology: Challenges and Opportunities for Farming in the Anthropocene." *Ciencia e Investigación Agraria: Revista Latinoamericana de Ciencias de La Agricultura, ISSN-e 0718-1620*. Vol. 47, N°. 3, 2020, Pages 204-215. <https://dialnet.unirioja.es/servlet/articulo?codigo=8049349>.
- Andriamihaja, O. Ravaka, Florence Metz, Julie G. Zaehring, Manuel Fischer, and Peter Messerli. 2021. "Identifying Agents of Change for Sustainable Land Governance." *Land Use Policy* 100 (January): 104882. <https://doi.org/10.1016/j.landusepol.2020.104882>.
- Arts, Bas, Jan van Tatenhove, and Pieter Leroy. 2000. "Policy Arrangements." *Political Modernisation and the Environment* 24: 53-69. [https://doi.org/10.1007/978-94-015-9524-7\\_4](https://doi.org/10.1007/978-94-015-9524-7_4).
- Azadi, Hossein. 2020. "Monitoring Land Governance: Understanding Roots and Shoots." *Land Use Policy* 94 (May): 104530. <https://doi.org/10.1016/j.landusepol.2020.104530>.
- Bakker, Eliane, Hassink, Jan, and Kees van Veluw. 2023. "The 'Inner' Dimension of Dutch Farmers' Trajectories of Change: Drivers, Triggers and Turning Points for Sustained Agroecological Practices." *Agroecology and Sustainable Food Systems* 47 (5): 687-717. <https://doi.org/10.1080/21683565.2023.2180563>.
- Beckett, Jessica, and Ryan E. Galt. 2014. "Land Trusts and Beginning Farmers' Access to Land: Exploring the Relationships in Coastal California." *Journal of Agriculture, Food Systems, and Community Development* 4 (2): 2. <https://doi.org/10.5304/jafscd.2014.042.008>.
- Berg, Leonardo van den. 2022. "Grond van Bestaan: De landproblematiek uitgelegd." Toekomstboeren, February 11. <https://toekomstboeren.nl/grond-van-bestaan-2/>.
- Beus, Curtis E., and Riley E. Dunlap. 1990. "Conventional versus Alternative Agriculture: The Paradigmatic Roots of the Debate." *Rural Sociology* 55 (4): 590-616. <https://doi.org/10.1111/j.1549-0831.1990.tb00699.x>.
- Bezner Kerr, Rachel, Julio C Postigo, Pete Smith, et al. 2023. "Agroecology as a Transformative Approach to Tackle Climatic, Food, and Ecosystemic Crises." *Current Opinion in Environmental Sustainability* 62 (June): 101275. <https://doi.org/10.1016/j.cosust.2023.101275>.
- Boonstra, Wiebren Johannes, and Adri van den Brink. 2007. "Controlled Decontrolling: Involution and Democratisation in Dutch Rural Planning." *Taylor & Francis*, ahead of print, December 1. world. <https://doi.org/10.1080/14649350701664721>.
- Boras Jr., Saturnino M., Jennifer C. Franco, and Sofia Monsalve Suarez. 2015. "Land and Food Sovereignty". *Third World Quarterly*: Vol 36, No 3. <https://doi.org/10.1080/01436597.2015.1029225>.

- Borras Jr., Saturnino M., Franco ,Jennifer C., and Sofia Monsalve and Suárez. 2015. "Land and Food Sovereignty." *Third World Quarterly* 36 (3): 600–617. <https://doi.org/10.1080/01436597.2015.1029225>.
- BrabantWater. n.d. "Duurzame gronduitgifte door Brabant Water." Accessed October 27, 2025. <https://www.brabantwater.nl/over-brabant-water/duurzaam/natuur-en-biodiversiteit/duurzame-gronduitgifte>.
- Buizer, Marleen, Bas Arts, and Judith Westerink. 2016. "Landscape Governance as Policy Integration 'from below': A Case of Displaced and Contained Political Conflict in the Netherlands." *Environment and Planning C: Government and Policy* 34 (3): 448–62. <https://doi.org/10.1177/0263774X15614725>.
- Burton, Rob J.F. 2004. "Seeing Through the 'Good Farmer's' Eyes: Towards Developing an Understanding of the Social Symbolic Value of 'Productivist' Behaviour." *Sociologia Ruralis* 44 (2): 195–215. <https://doi.org/10.1111/j.1467-9523.2004.00270.x>.
- Calo, Adam, Kirsteen Shields, and Alastair Iles. 2023. "Using Property Law to Expand Agroecology: Scotland's Land Reforms Based on Human Rights." *Taylor & Francis*, July 29. world. <https://www.tandfonline.com/doi/abs/10.1080/03066150.2022.2083506>.
- Campbell, Bruce, Douglas Beare, Elena Bennett, et al. 2017. "Agriculture Production as a Major Driver of the Earth System Exceeding Planetary Boundaries." *Ecology and Society, Published Online: Oct 12, 2017* | *Doi:10.5751/ES-09595-220408*, ahead of print, October 12. <https://doi.org/10.5751/ES-09595-220408>.
- Carolan, Michael S. 2005. "Barriers to the Adoption of Sustainable Agriculture on Rented Land: An Examination of Contesting Social Fields." *Rural Sociology* 70 (3): 387–413. <https://doi.org/10.1526/0036011054831233>.
- Charrierras, Quentin, Pierre Gasselin, Guillaume Ollivier, Gael Plumecocq. 2024. "Agroecology as a New Frame of Reference for French Agricultural Policy? Insights from a Lexicometric Analysis of Policy Documents." *Agroecology and Sustainable Food Systems* 49 (3): 386-414. <https://doi-org.ru.idm.oclc.org/10.1080/21683565.2024.2419953>.
- Chowdhury, Rashedur, Arno Kourula, and Marjo Siltaoja. 2021. "Power of Paradox: Grassroots Organizations' Legitimacy Strategies Over Time." *Business & Society* 60 (2): 420–53. <https://doi.org/10.1177/0007650318816954>.
- Conway, Gordon R., and Jules N. Pretty. 2013. "Unwelcome Harvest: Agriculture and Pollution." *Routledge*. <https://doi.org/10.4324/9781315066844>.
- Creswell, J. W. (2007). "Qualitative inquiry and research design: Choosing among five approaches." *Sage Publications*.
- DeHaan Advocaten en Notarissen. 2016. "Pacht en bedrijfsmatige landbouw." Accessed July 18, 2025. <https://www.dehaanlaw.nl/blog/pacht-en-bedrijfsmatige-landbouw>.
- DeLeo, Rob A., Reimut Zohlhöfer, and Nikolaos Zahariadis. 2024. "Multiple Streams and Policy Ambiguity. Elements in Public Policy." *Cambridge University Press*. <https://doi.org/10.1017/9781009397926>.
- DiMaggio, Paul J., and Walter W. Powell. 1983. "The Iron Cage Revisited: Institutional Isomorphism and Collective Rationality in Organizational Fields." *American Sociological Review* 48 (2): 147–60. <https://doi.org/10.2307/2095101>.
- Doorn, Anne van, Willemien Geertsema, Jurre Dekker, Joost Lommen, Boki Luske, and Joke de Jong. 2025. "Concretisering Natuurinclusieve Landbouw : Ambitieniveaus in Woorden En Cijfers Voor Melkveehouderij En Akkerbouw." Accessed September 22, 2025. <https://research.wur.nl/en/publications/concretisering-natuurinclusieve-landbouw-ambitieniveaus-in-woorden>.

- Doorn, Anne van, Dick Melman, Judith Westerink, Nico Polman, Theo Vogelzang, and H. Korevaar. 2016. "Food-for-Thought : Natuurinclusieve Landbouw." Accessed September 22, 2025. <https://research.wur.nl/en/publications/food-for-thought-natuurinclusieve-landbouw>.
- Driessen, Peter P. J., Carel Dieperink, Frank van Laerhoven, Hens A. C. Runhaar, and Walter J. V. Vermeulen. 2012. "Towards a Conceptual Framework for The Study of Shifts in Modes of Environmental Governance – Experiences From The Netherlands." *Environmental Policy and Governance* 22 (3): 143–60. <https://doi.org/10.1002/eet.1580>.
- Egli, Lukas, Judith Rüschoff, and Jörg Priess. 2023. *Frontiers | A Systematic Review of the Ecological, Social and Economic Sustainability Effects of Community-Supported Agriculture*. <https://doi.org/10.3389/fsufs.2023.1136866>.
- Eurostat. 2025. "Agricultural Land Prices and Rents - Statistics." Accessed April 15, 2025. [https://ec.europa.eu/eurostat/statistics-explained/index.php?title=Agricultural\\_land\\_prices\\_and\\_rents\\_-\\_statistics](https://ec.europa.eu/eurostat/statistics-explained/index.php?title=Agricultural_land_prices_and_rents_-_statistics).
- Eurostat. 2024. "EU Agricultural Land Prices and Rents: Huge Contrasts." Accessed May 26, 2025. <https://ec.europa.eu/eurostat/web/products-eurostat-news/w/ddn-20240126-2>.
- Eurostat. 2022. "Farms and Farmland in the European Union - Statistics." Accessed September 16, 2025. [https://ec.europa.eu/eurostat/statistics-explained/index.php?title=Farms\\_and\\_farmland\\_in\\_the\\_European\\_Union\\_-\\_statistics](https://ec.europa.eu/eurostat/statistics-explained/index.php?title=Farms_and_farmland_in_the_European_Union_-_statistics).
- Eurovia. 2021. "Policy Report: Roots of Resilience. Land Policy for an Agroecological Transition in Europe." . Accessed April 16, 2025. <https://www.eurovia.org/publications/policy-report-roots-of-resilience-land-policy-for-an-agroecological-transition-in-europe/>.
- Fairbairn, Madeleine. 2014. "'Like Gold with Yield': Evolving Intersections between Farmland and Finance." *The Journal of Peasant Studies* 41 (5): 777–95. <https://doi.org/10.1080/03066150.2013.873977>.
- FAO. n.d. *The 10 Elements of Agroecology*. Accessed March 27, 2025. <https://openknowledge.fao.org/items/74156cdc-0000-4150-8b60-e06162a095c8>.
- FAO. 2002. "WHAT IS LAND TENURE." Accessed April 4, 2025. <https://www.fao.org/4/y4307e/y4307e05.htm>.
- FAO. n.d. "Agroecology Knowledge Hub | Food and Agriculture Organization of the United Nations." Accessed March 23, 2025. <http://www.fao.org/agroecology/home/en/>.
- Federatie Agroecologische Boeren. 2024. "Rapport-Landonzekerheid." Accessed April 12, 2025. <https://www.federatieagroecologischeboeren.nl/wp-content/uploads/2024/10/rapport-landonzekerheid.pdf>.
- Fernandes, Vitor Bukvar, and Bastiaan Philip Reydon. 2024. "An Exploration of the Relationship between Land Governance and Development through a Systematic Review of Interventions." *Land Use Policy* 138 (March): 107032. <https://doi.org/10.1016/j.landusepol.2023.107032>.
- Flyvbjerg, Bent. n.d. "Five Misunderstandings about Case-Study Research." SSRN Scholarly Paper No. 2230464. Social Science Research Network. Accessed January 25, 2025. [https://papers.ssrn.com/sol3/papers.cfm?abstract\\_id=2230464](https://papers.ssrn.com/sol3/papers.cfm?abstract_id=2230464).
- Gauly, Sebastian Kilian, Michael Elia Hauschild, Bryan Adam Dix, Andreas Gattinger, and Wiebke Niether. 2025. "Food Forests and Forest Gardens: Definition, Practical Application and Role in Sustainable Development." *Agroforestry Systems* 99 (8): 224. <https://doi.org/10.1007/s10457-025-01310-9>.
- Geels, Frank W., and Johan Schot. 2007. "Typology of Sociotechnical Transition Pathways." *Research Policy* 36 (3): 399–417. <https://doi.org/10.1016/j.respol.2007.01.003>.

- Gerber, Jean-David, and Julien-François Gerber. 2017. "Decommodification as a Foundation for Ecological Economics." *Ecological Economics* 131 (January): 551–56. <https://doi.org/10.1016/j.ecolecon.2016.08.030>.
- Giddens, Anthony. 1986. "The Constitution of Society." *University of California Press*.
- Giraldo, Omar Felipe, and Peter M. Rosset. 2018. "Agroecology as a Territory in Dispute: Between Institutionalization and Social Movements." *The Journal of Peasant Studies* 45 (3): 545–64. <https://doi.org/10.1080/03066150.2017.1353496>.
- Giraldo, Omar Felipe, and Nils McCune. 2019. "Can the State Take Agroecology to Scale? Public Policy Experiences in Agroecological Territorialization from Latin America." *Agroecology and Sustainable Food Systems* 43 (7-8): 785-909. <https://doi.org.ru.idm.oclc.org/10.1080/21683565.2019.1585402>.
- Gliessman, Steve. 2016. "Transforming Food Systems with Agroecology." *Agroecology and Sustainable Food Systems* 40 (3): 187–89. <https://doi.org/10.1080/21683565.2015.1130765>.
- Gliessman, Steve. 2018. "Defining Agroecology." *Agroecology and Sustainable Food Systems* 42 (6): 599–600. <https://doi.org/10.1080/21683565.2018.1432329>.
- Goris, Margriet, Eliane Bakker, Leonardo van den Berg, et al. 2024. "Collective Land Arrangements That Decommodify Land for Agroecological Transformations." *Elementa: Science of the Anthropocene* 12 (1): 00061. <https://doi.org/10.1525/elementa.2023.00061>.
- Guba, Egon G., and Yvonna S. Lincoln. 1994. "Competing Paradigms in Qualitative Research." In *Handbook of Qualitative Research*. Sage Publications, Inc.
- Hajer, Maarten A. 1997. "Ecological Modernization: Discourse and Institutional Change." In *The Politics of Environmental Discourse: Ecological Modernization and the Policy Process*, edited by Maarten A. Hajer. Oxford University Press. <https://doi.org/10.1093/019829333X.003.0007>.
- Hall, Derek. 2013. *Land*. John Wiley & Sons.
- Harrison, Helena, Melanie Birks, Richard Franklin, and Jane Mills. 2016. "Case Study Research: Foundations and Methodological Orientations." *Forum Qualitative Sozialforschung / Forum: Qualitative Social Research* 18 (1): 1. <https://doi.org/10.17169/fqs-18.1.2655>.
- Holland, Margaret B., Yuta J. Masuda, and Brian E. Robinson. 2022. "Land Tenure Security and Sustainable Development." *Palgrave Macmillan*. <https://doi.org/10.1007/978-3-030-81881-4>.
- Hull, Simon Antony. 2024. "All for One and One for All? Exploring the Nexus of Land Administration, Land Management and Land Governance." *Land Use Policy* 144 (September): 107248. <https://doi.org/10.1016/j.landusepol.2024.107248>.
- IPCC. 2007. "AR4 Climate Change 2007: Mitigation of Climate Change." Accessed August 29, 2025. <https://www.ipcc.ch/report/ar4/wg3/>.
- IPES-Food. 2016. "From Uniformity to Diversity." Accessed April 14, 2025. <https://ipes-food.org/report/from-uniformity-to-diversity/>.
- Jansen, Kees. 2015. "The Debate on Food Sovereignty Theory: Agrarian Capitalism, Dispossession and Agroecology." *The Journal of Peasant Studies* 42 (1): 213–32. <https://doi.org/10.1080/03066150.2014.945166>.
- Janvry, Alain de. 1981. "The Role of Land Reform in Economic Development: Policies and Politics." *American Journal of Agricultural Economics* 63 (2): 384–92. <https://doi.org/10.2307/1239589>.
- Jellema, A., A. C. G. Beldman, and P. J. Woltjer. 2016. "Verkenning Nieuwe Eigendomsen Pachtvormen Voor Landbouwgrond: Een Stimulans Voor Een Meer Grondgebonden Melkveehouderij?" Accessed March

- 24, 2025. <https://research.wur.nl/en/publications/verkenning-nieuwe-eigendomsen-pachtvormen-voor-landbouwgrond-een->
- Jonas, Tammi. 2024. "Building the Intrinsic Infrastructure of Agroecology: Collectivising to Deal with the Problem of the State." *Agriculture and Human Values* 41 (3): 3. <https://doi.org/10.1007/s10460-024-10549-4>.
- Kadaster. 2024. "Overheidsinterventie op de agrarische grondmarkt." Accessed March 25, 2025. [https://www.zeeland.nl/sites/default/files/digitaalarchief/IB24\\_928e2360.pdf](https://www.zeeland.nl/sites/default/files/digitaalarchief/IB24_928e2360.pdf).
- Kadaster. 2024. "Hoeveel Landbouwgrond Bezitten Overheden? - Kadaster.Nl Zakelijk." Accessed April 10, 2025. <https://www.kadaster.nl/-/hoeveel-landbouwgrond-bezitten-overheden>.
- Kadaster. 2024. "Kwartaalbericht Agrarische Grondmarkt 2024-4 - Kadaster.Nl Zakelijk." Accessed March 25, 2025. <https://www.kadaster.nl/-/kwartaalbericht-agrarische-grondmarkt-2024-4>.
- Kallio, Hanna, Anna-Maija Pietilä, Martin Johnson, and Mari Kangasniemi. 2016. "Systematic Methodological Review: Developing a Framework for a Qualitative Semi-Structured Interview Guide." *Journal of Advanced Nursing* 72 (12): 2954–65. <https://doi.org/10.1111/jan.13031>.
- Kaufmann, Maria, Hannelore Mees, Duncan Liefferink, and Ann Crabbé. 2016. "A Game of Give and Take: The Introduction of Multi-Layer (Water) Safety in the Netherlands and Flanders." *Land Use Policy* 57 (November): 277–86. <https://doi.org/10.1016/j.landusepol.2016.05.033>.
- Kingdon, John, W. 1984. "Agendas, Alternatives, and Public Policies." *Journal of Public Policy* 5 (2): 281-287. <https://doi.org/10.1017/S0143814X00003068>.
- Knott, Eleanor, Aliya Hamid Rao, Kate Summers, and Chana Teeger. 2022. "Interviews in the Social Sciences." *Nature Reviews Methods Primers* 2 (1): 1–15. <https://doi.org/10.1038/s43586-022-00150-6>.
- Krčilková Š. and Janovská V. 2016. "Land Tenure as a Factor Underlying Agricultural Landscape Changes in Europe&58; A Review." *Scientia Agriculturae Bohemica* 47 (2): 68–81. <https://doi.org/10.1515/sab-2016-0011>.
- Land van Ons. n.d. "Zo Werkt Het." Accessed April 2, 2025. <https://landvanons.nl/onsplan/zo-werkt-het/>.
- LBPSight. 2025. "Duurzame grondfondsen en de agrarische grondmarkt" Accessed October 17. <https://www.lbpsight.nl/artikelen/duurzame-grondfondsen/>.
- Liefferink, Duncan. 2006. *The Dynamics of Policy Arrangements: Turning Round the Tetrahedron*. [https://doi.org/10.1007/1-4020-5079-8\\_3](https://doi.org/10.1007/1-4020-5079-8_3).
- Marks, G. 1993. "Structural Policy and Multilevel Governance in the EC. In A. Cafruny & G. Rosenthal (Ed.), *The State of the European Community: The Maastricht Debates and Beyond* (pp. 391-410). Boulder, USA: Lynne Rienner Publishers. <https://doi.org/10.1515/9781685856540-024>.
- Marsh, David, R. A. W. Rhodes, David Marsh, and R. A. W. Rhodes, eds. 1992. *Policy Networks in British Government*. Oxford University Press.
- Ministerie van Landbouw, Visserij. 2023. "Transitie in de pacht - Voorstellen voor wijzigingen in de pachtwetgeving - Rapport - Rijksoverheid.nl." Rapport. Ministerie van Algemene Zaken. Accessed May 3, 2025. <https://www.rijksoverheid.nl/documenten/rapporten/2024/12/20/bijlage-2-transitie-in-de-pacht-voorstellen-voor-wijzigingen-in-de-pachtwetgeving-rapport-december-2024>.
- Ministerie van Landbouw, Visserij. 2024. "Kamerbrief herziening pachtregelgeving - Kamerstuk - Rijksoverheid.nl." Kamerstuk. Ministerie van Algemene Zaken. Accessed May 18, 2025. <https://www.rijksoverheid.nl/documenten/kamerstukken/2024/12/20/kamerbrief-herziening-pachtregelgeving>.

- Molina, Manuel Gonzalez de. 2013. "Agroecology and Politics. How To Get Sustainability? About the Necessity for a Political Agroecology." *Agroecology and Sustainable Food Systems* 37 (1): 45–59. <https://doi.org/10.1080/10440046.2012.705810>.
- Montenegro de Wit, Maywa, and Alastair Iles. 2016. "Toward Thick Legitimacy: Creating a Web of Legitimacy for Agroecology." *Elementa: Science of the Anthropocene* 4 (July): 000115. <https://doi.org/10.12952/journal.elementa.000115>.
- Moon, Katie, and Deborah Blackman. 2014. "A Guide to Understanding Social Science Research for Natural Scientists." *Conservation Biology* 28 (5): 1167–77. <https://doi.org/10.1111/cobi.12326>.
- Morrison, D. 2011. "Indigenous food sovereignty: A model for social learning." In Wittman, H. et al (eds). *Food Sovereignty in Canada: Towards a just and sustainable food system*. Chapter 6. Fernwood Publishing. <https://www.indigenousfoodsystems.org/content/indigenous-food-sovereignty-model-social-learning>.
- Netwerk Voedselbosbouw. n.d. "Voedselbossen." Accessed December 19, 2025. <https://netwerkvoedselbosbouw.nl/voedselbossen/>.
- Noble, Helen, and Joanna Smith. 2015. *Issues of Validity and Reliability in Qualitative Research*. Research Made Simple. April 1. <https://doi.org/10.1136/eb-2015-102054>.
- Noord-Brabant. n.d.-a. "Beheer provinciale gronden." Accessed August 15, 2025. <https://www.brabant.nl/info/beheer-provinciale-gronden/>.
- Noord-Brabant. n.d.-b. "Duurzame pacht 2025." Accessed May 7, 2025. <https://www.brabant.nl/info/beheer-provinciale-gronden/uitleg-pachtpakketten-2025/duurzame-pacht-2025/>.
- Noord-Brabant. n.d.-c. "Nieuwe stap in verduurzaming pacht provinciale ruilgronden." Accessed October 9, 2025. <https://www.brabant.nl/actueel/nieuws/nieuwe-stap-verduurzaming-pacht-provinciale-ruilgronden/>.
- Nysingh advocaten en notarissen. 2021. "Wanneer is landbouw nog 'bedrijfsmatig'?" Accessed November 17, 2025. <https://www.nysingh.nl/blog/bedrijfsmatige-landbouw/>.
- Oosterbaan, A., Kuiters, A.T. 2009. "Agroforestry in the Netherlands." In: Rigueiro-Rodríguez, A., McAdam, J., Mosquera-Losada, M.R. (eds) *Agroforestry in Europe. Advances in Agroforestry*, vol 6. Springer, Dordrecht. [https://doi.org/10.1007/978-1-4020-8272-6\\_16](https://doi.org/10.1007/978-1-4020-8272-6_16).
- Ostrom, Elinor. 2009. "A General Framework for Analyzing Sustainability of Social-Ecological Systems." *Science* 325 (5939): 419–22. <https://doi.org/10.1126/science.1172133>.
- Ostrom, Elinor. 2015. *Governing the Commons: The Evolution of Institutions for Collective Action*. Canto Classics. Cambridge University Press. <https://doi.org/10.1017/CBO9781316423936>.
- Ostrom, Elinor, and Charlotte Hess. 2007. "Private and Common Property Rights." SSRN Scholarly Paper No. 1936062. *Social Science Research Network*. [https://papers.ssrn.com/sol3/papers.cfm?abstract\\_id=1936062](https://papers.ssrn.com/sol3/papers.cfm?abstract_id=1936062).
- Opendijk van Veen, Jeanet. 2019. "A Living Countryside: The Land Politics Behind the Dutch Agroecology Movement." *Resilience*. <https://www.resilience.org/stories/2019-12-16/a-living-countryside-the-land-politics-behind-the-dutch-agroecology-movement/>.
- Overheid, Wettenbank. n.d. "Burgerlijk Wetboek Boek 7." Accessed October 9, 2025. <https://wetten.overheid.nl/BWBR0005290/2025-07-18/#Boek7>.
- Palomo-Campesino, Sara, García-Llorente, Marina, and José A. and González. 2021. "Characterizing Agroecological and Conventional Farmers: Uncovering Their Motivations, Practices, and Perspectives toward Agriculture." *Agroecology and Sustainable Food Systems* 45 (9): 1399–428. <https://doi.org/10.1080/21683565.2021.1933671>.

- Perrin, Coline, and Adrien Baysse-Lainé. 2020. "Governing the Coexistence of Agricultural Models: French Cities Allocating Farmlands to Support Agroecology and Short Food Chains on Urban Fringes." *Review of Agricultural, Food and Environmental Studies* 101 (2): 2. <https://doi.org/10.1007/s41130-020-00105-z>.
- Pierri, Francesco Maria, Ward Anseeuw, and Adriano Campolina. 2025. "Land Tenure for Resilient and Inclusive Rural Transformation." *Global Food Security* 44 (March): 100835. <https://doi.org/10.1016/j.gfs.2025.100835>.
- Pierrick. 2000. "Land Reform: Via Campesina." *La Via Campesina - EN*, October 5. <https://viacampesina.org/en/2000/10/land-reform/>.
- Pierson, Paul. 2000. "Increasing Returns, Path Dependence, and the Study of Politics." *American Political Science Review* 94 (2): 251-267. *Cambridge Core*. <https://doi.org/10.2307/2586011>.
- Planbureau voor de Leefomgeving. 2021. "De werking van de grondmarkt en de rol van de overheid | Planbureau voor de Leefomgeving." <https://www.pbl.nl/publicaties/de-werking-van-de-grondmarkt-en-de-rol-van-de-overheid>.
- Ploeg, Jan Douwe van der, Dominique Barjolle, Janneke Bruil, et al. 2019. "The Economic Potential of Agroecology: Empirical Evidence from Europe." *Journal of Rural Studies* 71 (October): 46–61. <https://doi.org/10.1016/j.jrurstud.2019.09.003>.
- Ploeg, Jan Douwe van der, Jennifer C. Franco, and Saturnino M. Borrás Jr. 2015. "Land Concentration and Land Grabbing in Europe: A Preliminary Analysis." *Taylor & Francis*, April 3. world. <https://www.tandfonline.com/doi/abs/10.1080/02255189.2015.1027673>.
- Pont Omgeving. 2024. "Noord-Brabant stelt hogere eisen aan duurzaamheid op eigen pachtgronden." Accessed May 7, 2025. <https://omgevingsweb.nl/nieuws/noord-brabant-stelt-hogere-eisen-aan-duurzaamheid-op-eigen-pachtgronden/>.
- Raad voor de Leefomgeving en Infrastructuur. 2017. "Grond voor gebiedsontwikkeling." Accessed April 21, 2025. <https://www.rli.nl/publicaties/2017/advies/grond-voor-gebiedsontwikkeling>.
- Rijksoverheid. 2023. "Aanpak groei van aandeel biologische landbouw." Accessed December 3, 2025. <https://www.rijksoverheid.nl/onderwerpen/landbouw-en-tuinbouw/aanpak-groei-van-aandeel-biologische-landbouw>
- Rijksoverheid Kenniscentrum Voor Beleid En Regelgeving. n.d. "3.2.3 Algemene Rechtsbeginselen." Accessed December 5, 2025. <https://www.kcbr.nl/ontwikkelen-beleid-en-regelgeving/beleidskompas/3-wat-zijn-opties-om-het-doel-te-realiseren/32-rechtmatigheid/323-algemene-rechtsbeginselen>.
- Rijksvastgoedbedrijf. 2024. "Rijksvastgoedbedrijf verduurzaamt grondportefeuille - Nieuwsbericht - Rijksvastgoedbedrijf." Accessed July 22, 2025. <https://www.rijksvastgoedbedrijf.nl/actueel/nieuws/2024/07/22/rijksvastgoedbedrijf-verduurzaamt-grondportefeuille>.
- Robin, Tabitha. 2019. "Our Hands at Work: Indigenous Food Sovereignty in Western Canada." *Journal of Agriculture, Food Systems, and Community Development* 9 (B): B. <https://doi.org/10.5304/jafscd.2019.09B.007>.
- Rockström, Johan, John Williams, Gretchen Daily, et al. 2016. "Sustainable Intensification of Agriculture for Human Prosperity and Global Sustainability." *Ambio* 46 (1): 4–17. <https://doi.org/10.1007/s13280-016-0793-6>.
- Rosset, Peter, and Maria Elena Martínez-Torres. 2012. "Rural Social Movements and Agroecology: Context, Theory, and Process." *Ecology and Society*. <https://doi.org/10.5751/ES-05000-170317>.

- Rotz, Sarah, Evan D. G. Fraser, and Ralph C. Martin. 2019. "Situating Tenure, Capital and Finance in Farmland Relations: Implications for Stewardship and Agroecological Health in Ontario, Canada." *Taylor & Francis*, January 2. world. <https://www.tandfonline.com/doi/abs/10.1080/03066150.2017.1351953>.
- Runhaar, Hens. 2017. "Governing the Transformation towards 'Nature-Inclusive' Agriculture: Insights from the Netherlands." *Taylor & Francis*, July 4. world. <https://www.tandfonline.com/doi/abs/10.1080/14735903.2017.1312096>.
- RVO. 2024. "Jaarverslag-Grondkamers-2024" n.d. Accessed April 7, 2025. <https://www.rvo.nl/sites/default/files/2025-04/Jaarverslag-Grondkamers-2024.pdf>.
- RVO. 2024. "Resultaten Uitvraag Gecombineerde Opgave 2024."
- RVO.nl. n.d.-a. "Afspraken in een pachtovereenkomst." Accessed April 15, 2025. <https://www.rvo.nl/onderwerpen/pachten-en-pachtovereenkomsten/afspraken-overeenkomst>.
- RVO.nl. n.d.-b. "Grondkamer." Accessed April 16, 2025. <https://www.rvo.nl/onderwerpen/pachten-en-pachtovereenkomsten/grondkamer>.
- Sachet, Erwan, Ole Mertz, Jean-François Le Coq, et al. 2021. "Agroecological Transitions: A Systematic Review of Research Approaches and Prospects for Participatory Action Methods." *Frontiers Sustainable Food Systems* 26. <https://doi.org/10.3389/fsufs.2021.709401>.
- Safer. n.d. "Nos 4 Missions." Accessed March 27, 2025. <https://www.safer.fr/les-safer/nos-4-missions/>.
- Salman, Faris, and Akihisa Mori. 2023. "When, Where, and How Can Land Governance Overcome Path Dependency? A Trajectory of Land Governance Change." *Land Use Policy* 134 (November): 106920. <https://doi.org/10.1016/j.landusepol.2023.106920>.
- Scott, W. Richard. 1987. "The Adolescence of Institutional Theory." *Administrative Science Quarterly* 32 (4): 493–511. <https://doi.org/10.2307/2392880>.
- Silvis, Huib, and Martien Voskuilen. 2018. "Economie van de Pacht." *Wageningen Economic Research* 2018-082. <https://doi.org/10.18174/460704>.
- Skal Biocontrole. n.d. "Over Ons." Accessed August 7, 2025. <https://www.skal.nl/over-ons>.
- Sklenicka, Petr, Kristina Janeckova Molnarova, Miroslav Salek, et al. 2015. "Owner or Tenant: Who Adopts Better Soil Conservation Practices?" *Land Use Policy* 47 (September): 253–61. <https://doi.org/10.1016/j.landusepol.2015.04.017>.
- Staatsbosbeheer. n.d.-a. "Natuurinclusieve landbouw en pacht." Accessed April 10, 2025. <https://www.staatsbosbeheer.nl/zakendoen/natuurinclusief-boeren>.
- Staatsbosbeheer. n.d.-b. "Wat We Doen." Accessed April 10, 2025. <https://www.staatsbosbeheer.nl/wat-we-doen>.
- Stellingwerf, Josephine. 2023. "Minister Adema Zegt Modernisering Pachtstelsel Toe." *LTO*, September 28. <https://www.lto.nl/minister-adema-zegt-modernisering-pachtstelsel-toe/>.
- Steurer, Reinhard. 2013. "Disentangling Governance: A Synoptic View of Regulation by Government, Business and Civil Society." *Policy Sciences* 46 (4): 387–410. <https://doi.org/10.1007/s11077-013-9177-y>.
- Sulistyowati, Catharina Any, Suraya A. Afiff, Muhammad Baiquni, and Mia Siscawati. 2023. "Challenges and Potential Solutions in Developing Community Supported Agriculture: A Literature Review." *Agroecology and Sustainable Food Systems* 47 (6): 834–56. <https://doi.org/10.1080/21683565.2023.2187002>.

- Sumberg, James, and Ken E. Giller. 2022. "What Is 'Conventional' Agriculture?" *Global Food Security* 32 (March): 100617. <https://doi.org/10.1016/j.gfs.2022.100617>.
- SWDV Advocaten. 2017. "Pacht: Bedrijfsmatige Landbouw." Accessed October 9, 2025. <https://www.swdv-advocaten.nl/agri/pacht-bedrijfsmatige-landbouw/>.
- Swinnen, Johan, Kristine Van Herck, and Liesbet Vranken. 2016. "The Diversity of Land Markets and Regulations in Europe, and (Some of) Its Causes." *The Journal of Development Studies* 52 (2): 186–205. <https://doi.org/10.1080/00220388.2015.1060318>.
- Talukder, Byomkesh, Alison Blay-Palmer, Gary W. vanLoon, and Keith W. Hipel. 2020. "Towards Complexity of Agricultural Sustainability Assessment: Main Issues and Concerns." *Environmental and Sustainability Indicators* 6 (June): 100038. <https://doi.org/10.1016/j.indic.2020.100038>.
- Thiel, Sandra van. 2014a. *Research Methods in Public Administration and Public Management: An Introduction*. Routledge. <https://doi.org/10.4324/9780203078525>.
- Thiel, Sandra van. 2014b. "Theoretical Framework." In *Research Methods in Public Administration and Public Management*. Routledge.
- Toekomstboeren. 2018. "Grond van Bestaan: Land Voor Agroecologie En Nieuwe Boeren." Accessed April 28, 2025. <https://doi.org/10.13140/RG.2.2.27728.43526>.
- Toekomstboeren. n.d. "Over Toekomstboeren." Accessed May 11, 2025. <https://toekomstboeren.nl/over/>.
- Toekomstboeren. 2022. "Visie-Op-Pacht-En-Agroecologie." Accessed March 31, 2025. <https://toekomstboeren.nl/wp-content/uploads/2022/12/Visie-op-pacht-en-agroecologie.pdf>.
- Torfiging, Jacob. 2009. "Rethinking Path Dependence in Public Policy Research." *Critical Policy Studies* 3 (1): 70–83. <https://doi.org/10.1080/19460170903158149>.
- Tuck, Eve, and K. Wayne Yang. 2012. "Decolonization Is Not a Metaphor." *Decolonization: Indigeneity, Education & Society* 1 (1): 1. <https://jps.library.utoronto.ca/index.php/des/article/view/18630>.
- UN-Water. 2015. "UN World Water Development Report 2015." Accessed August 29, 2025. <https://www.unwater.org/publications/un-world-water-development-report-2015>.
- Van Oers, Laura M., W. P. C. Boon, and Ellen H. M. Moors. 2018. "The Creation of Legitimacy in Grassroots Organisations: A Study of Dutch Community-Supported Agriculture." *Environmental Innovation and Societal Transitions* 29 (December): 55–67. <https://doi.org/10.1016/j.eist.2018.04.002>.
- Verkuil, Loes A., Peter H. Verburg, Christian Levers, Anne Elise Stratton, and Catharina J. E. Schulp. 2024. "Bright Spots of Agroecology in the Netherlands: A Spatial Analysis of Agroecological Practices and Income Stability." *Agricultural Systems* 220 (October): 104086. <https://doi.org/10.1016/j.agsy.2024.104086>.
- Vijn, M., Docters van Leeuwen, H., Selin-Norén, I., de Jonge, I., de Ridder, A., Vermeij, I., & van der Voort, M. 2023. "Duurzaamheidsscore certificatiesystemen bij pachtinschrijvingen Rijksvastgoedbedrijf: Beoordeling certificatiesystemen op bodem- en waterkwaliteit en biodiversiteit." *Wageningen Plant Research; No. WPR-OT-1008*. <https://doi.org/10.18174/591317>.
- Wezel, A., S. Bellon, T. Doré, C. Francis, D. Vallod, and C. David. 2009. "Agroecology as a Science, a Movement and a Practice. A Review." *Agronomy for Sustainable Development* 29 (4): 4. <https://doi.org/10.1051/agro/2009004>.
- Wezel, A., Grard, B., Kamilia, K., Gkisakis, V., Moeller, N. I., Bitouzet, H., Balogh, L., Réthy, K., Blaix, C., Guznenco, V., Benoliel Coutinho, A., Hassink, J., Goris, M. B., Klapwijk, C., Hijmans, J., Nieboer, S., Van Dam, A., Katsaros, I., Andreotti, F., Schmutz, U. 2024. "Mapping the development of agroecology in Europe - Volume 2". *Isara*. <https://doi.org/10.5281/zenodo.11094953>.

- Wezel, Alexander, Barbara Gemmill Herren, Rachel Bezner Kerr, Edmundo Barrios, André Luiz Rodrigues Gonçalves, and Fergus Sinclair. 2020. "Agroecological Principles and Elements and Their Implications for Transitioning to Sustainable Food Systems. A Review." *Agronomy for Sustainable Development* 40 (6): 6. <https://doi.org/10.1007/s13593-020-00646-z>.
- Whyte, Kyle. 2018. "Food Sovereignty, Justice, and Indigenous Peoples: An Essay on Settler Colonialism and Collective Continuance." In *The Oxford Handbook of Food Ethics*, edited by Anne Barnhill, Mark Budolfson, and Tyler Doggett. Oxford University Press. <https://doi.org/10.1093/oxfordhb/9780199372263.013.34>.
- Wiering, M. A., and B. J. M. Arts. 2006. "Discursive Shifts in Dutch River Management: 'Deep' Institutional Change or Adaptation Strategy?" *Hydrobiologia* 565 (1): 1. <https://doi.org/10.1007/s10750-005-5923-2>.
- Wiering, M., D. Liefverink, and A. Crabbé. 2018. "Stability and Change in Flood Risk Governance: On Path Dependencies and Change Agents." *Journal of Flood Risk Management* 11 (3): 230–38. <https://doi.org/10.1111/jfr3.12295>.
- Wittman, Hannah, and Dana James. 2022. "Land Governance for Agroecology." *Elementa: Science of the Anthropocene* 10 (1): 00100. <https://doi.org/10.1525/elementa.2021.00100>.

## Appendix 1: Interview guide

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Typical duration interview: 60 min

Translation is included (in between brackets in green)

Explanation interview questions: The interview questions were divided into two main themes: 'concrete tenure practices' and 'institutional dynamics'. The first theme aimed at capturing the most important features of sustainable tenure practices in terms of allocation and sustainable land use, and how these might align/misalign with agroecology. The second theme explored broader tenure dynamics, reflecting on institutional barriers. The numbered questions are open questions and were the 'pillars' of the interview. The bullet point questions are follow-up questions in order to help keep the interview on track with my research purposes. It should be acknowledged that no interview was the same and that interview questions evolved over time. These final questions were the ones that consistently performed the best.

### Introduction

Ik ben Viktor Bruyn en ik ben master student *Environment and Society Studies* aan de Radboud Universiteit. Mijn onderzoek gaat over de relatie tussen agro ecologie en duurzame pacht in de provincie Noord-Noord-Brabant. Het doel van het onderzoek is het in kaart brengen van de mogelijkheden en obstakels voor het integreren van agro-ecologische landbouwvormen in duurzaam pachtbeleid. Het doel van dit interview is om meer te weten te komen over hoe u als [functie] van [organisatie] nadenkt over vraagstukken rondom verduurzaming van de pacht, en uw ervaringen in deze transitie tot nu toe.

(My name is Viktor Bruyn and I am a Master's student in *Environment and Society Studies* at Radboud University. My research is about the relation between agroecology and sustainable tenure in the province of Noord-Brabant. The aim of this research is to identify the possibilities and barriers for integrating agroecological needs for land access with sustainable land tenure policy in the province of Noord-Brabant. The goal of this interview is to learn more about how you, as [position] of [organization], view issues around sustainable tenure, and specifically your experiences in this transition so far.)

### Definition agroecology

Agro-ecologie is een manier van landbouw die de natuur als uitgangspunt neemt. Het combineert ecologische kennis met landbouwpraktijken om voedsel te produceren op een manier die goed is voor de bodem, de biodiversiteit én de mensen die er werken. Agro-ecologische boeren onderscheiden zich daarmee van biologische boeren bijvoorbeeld, omdat ze dus niet alleen rekening houden met hoe ze telen, maar ook met sociale cohesie en verbindingen tussen mens, maatschappij, en natuur. Agro ecologie staat bijvoorbeeld ook voor het opbouwen van gemeenschappen rondom grond en een economie gebaseerd op solidariteit.

(Agroecology is a way of farming that takes nature as its starting point. It combines ecological knowledge with agricultural practices to produce food in a way that benefits the soil, biodiversity, and the people who work the

land. Agroecological farmers thereby distinguish themselves from organic farmers for example, because they do not only consider how they grow crops, but also focus on social cohesion and the connections between people, society, and nature. Agroecology also stands for building communities around land and fostering an economy based on solidarity for example.)

### **Opening remarks**

- Het interview zal ongeveer een uur duren.  
(The interview will take approximately one hour)
- Alle informatie die u deelt is vertrouwelijk en zal niet direct tot u terug te herleiden zijn.  
(All information you share is confidential and will not be directly traceable to you)
- Vindt u het goed dat ik dit interview opneem?  
(Do you consent to this interview being recorded?) (*usually agreed upon beforehand*)
- Tot slot zou ik graag nog willen benadrukken dat u geen vragen hoeft te beantwoorden als u dat niet wilt, en dat we het interview op elk moment kunnen stoppen.  
(Lastly, I would like to emphasize that you are not required to answer any questions you do not want to, and we can stop the interview at any time)

### **Introductory questions**

1. Kunt u kort uw functie toelichten, en de rol die duurzame pacht daarin speelt?  
(Could you briefly introduce your job function and the role that sustainable tenure plays in it?)

### **Theme 1: Concrete tenure practices (dimension ‘rules of the game’)**

2. ‘Duurzaamheid’ is een breed begrip. Hoe wordt ‘duurzame pacht’ ingevuld door [organisatie/gemeente]?  
(‘Sustainability’ is a broad term. Could you describe what sustainable tenure looks like at [organization]?)

### **General follow-up questions**

- Hoe is deze besluitvorming tot stand gekomen?  
(How did this decision-making come about?)
- Welke partijen zijn betrokken (geweest) bij het opstellen van duurzaamheidsvoorwaarden?  
(Which parties are/were involved in the making of sustainability criteria?)
- Wat voor type pachtcontracten hebben jullie, en waarom?  
(What types of lease contracts do you issue, and why?)
- Is er wel eens sprake van een doorslaggevende factor in de gunning? Zo ja, wat is dit dan?  
(Is there sometimes a decisive factor in the allocation process? If so, what is it?)
- Zijn er wel eens problemen geweest met pachters? Waar gingen deze problemen dan over?  
(Have there ever been issues with tenants? What were those issues about?)

### **Follow-up questions related to AE**

- Naast certificaten en keurmerken, is het ook mogelijk om op andere manieren te controleren en te meten of een bedrijf duurzaam is (bv. teeltplannen, bedrijfsplannen, monitoringsplannen, inkoopfacturen?). Waarom wel/niet?  
(Besides certificates, is it also possible to determine whether a farming business is sustainable in different ways? For example, by evaluating crop rotation plans, business plans, monitoring plans, and purchase invoices? Why (not)?)

- Is het mogelijk om een aparte gunningsprocedure te hebben voor kleine percelen rondom dorps/stadskernen voor kleinschalige initiatieven zoals voedselbossen en zelfoogstuinen? Waarom wel/niet?  
(Is it possible to have a separate allocation process for smaller parcels around villages and cities for small-scale initiatives such as food forests and CSA's? Why (not)?)
- Agro ecologie is meer dan alleen duurzaam grondgebruik. Het staat ook voor het bevorderen van sociale cohesie en een economisch model gebaseerd op solidariteit. Is het mogelijk voor [organisatie] om 'maatschappelijke' selectiecriteria in te voeren? Denk aan ledenlijsten met adressen (korte keten) bijvoorbeeld. Waarom wel/niet?  
(Agroecology is more than sustainable land use. It also advocates social cohesion and economic solidarity. Is it possible for [organization] to take into consideration 'social' selection criteria? For example member lists with addresses (short supply chain)? Why (not)?)

## **Theme 2: Institutional dynamics (dimension 'power and resources') – 15 min**

3. Wat zijn de grootste uitdagingen voor het verduurzamen van de pacht voor [organisatie/gemeente]? Heeft u voorbeelden/anekdotes?  
(What are the biggest challenges in making land tenure more sustainable for [organization]? Do you have examples/anecdotes?)
4. Wat gaat er goed in de verduurzaming van de pacht? Zowel in [organisatie], als in Nederland in het algemeen? Heeft u voorbeelden/anekdotes?  
(What is going well in sustainable land tenure, both in [organisation] and in the Netherlands? What are examples of good practices?)
5. Als u vanuit uw rol bij [organisatie/gemeente] een advies mocht geven aan de Tweede Kamer, wat zou u dan graag in een eventuele nieuwe pachtwet willen zien? (mag in het kader van verduurzaming, maar ook in het algemeen).  
(If you could give advice to the Second Chamber for a potential new tenure law, what would you advise?)

## **Closing remarks**

- Heeft u nog opmerkingen die u wilt delen?  
(Do you have any final remarks you would like to share?)
- Heeft u aanbevelingen voor wie ik nog meer zou kunnen interviewen over dit onderwerp?  
(Do you have recommendations for other organizations I could interview on this topic?)
- Hoe wilt u graag op de hoogte willen worden gehouden na het onderzoek? Wilt u het transcript en/of de volledige scriptie?  
(How would you like to be kept informed after the interview? Would you like the transcript and/or the full thesis?)
- Mocht u meer willen weten over agro ecologie of in contact komen agro ecologische boeren, kunt u contact opnemen via [land@toekomstboeren.nl](mailto:land@toekomstboeren.nl)  
(If you would like to learn more about agroecology or get in touch with agroecological farmers, you can contact [land@toekomstboeren.nl](mailto:land@toekomstboeren.nl))
- Bedankt voor uw tijd. U kunt me altijd bereiken voor nabranders.  
(Thank you for your time. Feel free to contact me with any follow-up questions)

## Appendix 2: Coding scheme

| Code group                                                      | Subgroup (indicators)        | Number of quotations per subgroup | Code                                            | Number of quotations |
|-----------------------------------------------------------------|------------------------------|-----------------------------------|-------------------------------------------------|----------------------|
| <b>Sustainable tenure characteristics</b>                       |                              |                                   |                                                 |                      |
|                                                                 | Eligibility                  | 19                                | Eligibility_agricultural_business               | 19                   |
|                                                                 | Allocation                   | 43                                | Allocation_public_listing                       | 22                   |
|                                                                 |                              |                                   | Allocation_certificates                         | 17                   |
|                                                                 |                              |                                   | Allocation_motivation                           | 4                    |
|                                                                 | Rights                       | 14                                | Rights_transferability                          | 9                    |
|                                                                 |                              |                                   | Rights_permits                                  | 5                    |
|                                                                 | Duration                     | 10                                | Duration_short_term                             | 10                   |
|                                                                 | Sustainable land use         | 53                                | Sustainability_prohibitions_chemicals           | 17                   |
|                                                                 |                              |                                   | Sustainability_prohibitions_plant_species       | 4                    |
|                                                                 |                              |                                   | Sustainability_distance                         | 8                    |
|                                                                 |                              |                                   | Sustainability_definitional_issue               | 24                   |
| <b>PAA dimensions for misalignment (barriers for alignment)</b> |                              |                                   |                                                 |                      |
| Resources and power                                             | Barrier knowledge            | 54                                | Barrier_internal_agricultural_knowledge         | 21                   |
|                                                                 |                              |                                   | Barrier_knowledge_definition_sustainable_tenure | 24                   |
|                                                                 |                              |                                   | Barrier_reactionary_province                    | 9                    |
|                                                                 | Barrier legitimacy           | 18                                | Barrier_lack_AE_legitimacy                      | 18                   |
|                                                                 | Barrier natural spatial      | 14                                | Barrier_natural_spatial                         | 14                   |
|                                                                 | Barrier limits public tenure | 50                                | Barrier_governance_purpose                      | 15                   |
|                                                                 |                              |                                   | Barrier_variance_governments                    | 5                    |
|                                                                 |                              |                                   | Barrier_political_color                         | 12                   |
|                                                                 |                              |                                   | Barrier_lack_of_vision                          | 5                    |
| Barrier_work_capacity                                           |                              |                                   | 8                                               |                      |

|                                                                  |                                        |    |                                               |    |
|------------------------------------------------------------------|----------------------------------------|----|-----------------------------------------------|----|
|                                                                  |                                        |    | Barrier_subsidies                             | 5  |
| Actors                                                           | Barrier status quo coalitions          | 18 | Barrier_grondkamer                            | 12 |
|                                                                  |                                        |    | Barrier_lobby_agroindustry                    | 4  |
|                                                                  |                                        |    | Barrier_conventional_banks                    | 2  |
| Rules                                                            | Barrier formal rules                   | 19 | Barrier_didam_ruling                          | 9  |
|                                                                  |                                        |    | Barrier_lacking_legislative_framework         | 10 |
|                                                                  | Barrier informal rules                 | 8  | Barrier_agricultural_business                 | 8  |
| Discourses                                                       | Barrier discourses governance          | 19 | Barrier_market_mechanisms                     | 19 |
|                                                                  | Barrier discourses policy specific     | 9  | Barrier_land_as_financial_asset               | 9  |
| <b>PAA dimensions for alignment (facilitators for alignment)</b> |                                        |    |                                               |    |
| Resources and power                                              | Facilitator legitimacy                 | 12 | Facilitator_province_as_leader                | 12 |
| Actors                                                           | Facilitator actor coalitions           | 2  | Facilitator_cooperation_governments           | 2  |
| Rules                                                            | Facilitator informal rules             | 4  | Facilitator_Skal_land_status                  | 4  |
| Discourses                                                       | Facilitator discourses policy specific | 11 | Facilitator_recognition_problem_productivism  | 11 |
| <b>Other</b>                                                     |                                        |    |                                               |    |
|                                                                  | Recommendations                        | 15 | Recommendation_separate_planning_title_AE     | 8  |
|                                                                  |                                        |    | Recommendation_choice_sustainability_measures | 5  |
|                                                                  |                                        |    | Recommendation_left_over_parcel               | 2  |

### Appendix 3: Statement on the use of generative AI

During the writing of this research, generative AI (ChatGPT) was occasionally used as a supportive tool. In the beginning of the research it was mainly used to help create a general outline of the thesis. For example in terms of how many words each chapter should roughly have, as well as how to structure the overall lay-out. Of course, the final version ended up being different from what ChatGPT suggested but it was useful to get started. In later stages of the research ChatGPT was sometimes used as a sparring partner, especially as the thesis exceeded the word limit. In paragraphs where I suspected I had excessive words, I would ask ChatGPT whether it could make a shorter version. Importantly, I never copied these texts, but always made sure to critically evaluate what was essential. As such, I mainly took inspiration from shorter sentence structures and phrasing, rather than actually deleting ‘substantial’ text. Lastly, I never uploaded the entire thesis or empirical results to ChatGPT, as to stay in accordance with ethical and academic integrity. All of the writing in this thesis is fully my own.