

Rethinking Our Food Systems

Davide Gentilini

University College Twente

BSc Technology Liberal Arts & Sciences

University of Twente

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Supervised by

Dr. Cheryl de Boer

Dr. Pascal Wilhelm

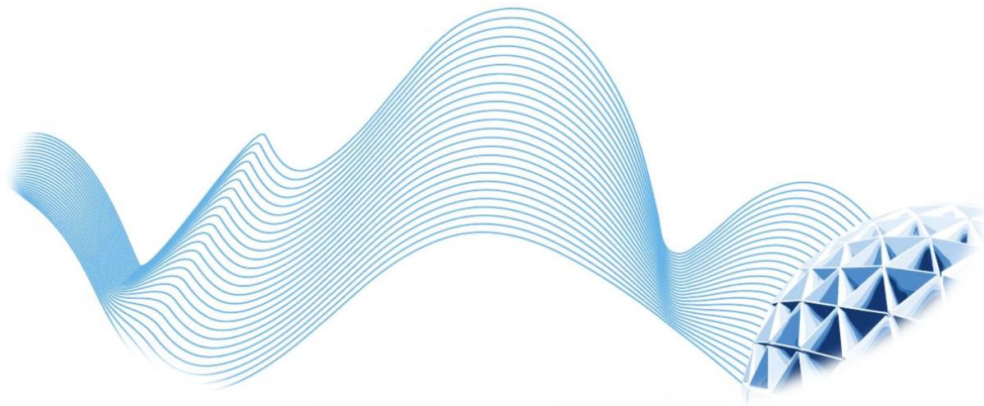


Table of Contents

Table of Contents.....	2
Abstract	4
Introduction.....	4
The Peasant Model.....	5
Post war modernization and entrepreneurial agriculture	6
Herenboeren Initiative	7
Theoretical Framework.....	9
Multi-Level Perspective	9
Strategic Niche Management	11
Strategic Niche Management in Agriculture.....	12
Governance.....	12
Enrolling Capacity.....	12
Integration.....	13
Heterogeneous Knowledge Production.....	13
Effective Reformism.....	13
Example of Noardlike Fryske Walden:.....	14
Formulation of Research Question	16
Materials & Methods.....	16
Results	20
Governance.....	20
Enrolling Capacity:.....	20
Integration:.....	21
Heterogeneous Knowledge Production:	22
Effective Reformism:.....	22
Discussion	23
Contextual Exploration	25
Conclusion.....	27
References:	28

Appendix A: Consent form 30

Abstract

Due to the contemporary challenge of climate change and the large contribution that industrial agriculture has in causing this issue, seeing regenerative agriculture as a more dominant food production model has the potential for being an important mitigation option. In this research, a community farm that farms regeneratively in the outskirts of Enschede, Netherlands, was examined according to the criteria of Strategic Niche Management (SNM). This literary framework provides managerial indications of the activities and relationships a niche must nurture to shelter itself and grow towards the regime level. The following research question was used: *According to Strategic Niche Management, to what extent does a community farm in Enschede enact the required strategies to nurture and grow its niche?* Semi-structured interviews with members of the farm's management board and a farmer were used to gather the data. Results indicated that despite not knowing SNM, the farm covers most of its pillars, providing a possible indication for why it has been demonstrating a viable management model, capable of bringing increased recognition to the farm in time.

Introduction

Within the global challenge of the ecological transition, it is fundamental to address the way our food is produced. Industrial agriculture, responsible for the global food supply, is characterized by intensive monocultures, pesticides and synthetic fertilizers, which cause heavy soil degradation (Bonfante, Terribile, & Bouma, 2019). When the soil degrades, it loses its fundamental services in sustaining all life on land, and therefore, also agriculture and the societies that rely on it to survive (Anderson et al., 2023). The soil is also a large carbon sink, which releases it in the atmosphere once it degrades. To counter the loss in fertility of the soil, industrial agriculture must rely more and more on chemical inputs, entering a destructive vicious cycle (Calitatea, 2017).

These inputs pollute the atmosphere and surrounding environment, killing many species but failing to eliminate others that thrive uncontrollably, causing disequilibrium and loss of biodiversity (Anderson et al., 2023). Lacking the equilibrium of a native ecosystem, the ones created by industrial agriculture to produce food strongly lack resilience. Extreme weather events and pests can easily challenge an agricultural system that doesn't have the ecological characteristics of a natural environment, which are fundamental to withstand stress (Anderson et al., 2023).

The way to solve these issues might not be the one of taking a technocratic route in innovating certain farming technologies to make them carbon neutral or less pollutant. What we need is to rethink our systems and divert from the goal of infinite economic growth as it is not possible on a planet with finite resources (McGreevy et al., 2022).

In the next section we will go through a quick guide to the model changes in the agricultural sector that occurred in the past century and how these lead to environmental and

social unsustainability. We will reflect on rediscovering elements of nature driven agriculture and collectivity that existed in farming prior to the economic boom as a potential solution and introduce the case explored in this research.

The Peasant Model

To understand why industrial farming leads to severe environmental issues we must go beyond the analysis of specific practices. Ecologically detrimental methods are the result of a deeper radical revolution in the ways society interacts with land and food production (Van der Ploeg, 2018).

In doing so, the role of the farmer in society has shifted significantly. When we think about farmers before the post-war green revolution, we tend to see them as a very poor and retrograde class. While poverty and intense labor were characteristic of the farming class, Van der Ploeg argues that the peasant model also comes with a fundamental knowledge patrimony on regenerative food production and territorial management (Van der Ploeg, 2015).

The peasant model is a form of co-production between man and nature, where the farmers use this relationship to obtain a continuous and self-sufficient flow of resources. In the book “The New Peasantries” Van der Ploeg describes how the constant co-production and transformation of the natural and social environments is what primarily distinguishes rural and urban areas (Van der Ploeg, 2015). The farmers use their awareness of the territory to steward the land, obtaining resources in a regenerative manner that safeguards the future generations. At the same time, the specific characteristics of the land require the development of unique knowledge, which leads to the formation of unique artisan methods and products that interact with the markets (Van der Ploeg, 2015).

Equally important to the concept of production is the one of reproduction. Together they enable the farmer to manage its territory as a base of resources, whose regeneration potential is directly proportional to its production potential. This is possible first through the labor processes that occur in the farm, which is the point of encounter between man and nature. A combination of practices that constitute the unique ways farmers can develop to cocreate and regenerate their territory, their base of resources. Van der Ploeg argues how these characteristics of the peasant model contain large potential for progress at an environmental and social level. Indeed, it is through labor done to satisfy the needs of the farm, the land and the local network that farmers overcome class struggle, improving their condition and rural territory (Van der Ploeg, 2015).

As such, the strengthening of this base of resources is what ultimately gives self-sufficiency to the farmers. A condition where the farm possesses the knowledge and abilities to regenerate its resources such as soil and water, as well as an integrated local network of people providing them with inputs needed and a direction for its outputs (Brumori & Rossi, 2000). For this reason, the development of a strong base of resources also depends on the farmer’s

cooperation with local actors, as they are what ultimately valorizes the resources. This again highlights the farmer's fundamental role in shaping the environment's quality, social cohesion and life in rural areas.

In the process of formation of new peasantries, farmers see agriculture as a process where the conversion of inputs into outputs is oriented within their farm and local communities. This implies the rediscovery of tight relations with the consumer, a diversification of outputs and services, and the establishment of local networks to obtain the needed resources and political support. As such, the detachment from the need of inputs that come from the agroindustry requires to base production on resources that are not controlled by powerful third parties, but by the farmers and the tied collectives (Van der Ploeg, 2015; Krishnan et al., 2021).

Post war modernization and entrepreneurial agriculture

Following WWII and the widespread hunger that it brought to Europe, the peasant model was successfully reconstructed, providing an agricultural recovery across its countries. However, in the mid 1950s and the growing wealth of the population and technological development, the peasant model began to be seen as a symbol of “backwardness” (Van der Ploeg, 2018). An important reason for this was the lack of scientific and technological benefits, which was used as an explanation for the conditions of poverty that characterized the farmers. As a result, there was widespread support for entrepreneurial agriculture, where large, intensive monocultures could be efficiently cultivated with technological innovations (Zaharia, & Mihai, 2018). At the same time, this would enable the farmers to abandon their rural lives and find better conditions in the cities (Van der Ploeg, 2015).

Leitheiser et al. (2022) identifies the three interrelated elements of how industrial farming works that constitute its social and environmental unsustainability. The first is a “modernist social imagery”, which assumes that industrial and techno-scientific developments lead to linear progress, economic growth and replacement of human labor. The “peasant model” was regarded as “backwards” and not in line with the demands of a developed country and globalized market. The second is dis-embeddedness, which is the resulting separation between the food producer and the consumer. Food is not transformed according to local traditions and knowledge, it is rather assembled in locations that can be thousands of kilometers apart, losing the social value it has. Traditional collaborations and relationships are replaced with the individualism of a supply chain relentlessly pursuing economic growth. This inevitably impacts the social vitality and attractiveness of rural areas. The third element is the commodification of food, land and labor, where the value of products exists in their exchange potential. At the same time, the land is the field to materialize this exchange potential, where strong property regimes drive both industrial and agroecological farmers to “*operate as atomized entrepreneurial units, rather than as a social force concerned with land justice*” (Calo, 2022, p. 2). Needing to abide by specific productive methods to obtain subsidies and depending on powerful corporations for inputs and directions for outputs, farmers lose their agency in the stewardship of the territory, becoming

dependent workers for stronger actors (Lobao, & Stofferahn, 2008) (Van der Ploeg, 2015) (Zaharia, & Mihai, 2018) (Anderson et al., 2023).

Many criticisms of the industrial food model often blame the farmers for the unsustainability of how our food is produced (Daghagh Yazd, Wheeler, & Zuo, 2019), failing to address the much more relevant structures of political, market and technological trajectories that create a modernist social imagery, disembeddedness and commodification (Leitheiser et al., 2022). Farmers are the weakest actor in terms of decision power in the supply chain. Yet, they are the ones that are told to change towards sustainability while depending on a system that is unsustainable by design (Van der Ploeg, 2020). Policies such as the 2024 Green Deal and the proposed solution of Dutch party D66 to half the number of livestock on Dutch farms to mitigate nitrogen pollution have only resulted in massive farmer protests and the empowering of populist arguments that are completely hostile to the ecological transition (Matthews, 2024). Ultimately, showcasing the limited impact of solutions that try to lean towards sustainability without strongly questioning the capital-intensive design of food production.

This is why a possible solution to the urgent need to produce our food sustainably is to see the rise of farms that follow the principles of regeneration and social inclusion of the peasant model as described by Van der Ploeg. Through constant experimentation and improvement, such farms need to strive to get out of their current niche position, ultimately gaining the support and recognition that enables the consumer to choose them instead of industrial producers.

Herenboeren Initiative

Despite what this introduction might leave to imagine, during the last 20 years Europe has seen the rise of movements that aim at rediscovering the regenerative and social elements of food production (Van der Ploeg, 2015). They have been doing so in the strive for self-sufficiency and improved living conditions by redefining the farmer's role in the food production supply chain and within their rural communities. Farms with principles that revive elements of the peasant model and develop regenerative practices are emerging. As they experiment and find ways to produce food sustainably, they gain recognition and support, growing their potential to challenge industrial agriculture in the political debate and in the market.

One of the most famous examples in the Netherlands is the Herenboeren initiative. An organization of 18 active community farms spread across the country that exists since 2013. Each one strives to produce food differently from the industrial models of today, focusing on the growth of local seasonal food, but most importantly, the relationship between the farmer, the consumer and ecosystem services such as biodiversity and soil health. Each farm consists of 1-3 professional farmers and 250 households of "gentleman farmers" that offer financial and occasional labor support in the farm in exchange for their weekly share of local seasonal food.

The farm provides food security for its members and doesn't focus on selling products outside the community.

The three pillars are: (1) nature-driven, (2) socially connected and (3) economically supported. The seven principles are:

1. A Herenboerderij is a cooperative
2. Appreciation of the minimum labor is guaranteed in the budget
3. Production is tailored to the nutritional needs of the members
4. Products are not sold
5. Financing only through deposits and contributions
6. Nature-driven production
7. Being a learning and experimenting network.



Fig 1. Herenboeren (Gezondorp)

The Herenboeren Initiative is growing, with 35 new farms being planned to start in the upcoming years. This research focuses on understanding the local relationships and activities that enable a Herenboeren farm to function and obtain the agency needed for success. As previously mentioned, a possible solution for the sustainability of our food systems is to see a greater presence of such farming organizations on the global food market. Where they can have the political support and logistic feasibility to enable consumers to choose them as their food source. By performing a case analysis on one Herenboeren farm I want to understand the extent to which it follows the processes needed for the growth of a niche into a potential market solution.

Theoretical Framework

Multi-Level Perspective

The emergence of Herenboeren and the “new peasantries” discussed by Van der Ploeg can be understood by contextualizing it within the Multi-Level Perspective (MLP) first envisioned by Rip and Kemp (1998) and then developed by Geels (2001). The MLP describes how socio-technical transitions occur by describing society as a set of ever evolving levels (niche, regime and landscape) that define its cultural, technological and radical trajectories.

The shift of farming practices and conceptualizations from the dominant industrial models to more socially and environmentally sound systems constitutes a radical socio-technical transition. Like many radical technologies and philosophies, it faces the strong resistance of the current socio-technical configuration, as the elements within it are strongly linked and aligned to each other (Geels, 2001). This causes them to become highly valued culturally, economically and politically (McGreevy et al., 2022).

For example, in the European farming industry large-scale intensive production is subsidized by the EU through the Common Agricultural Policy (CAP). Powerful pharmaceutical and chemical companies provide the inputs of seeds, pesticides and fertilizers. The size of the cultivated land and intensive production asks for large machinery and the corporate actors that provide them. Actors involved in transportation and packaging also possess a large stake, given the thousands of kilometers that a product travels from the farm to the organization responsible for its transformation. Transport and packaging is then needed again to take the product to the supermarkets that enable contact with the consumer, who begins supporting such configuration as they witness how it brings food on their table. Such complex technological trajectories and interactions define what is known as the regime of the multi-level perspective. They are the similar routine that all the firms and actors involved follow. Within the established regime you find the rules that define engineering practices, production processes, product characteristics, skills, together with the ways of handling problems and innovation (Rip & Kemp, 1998).

The technological trajectories are in the socio-technical landscape, defined as the external structure and context of the interactions between actors of the regime. The landscape includes a set of deeply rooted heterogeneous factors such as: culture, spatial arrangements of cities, economic growth, wars, immigration, climate change, and dominant political ideologies (Geels, 2001). Zooming into the farming industry, our neoliberal capitalist society and its pursuit of economic growth valorizes large-scale entrepreneurial farming and the actors involved along the supply chain. This dominant political and economic stance also influences the interactions between society and the human/natural resources, providing food security for a portion of the human population on one side, but threatening it by causing climate change and biodiversity loss on the other.

It is through these imbalances in the dominant societal paradigms that radical innovations are called into action, as they provide the need and inspiration for the surge of niches. As such, a

niche is any technological or societal innovation that responds to changes in the landscape in different and unpopular ways. It does not follow the rules of the dominant regime and landscape. For instance, the development of new peasantries discussed by Van der Ploeg can be seen as a niche within the farming industry. It is a radical way of conceptualizing the technologies and rules of today's food production in Europe. As such, this radical socio-technical trajectory finds the niche stage as an incubation room where it can be studied, developed, improved and form additional novelties. This is especially important because in the first stages of development, every radical socio-technical trajectory cannot compete with the markets that dominate the regime. Instead, by initially working at the niche level, it also has the opportunity to demonstrate whether it can work or not.

Overall, socio-technical transitions occur because the imbalances in the landscape put pressure on the regime and create fractures in the dominant technological trajectories, enabling niches to penetrate and become part of the regime. Ultimately, they reform the technological trajectories and the socio-technical landscape. Broader themes like climate change and social justice (landscape), put pressure/questioning on the dominant farming methods (regime), which enables the development of niche innovations like the development of new peasantries. However, even if the correct societal conditions exist amongst the various levels, not all niches succeed. This is why it is crucial to understand what strategies a niche must pursue.

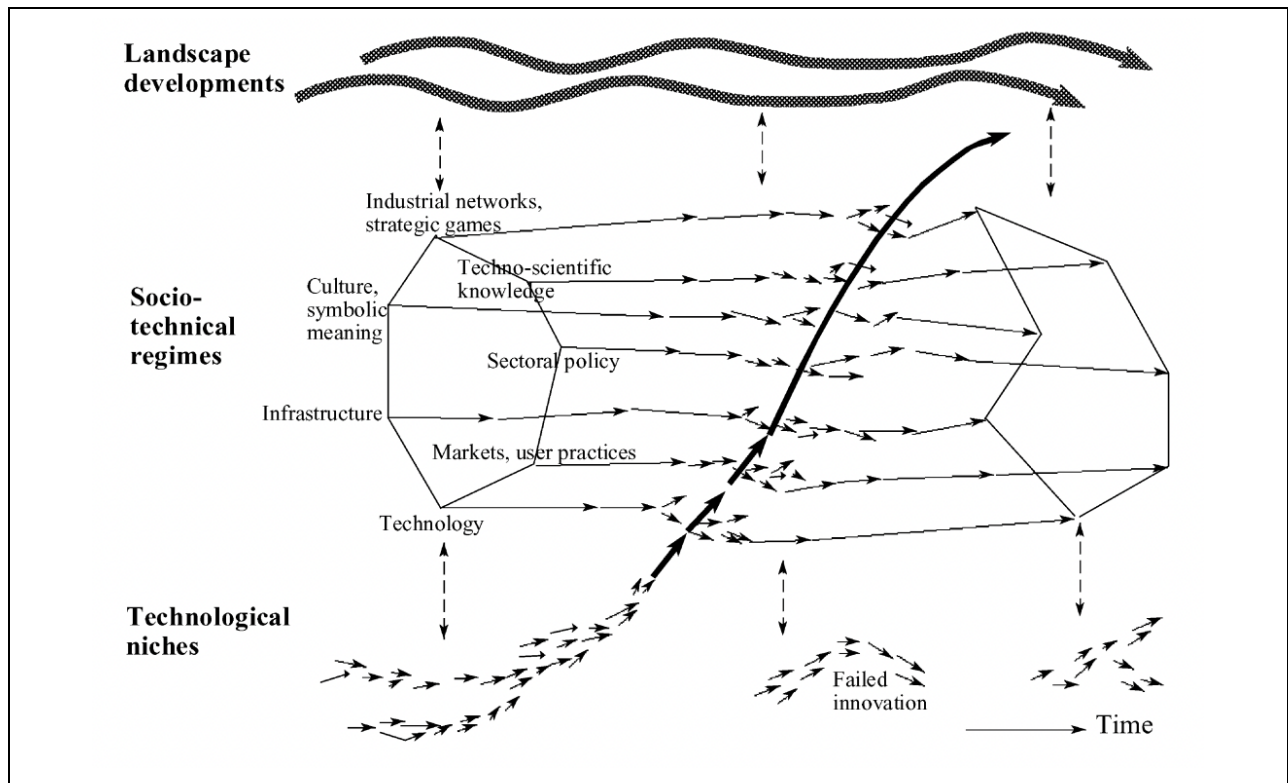


Fig. 2. A dynamic multi-level perspective on Technological Transitions (Geels, 2002).

Strategic Niche Management

To fulfill their role as incubation rooms that launch a radical innovation in the regime, a niche must be protected, nourished and managed. To understand the commonalities of how this is done, Schot, Hoogma, and Elzen (1994) and Kemp, Schot, and Hoogma (1998), used insights from constructivist science and technology studies in evolutionary economics to craft the theory of Strategic Niche Management (SNM). This theory was proposed as a tool to simultaneously manage both technological and institutional change, in order to enable the smart diffusion of socio-technical novelties (Roep, Van der Ploeg, Wiskerke, 2003). Through the involvement of technical experts, researchers, policy makers and representatives of public interests, Kemp et al. (1998, 2001) saw it as a way to design desirable transition paths that would allow socio-technical novelties to build a new regime.

Strategic Niche Management distinguishes three processes that determine the success of the niche (Schot & Geels, 2008).

Expectations:

According to SNM, the development of a niche community should be nurtured by firstly ensuring that expectations of what the niche can deliver are robust (shared by all actors), specific (in order to provide proper guidance), and achievable (Seyfang & Haxeltine, 2012). Expectations should also be of a high quality, meaning that their content is supported by ongoing projects. Ultimately, expectations provide directions for learning processes, attract attention and legitimate the nurturing of the niche (Schot & Geels, 2008).

Networks:

It is fundamental that a niche establishes a broad network, consisting of stakeholders that belong to different types of organizations, capable of providing multiple voices and facilitating learning. Equally important is the fact that these networks are deep, in order to enable interaction between relevant stakeholders and ensure that they mobilize the resources for which they are needed (Schot & Geels, 2008).

Learning:

Actors of a niche should engage in both first and second order learning (Schot & Geels, 2008). First order learning is the one that occurs when factual information is acquired, such as the accumulation of data for the project. Second order learning encourages actors of the niche and those outside to reflect and question current systems and frames of reference, in order to radically change the existing actions and thinking patterns (Seyfang & Haxeltine, 2012). In the farming industry this could involve the questioning of dominant regimes and the consideration of small-scale alternative farming methods and conceptualizations.

SNM suggests that a niche must perform efficiently over these three internal processes, which nurture it and enable it to exploit the fractures in socio-technical trajectories caused by changes in the landscape to form a new regime. However, expectations, networks and learning can be divided into more specific processes and activities catered to the development of agricultural niches.

Strategic Niche Management in Agriculture

By examining successful farming niches Roep, Van der Ploeg and Wiskerke (2003) identified five interrelated strategic components of SNM, that are a direct elaboration of Expectations, Networks and Learning. These are (1) Governance, (2), Enrolling Capacity, (3) Integration, and (4) Heterogeneous Knowledge Production, which together lead to (5) Effective Reformism. While incorporating the three pillars of SNM, these five strategic components indicate precise relationships and activities that an agricultural niche must develop to shelter itself and manage itself outside the niche level (Roep, Van der Ploeg, Wiskerke, 2003).

Governance

Governance is the ability to coordinate procedures across multiple levels of the niche's ecosystem, which consist of political and educational institutions, and the stakeholders that directly depend on it such as members (Roep, Van der Ploeg, Wiskerke, 2003). It is important, as for farmers it can be very difficult to reconcile nature policy, agro-environmental policy, animal wellbeing prescriptions and landscape policy. It becomes even more complicated when coping with municipal guidelines, national laws and regulations from the European commission. These policy measures are often discontinuous in the sense that they are poorly tied to each other, requiring separate and at times contradictory solutions (Van der Ploeg, 2015). Successful governance requires an effort to negotiate and align views with who creates these policies. This becomes very useful as an integral part of agricultural niches is that they work in ways that don't align with many regulations influenced by the regime (Kemp, R., Schot, J., & Hoogma, R., 1998). However, they have the potential to be more suitable for the specific local environment. By doing so, it is the capability to create promises, expectations, and "do better" compared to the dominant regime, resulting in a convincing record and in an opportunity for further questioning of the regime (Van der Ploeg, 2015).

Enrolling Capacity

Intended as the ability to involve, stimulate and utilize the assets of others. It is fundamental in creating, defending and expanding the maneuvering space needed for the niche (Roep, Van der Ploeg, Wiskerke, 2003). Enrolment of a large supporting network is needed to overcome the obstacles of the regime, for example, a large and deep network can support the

experimentation and the creation of novelties needed to establish credibility in the niche over the regime (Van der Ploeg, 2015).

Integration

On one side there is the governance that establishes effective participation in the niche and with the state authorities for regulations. Simultaneously, a successful agro-ecological farm must make relationships with local activities an integral part of its strength and survival. Integration is the process responsible for overcoming the physical and formal boundaries of the dominant regime (Van der Ploeg, 2015). Which is dominated by competitive relationships, with each farmer operating and working for change within the limits of their private property. To deal with such commonly emerging issues, successful agro-ecological niches must integrate different local activities into a synergy which works against local problems with solutions and procedures that are catered to their territory (Wiskerke et al., 2003) (Kemp, R., Schot, J., & Hoogma, R., 1998).

Heterogeneous Knowledge Production

These networks need to be part of the fabrication of novelties. As such, the network also becomes an integration of expertise from different sources, thus becoming heterogeneous (Roep, Van der Ploeg, Wiskerke, 2003). This is especially important as we live in a society based on empirical knowledge and demonstration. A niche, as an important hub of novelty, should be in a constant search for improvement and development, documenting their findings and using them as a demonstration of their assets (Van der Ploeg, 2015).

Effective Reformism

Enrolling capacity, governance, knowledge production, integration, these processes all lead to effective reformism (Roep, Van der Ploeg, Wiskerke, 2003). Through the creation of new forms of interactions across multiple levels and the subsequent production of knowledge and demonstration, a niche begins to establish itself as a potential “better” alternative. Overall, effective reformism is the ability to obtain results that strengthen the governance and political coalitions that support it and can produce significant change (Van der Ploeg, 2015).

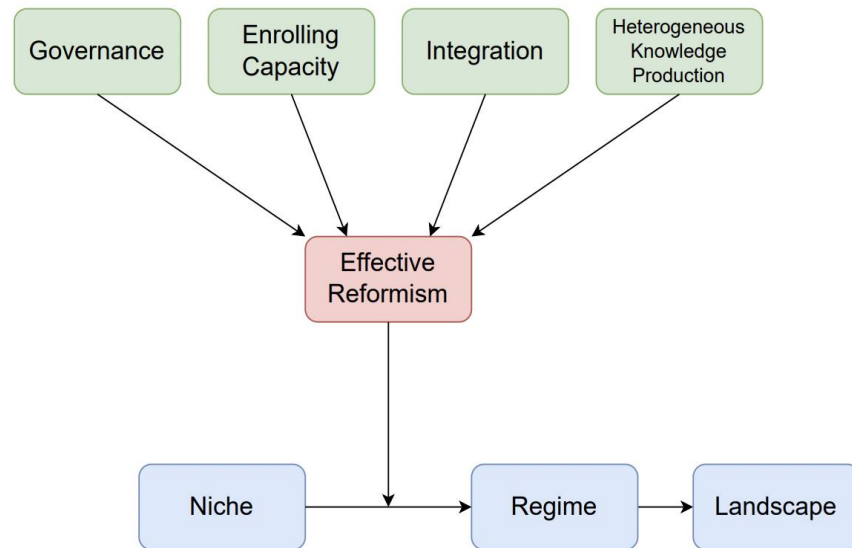


Fig 3. Effect of SNM on the MLP

Example of Noardlike Fryske Walden:

The Netherlands are a country where several examples can be found showcasing agricultural niches using these strategies to grow into resilient socio-technical realities. Perhaps one of the most relevant is the Noardlike Fryske Walden (NFW). An agricultural cooperative north-east of Leeuwarden that counts approximately 900 members between farmers, landlords and citizens. 80% of local farmers are affiliated to the cooperative, creating a powerful network of continuous farms that have become effective managers of their territory. However, when it first formed in the early 2000s, it emerged as a vulnerable niche that had to engage in SNM processes to build resilience and self-sufficiency (Roep, Van der Ploeg & Wiskerke, 2003).

The cooperative emerged as a result of environmental measures taken by the state that would severely punish local agricultural activities (Van der Ploeg, 2015). The Netherlands suffered from acid rain damage caused by ammonia emissions from the farms, which brought to the approval of a law that would prevent most forms of farming in sensitive areas like the one of the NFW (Van der Ploeg, 2015).

To not see their activities stalled by the government, the farmers united in a cooperative and sought the attention and support of the provincial government authorities. With the will to find a compromise, they developed a contract that enabled the farmers to continue their activities if they committed to solving the environmental issues they were causing and protecting the natural environment (Wiskerke et al., 2003).

Up to 90% of the farmers participated in an initiative, establishing a new form of relationship, integration and participation between them. The governance abilities of the collective and their enrolling capacity with local authorities produced a unique condition where provincial administration set their plans simultaneously to the farm management plans. At the same time, local leaders rather than state officials explained to the farmers the importance of nature and landscape management (Van der Ploeg, 2015).

The cooperative obtained exemptions from specific agricultural laws that would be detrimental to its attempt to maintain their activities while protecting the regional environment (Wiskerke et al., 2003). They had the legal opportunities to test new methods of nature driven farming and develop a program of converting the member farms into sustainable activities. Primarily, they started seeking ways to rely on the local network of farmers to produce organic fertilizer, rather than relying on the synthetic one provided by the conventional supply chain (Roep, Van der Ploeg, Wiskerke, 2003). The newly established relationship of farmer to farmer and farmer to public authority also contributed to making the cooperative a hub of experimentation and knowledge production (Van der Ploeg, 2015).

As it gained momentum and began to show signs of improvement of the territory, the cooperative became of interest to politicians as it became an important source of question to policy measures and to reconcile policy contradictions (Van der Ploeg, 2015). By having members of parliament become tied to the cooperative, the NFW could also obtain protection and media coverage. It also developed partnerships with the Ministry of Agriculture, the Environmental Federation, five municipalities, environmental organizations and the University of Wageningen (Roep, Van der Ploeg, Wiskerke, 2003).

By having the space and protection for experimentation, the NFW significantly decreased ammonia pollution and increased levels of biodiversity, obtaining better results compared with farmers adopting the methods imposed by the state. For this, the cooperative also received special prices and recognitions from the Ministry of Public Housing, Spatial Planning and Environmental Affairs, from the Frisian Environmental Movement and BoerenNatuur organization (Roep, Van der Ploeg, Wiskerke, 2003).

The NFW deeply reflects the previously mentioned processes of emergence of new peasantries, the Multi-Level Perspective and Strategic Niche Management. Changes in the landscape (environmental crisis) produced fractures in the dominant socio-technical trajectories in the farming industry. As a result, the niche of the NFW emerged, becoming an example of farmers diverting from a position of poor power in the food production chain and environmental management. Ultimately, improving their agency and self-sufficiency by embracing a model of common governance.

Indeed, through new forms of cooperation between local government and farmers, they achieved an integration that overcomes boundaries set by normative schemes, which prevent effective communication between levels for the common good. By doing so they are also able to involve most farmers in the area, ensuring that territorial management wouldn't be hindered by private property legitimacy. The NFW is an example of the essential role networks have in

enabling the niche to experiment and produce knowledge that forms agency. An added strength to the niche which attracts new networks that help consolidate the niche more within the regime, contributing to effective reformism. Overall, NFW is an important local reality, but is still a niche when compared to the broader national and international regime. Nonetheless, starting from a position of radicality and vulnerability, it obtained agency and self-sufficiency, inspiring the emergence of similar initiatives.

Formulation of Research Question

The NFW is an example of how an agricultural niche that grows agency over its activities and stewardship of the territory reflects many elements of SNM. The case of the NFW led to the assumption that the extent to which a farming niche satisfies the five key components of the theory indicates its likelihood to grow beyond the niche level. Therefore, SNM in agriculture was taken as the framework for the specific types of networks and strategic processes to be investigated in the Herenboeren farm. By comparing what the farm does with what is indicated by SNM, it might be possible to identify managerial strengths and weaknesses of the Herenboeren community farm. By doing so, the theory can be used to identify potential areas of improvement, giving the niche a greater chance of survival.

From here, the following research question was created:

According to Strategic Niche Management, to what extent does a community farm in Enschede enact the required strategies to nurture and grow its niche?

Materials & Methods

The data for this research was gathered through three semi-structured interviews. Two of the interviews were done with two different members of the farm's management board, each lasting one hour. The third was done with one of the farmers, lasting approximately 15 minutes. Management board members were chosen as the research focuses on the farm's management strategies. The farmer was chosen to answer questions related to the local network and relationships with the other farmers.

Since this research attempts to answer the question by analyzing a single farm, it encounters the generalizability obstacles of case studies. To mitigate this issue and properly answer the research question, the data was gathered and interpreted according to analytic generalizations. This process involves two steps. The first is establishing a theoretical claim to which the results can be linked to see the extent to which they have informed a particular set of

concepts and relationships. The second step consists in using the same theoretical claims to reflect on other cases where similar concepts might be relevant (Yin, 2012).

To satisfy the first step of analytic generalization a clear theoretical claim was established by dissecting the internal processes of SNM. It was done by using definitions and successful examples of governance, enrolling capacity, integration, heterogeneous knowledge production, effective reformism and agency & self-sufficiency found in the literature previously described. These enabled to identify key concepts that represent specific relationships and activities that a regenerative farm must have to complete the internal processes of SNM.

SNM Internal Processes	Key Concepts	Questions
Governance	<ul style="list-style-type: none"> • Dialogue with political institutions • Negotiation for: <ul style="list-style-type: none"> ○ Land access ○ Legal concessions ○ Political support ○ Media coverage • Involvement of members in political dialogue • Involvement of members: <ul style="list-style-type: none"> ○ Management ○ Decisions ○ Activities • Alignment of vision between farm and political institutions 	<ol style="list-style-type: none"> 1. Do you engage in any form of dialogue with local and national political institutions? 2. Do you collaborate with them for: <ol style="list-style-type: none"> 2.1. Access to land? 2.2. Concessions on farming practices? 2.3 Concessions for your business model? 2.4 Media coverage? 2.5 Broader political support? 3. How is Ussler Es present in the local political dialogue? 4. Have you ever struggled to align your views with those of local policy? 5. Have the members of the community farm been involved in the political dialogue? 6. How would you judge your relationship with local politics and your alignment of view/intentions?
Enrolling Capacity	<ul style="list-style-type: none"> • Link with organizations that can provide the needed resources • Resources are: <ul style="list-style-type: none"> ○ Biological Inputs ○ Land ○ Directions for outputs ○ Funds ○ Manpower ○ Marketing ○ Expertise ○ Knowledge 	<ol style="list-style-type: none"> 7. How and from whom do you obtain the required farming inputs (seeds, fertilizer, tools, pesticides)? <ol style="list-style-type: none"> 7.1. Do you source them from local enterprises, other farms, the community, agribusiness or are you 100% self-sufficient? 8. Outputs are only sourced towards the members of the community? 9. How do you gain access to land? <ol style="list-style-type: none"> 9.1. Do you rent it; do you rely on a supportive organization? If so, how does your

		<p>relationship with it work to enable you to have land to farm?</p> <ol style="list-style-type: none"> 10. Does the farm require additional funding besides the one obtained from subscriptions? Did it require initial funding? 11. Are you connected with actors that provide you with relevant farming knowledge? 12. Are you linked with sustainability driven organizations in the area?
<p>Integration</p>	<ul style="list-style-type: none"> • Relationship with other local farmers for: <ul style="list-style-type: none"> ○ Knowledge exchange ○ Resource exchange • Role of farm in local community: <ul style="list-style-type: none"> ○ Driver of social cohesion and resilience ○ Contribution to a better and integrated livelihood in the area • Achievement of integration through: <ul style="list-style-type: none"> ○ Sociality in farming processes ○ Sociality around food 	<ol style="list-style-type: none"> 13. What is your relationship with the surrounding farmers in your area and with the ones that farm similarly to you? <ol style="list-style-type: none"> 13.1. What kind of support do you gain? 13.2. Do you exchange knowledge? 13.3. Do you exchange resources? 14. How do you ensure social cohesion amongst the members? 15. Are the members coming from this neighborhood or from all over the city?
<p>Heterogeneous Knowledge Production</p>	<ul style="list-style-type: none"> • Involvement in research • Collaboration with educational and research institutions • Presence in knowledge hubs • Documentation of findings • Exchange of findings with the network 	<ol style="list-style-type: none"> 16. Does the farm collaborate with the University of Twente, Saxion and other educational and research institutions? 17. Is the farm present in farming knowledge hubs? 18. Is the farm involved in research projects or any form of knowledge production? 19. Does it document its findings and exchange them with knowledge hubs
<p>Effective Reformism</p>	<ul style="list-style-type: none"> • Through proper governance, enrolling capacity, integration and heterogeneous knowledge production, obtain successes to grow support across multiple levels • Greater public and political recognition • Media coverage • Encouragement of questioning of dominant regime 	<ol style="list-style-type: none"> 20. Have the results of the farming been able to ignite local political debate on the appropriate farming models? 21. Has it encouraged questioning of agribusiness in the political class of Enschede? 22. Has it gained more media coverage and awareness amongst the citizens?

Table 1: Key concepts and interview questions for each SNM internal process

For each internal process, sets of questions asking about each key concept were formulated. The questions were created especially to engage in a conversation on the key concepts that allowed for the addition of follow up questions to further investigate the activities and relationships of the farm relevant to each internal process of SNM.

All the questions found above were asked to the two members of the farm’s management team. The third interview with the farmer only targeted the farming related relationships and activities investigated in enrolling capacity and integration (questions 7.0, 7.1, 13.0 - 13.3).

The conversations were recorded, and the responses transcribed. To mitigate potential perceptive biases in the responses of the interviewees, only the specific relationships, events and activities relevant to answer the questions were included in the transcript. To analyze the results, for each SNM internal process the transcript of the interviews was compared to the corresponding key concepts found in Table 1. The transcripts corresponding to each internal process were analyzed by noting which key concepts were stated by the interviewees as being part of the strategy of the farm, what was said about them, which were stated as not being part of strategy of the farm and which were missing. Subsequently, each mentioning of a key concept was separated from the transcript and placed with all the other mentions of the relative key concept as demonstrated in Table 2. This organization allowed to clearly see what was said about each key concept in all the interviews and evaluate what the farm does or doesn’t do.

Key Concept	Belongs to SNM Strategic Component:	Mention in Transcript:
Dialogue with political institutions	governance	Mention A Mention B
Negotiation for land access	governance	Mention A Mention B
Negotiation for legal concessions	governance	Mention A Mention B
Negotiation for Political support	governance	Mention A Mention B
Negotiation for media coverage	governance	Mention A Mention B

Table 2: Mentions of each key concept organized together

Results

Governance

Herenboeren Usseler Es is a very young farm, as it has been active for only one year. For its activity to exist, it possesses a continuous and fundamental dialogue with the municipality of Enschede, as the land on which the farm exists is leased from the municipality for six years. The land was given to Herenboeren after significant discontent from the people of the surrounding neighborhoods over the initial municipality decision to transform the land into an industrial zone. Listening to the requests coming from the bottom, the municipality drastically changed its vision and decided to dedicate the land to regenerative farming. Farmers that wanted to gain access to the land had to apply and were given access based on how well their plan scored on a regenerative farming scale set by the municipality. Herenboeren Netherlands caught the opportunity and was granted access by gaining a perfect score. Still, before Herenboeren Usseler Es could even start farming they worked for one year with the municipality on aligning the visions from both sides. Now, after one year that the farm has been active, a constant and important dialogue with the municipality remains to gain permits to build infrastructure on the farm, such as a water storage well, greenhouses, and planting trees. Despite the vivid relationship with the local municipality, Herenboeren Usseler Es doesn't have connections with specific political parties. However, it remains under the wing of Herenboeren Netherlands, which is involved in the political dialogue at a national level.

Another very important element in the governance of the farm is that it is a cooperative. A cooperative is organized and operated by the members. Herenboeren Usseler Es has approximately 250 members/households, for a total of almost 500 mouths being fed by the farm. The members are organized in two organs, the general meeting composed of all the members, and the board of directors composed of a smaller number of people responsible for day-to-day management. The directors are appointed by the general meeting. The members, by representing the collective, are the highest organ, who appoint, discharge, approve budgets, annual accounts, and vote for decisions. Each general meeting sees hundreds of members coming.

Enrolling Capacity:

Herenboeren Usseler Es strongly relies on the national movement (Herenboeren Netherlands) for assets such as farming knowledge and resources. All the 18 active farms have at least two salaried professional farmers which are constantly in contact with the other Herenboeren farmers across the country. The farmers have a WhatsApp group to share information and ask questions, they call each other and have a general meeting once a month where they share knowledge, questions and visions. Farmers from the national movement also rely on each other for the exchange of resources like machinery and crops. Herenboeren Usseler

Es also relies on organic suppliers of seed and fertilizers, but also on a local contractor for machinery and a local farmer for manure and help with the animals.

The farm also has relationships with local companies responsible for water management and the deionization of water. This is due to the farm's effort to contrast an excess of water in the winter and a lack in the summer due to dryer months and quick drainage of the sandy soil in the area. These companies help them come up with and materialize frugal ideas on how the farm can manage the water by themselves, like the building of a well at an appropriate depth and a pool for water storage. Herenboeren Usseler Es itself does not work with organizations that focus on sustainable development, but the national movement does, and the farm relies on it as its main knowledge hub. The farm also does not rely on any form of private and public subsidy, managing its finances only through the subscription and weekly member fees.

From before they started farming and were still in the process of discussing with the municipality, Herenboeren Usseler Es involved in marketing such as the use of press to get people to know about them. Articles about them have been published in the most important local newspaper; Tubantia. They often rely on free local newspapers being delivered to people's mailboxes, as they frequently publish the articles the farm sends them. Usseler Es is active on social media and also has connections with local radio stations that have talked about their new initiative happening in the city.

Integration:

Despite some interactions with local farmers, in its first year of activity Herenboeren Usseler Es has worked predominantly in close contact with the other Herenboeren farms. However, they are working on integrating with the greater network of local farmers in Enschede. Their initiative was a novelty in the area, and many local farmers were skeptical about it. For this reason, Herenboeren Usseler Es is focusing on developing networks with other farmers and ensuring that they understand what their initiative is and the value it portrays. For example, it recently joined a semi-governmental organization called Stawell. This organization is a network of all parties and organizations active in rural Enschede. They will be having meetings where Herenboeren can explain in detail what they're doing and potentially initiate forms of cooperation. Herenboeren Usseler Es has also been committed to increasing interactions with its neighbors, both farmers and inhabitants of the surrounding houses. For the farming neighbors, it has recently organized a "get to know each other" event where all the neighboring farmers have been invited to the farm. Before the start of farming activities, Herenboeren Usseler Es hosted a variety of social events and gatherings in the surrounding neighborhoods, acquiring 180 subscriptions to start with.

The members are co-owners of the land, sharing everything that comes from it and being fundamental in the decision making of the cooperative. Beyond the governance role that the members have, the farm integrates them through continuous farming related and non-farming related activities. For example, the farm hosts events like a party for the harvest, Christmas choir,

tasting of rare vegetables grown on the farm and biodiversity workshops for children to teach them its value. The farm also requires an average of eight members a day to help farmers manage the land and crops. On the website there is a daily list of the tasks where help is needed. This way the members can easily check and volunteer. At the moment, the farm receives the necessary workforce support from its members.

The members are for the vast majority Dutch individuals and families. There are very few members from other ethnic backgrounds, but there is variety in the social status. Most are from the surrounding neighborhoods and reach the farm by bike or by walking. Herenboeren Usseler Es also interacts with the surrounding neighborhoods and wider Enschede by collaborating with an organization called Stichting Stop Armoede 053, which is responsible for distributing food to people in poverty. The farm often has leftover food from the few members that cannot pick up their weekly portion. These leftovers are given to Stichting Stop Armoede 053. This is not the only solidarity action done by the farm. In fact, the municipality is subscribed as a member and gathers once a month the portion for 20 people, which it distributes to people in need.

Heterogeneous Knowledge Production:

Herenboeren Usseler Es also performs experiments with external partners on its land. The University of Twente faculty of Geo-Information Science and Earth Observation (ITC) uses the site for data collection on how factors like rain, weather and saturation of the soil impact crop growth. Saxion University collaborated with the farm to test an automatic device to burn infesting weeds. They also offer to the Municipality a test site for research investigating how spreading a specific type of charcoal on the ground would help prevent excessive infiltration of water, helping water retention and maintenance of moisture in the soil. The farm also has a group of members responsible for monitoring the biodiversity on the farm. They gather information on the species they find on the land every three months and form conclusions on the biodiversity trends occurring on their land. Herenboeren Netherlands is present in multiple knowledge hubs and the farm relies on the national movement for knowledge, indications on how to set up a farm, how to organize finances, and ideas on marketing. When the Herenboeren farmers meet each other every month they have the opportunity to exchange what they learned. Findings related to both agriculture and the social aspects of the farm are always shared on their website and newsletter.

Effective Reformism:

As a single Herenboeren farm, the process of putting in question the dominant socio-technical regime goes beyond the objectives of Usseler Es. However, they are part of the Herenboeren movement, which has 18 farms in the Netherlands, 35 are being planned to start in the upcoming years, thousands of families being fed, and possesses connections in national politics. Throughout its first year of activity, Herenboeren Usseler Es has used regenerative

agriculture to feed its members and the amount of food produced by the land is set to increase by adding new cultivations. By building a community around the food, it has created social solidarity, both between its members and people in need in Enschede. These actions have captured the attention of the Mayor of Enschede and other high functionaries in the municipality that have visited the farm. The farm also saw an increase in media coverage, to the point where their initiative to gift part of their weekly and monthly food to social solidarity associations made Herenboeren Usseler Es appear on national television.

Discussion

From the interviews it emerged how Herenboeren Usseler Es is an initiative that was made possible through continuous collaboration between the members of the initiative and the municipality. Similarly to the NFW, the existence of such farming activities was possible through a coordination of visions and expectations with the local government in everything from the access to the land, agricultural practices and permits. According to Roep, Van der Ploeg and Wiskerke (2003), successful governance requires active participation across multiple levels. Herenboeren Usseler Es also possesses connections with higher education institutions and establishes strong relationships and participation amongst its members. It offers its land as a test site for projects from the municipality, University of Twente and Saxion University. By being a cooperative, the whole farming projects exists on the premise that the members co-own the land, making them responsible for important choices and day to day management, ultimately demonstrating a capability to involve most members in the collectiveness for which the Herenboeren initiative exists in the first place.

The collective built around the farm isn't only a form of effective governance, but also a demonstration of the farm's ability in establishing a place where social cohesion and stewardship of the land evolve around food production. Social activities related and non-related to farming (pluriactivity), involvement of members in decisions and management and a clear communication of values provide high participation and the member workforce needed to run the farm. The members of the farm are mostly from the surrounding neighborhoods. By providing food and social value to almost 500 people in the adjacent areas, the farm acts as a place for integration not only between members but also between citizens, adding to the political relevance of its existence, strengthening the niche. Herenboeren Usseler Es further adds to its performance on the integration criteria and political relevance by giving part of its produce to solidarity associations that feed hungry people in Enschede.

In its first year of activity, the farm has succeeded in the strategic component of integration regarding its members and the social impact on the city. However, due to its young age it has lacked strong connections and cooperation with other local farmers. The fact that Herenboeren Usseler Es is a new initiative in the region, that it brings a new approach to farming and relationships with the consumer has made it challenging to connect with the traditional

farmers of Twente. Still, Herenboeren Usseler Es understands the importance of being integrated with the local agricultural ecosystem and is joining organizations like the Twente rural community network Stawell and is organizing events on their land where neighboring farmers are invited. They believe that much of the skepticism from traditional farmers in the area comes from the fact that they don't know what Herenboeren is. By getting involved in networking organizations and speaking with other farmers, they want them to understand the good intentions behind the initiative.

Regarding the strategic component of Enrolling Capacity, Herenboeren Usseler Es possesses a network of multiple types of organizations whose assets give important support to the initiative. From the municipality granting land, concessions but also providing expertise, water management companies helping them design methods to collect water, a biological seed supplier, a local farmer providing manure, to local newspapers publishing articles about them. The fact that they are part of a greater national movement composed of another 17 farms gives Herenboeren Usseler Es an advantage compared to independent regenerative farms. This is because Herenboeren Netherlands is already a knowledge hub where Ussler Es can gain important information and share its findings. The national movement also offers other fundamental assets like political voice at a national level, resources and expertise. The fact that the farm is already integrated in a strong initiative/network and has good relationships with the municipality could explain why they don't have ties with organizations that produce sustainable development. Still, connecting with a network of local private and public organizations that have sustainability as their value proposition could be a way in which Herenboeren Usseler Es could strengthen its enrolling capacity.

Despite its very young age, this community farm has been using regenerative farming and alternative methods of management to provide an important social service to its members and beyond. This has led to increased recognition, in the media and within high functionaries of the municipality. Yet, it is important to note that the activities of Herenboeren Usseler Es have not inspired questioning of the dominant agricultural regime in Enschede, but this is not their intention either. At the same time, it can be argued that they are still importantly contributing to doing so by being part of the Herenboeren Initiative. By being one of the 18 active farms across the Netherlands, Usseler Es contributes to giving a greater strength to the movement, acting as one example capable of providing evidence of the viability of the Herenboeren model. Their contribution, alongside the one of the other farms, is what gives greater appeal and political agency to Herenboeren, which as a collective of farms has the strength to inspire policy towards a shift of regime. With the fact that 35 new farms are being planned across the Netherlands, there is also an indication of how Herenboeren is showing signs of transition from niche to regime level.

Contextual Exploration

This research falls within the broader societal context of agriculture as a leading cause of climate change. Out of this very broad topic, it focuses on the need to see more solutions that pursue environmental sustainability in our production processes by overcoming the alienation between man and nature that is fostered by production processes in the capitalist system. The Herenboeren initiative and its farms like Herenboeren Usseler Es use an agricultural and organizational cooperative model that places its members as a fundamental element in the farm's management. By taking part in managerial decisions and in assisting the farmers, Herenboeren farms involve consumers in the production of their food. Ultimately, allowing them to nurture a relationship of greater respect and consciousness for the land and the farmers that produce it. This gives the farm additional value to the one of being a source of sustainable food, as it becomes a location of social relevance for its members coming from the surrounding neighborhoods.

Herenboeren and farms that follow a similar concept are rare in today's food production models. More importantly to this research, they are also a niche in the solutions that attempt to mitigate climate change. Many of the solutions that are valued politically and economically focus on a more technocratic and top-down approach to sustainability (Bakari, 2015). While they still resemble efforts that are needed to tackle an immense issue, a technocratic approach fails to overcome human to nature alienation which favors the view of natural resources as a commodity (Calo, 2012). Therefore, Herenboeren also offers an interesting and less present approach to sustainability that also has the potential to tackle the deeper social causes behind unsustainability.

It is highly important that such solutions find space in the socio-technical regimes, reason for which this research aims at investigating if a Herenboeren farm pursues the necessary activities to grow its niche according to the theory of Strategic Niche Management.

The research suggests that the farm follows most of the necessary activities mentioned by SNM. This indicates that having a management model that incorporates the elements of SNM is a reason for why the Herenboeren initiative is a niche organization that has been surviving, as well as steadily growing in the number of affiliated farms and public attention. It highlights that even if the Herenboeren farm managers didn't know about SNM theory, their yet successful strategy incorporates many of its indications. Therefore, this research is relevant for other organizations or independent farms that follow a similar concept to Herenboeren. It provides similar farms that might be struggling with the indication that one of the reasons for why Herenboeren is working is that they follow SNM theory. From there, they can use the questions used for the interviews in this research to assess their management strategy and identify the elements of SNM they already possess, how they reach them and the ones they don't have. This could assist other regenerative community farms in sheltering themselves from mainstream competition, while creating a safe space where they can operate and slowly demonstrate their potential. Ultimately, fostering the presence of such farms in the food production regime which

address the Sustainable Development Goals of “Sustainable Cities and Communities” (SDG 11), “Life on Land” (SDG 15), and also “Zero Hunger” (SDG 2) due to the solidarity services that farms like Herenboeren provide. This research doesn’t only provide interesting insights for regenerative community farms, but feeds into the growing movement of bottom-up initiatives that aim at covering also different SDGs. In the fight against the ecological crisis and the tied social issues, there is a growing popularity of sustainable approaches carried out by collectives which still fall within the niche category (Seyfang & Haxeltine, 2012). These could also benefit from research highlighting how functional niches reflect many elements of SNM theory. Overall, by exploring climate mitigation solutions that achieve sustainability also through overcoming man to nature alienation, this research provides a contribution to the field of sustainable development.

Another field of study that could potentially benefit and build onto this research is behavioral science. This research could be used as a starting point to investigate on a deeper level the influence that the different strategic components of SNM have in overcoming man to nature alienation and fostering a sustainable behavior in people. For example, investigating the integration strategies of the farm and how the member’s sustainable behavior was influenced.

The fact that only one farm was studied is a limitation of this research. It limits the ability to understand the effect the Herenboeren initiative is having on effective reformism. It also consists of only one farm with its unique strategies. Even though every Herenboeren farm adopts the same concept, the interviewees pointed out how there are differences in each one. While all farms follow the same model there are slightly different choices of farming and management methods. For future research, the same concepts could be applied to a broader study of the Herenboeren initiative, with data from multiple farms and from the national management board. This would also mitigate the limitation of having a small sample of participants. By having interviewed only three people responsible for running the farm the data does not avoid perspective bias. Even if only names of organizations, specific activities and relationships were used as data, every participant offers their perspective on each question asked. For this reason, a bigger sample would be advised. This research also cannot determine how members actually feel within the community and the extent to which they see themselves as connected to the food they eat. A future recommendation could be to interview members of the farm on topics like integration. The way the results were analyzed could also be improved and made more objective. Key concepts and key words mentioned by the interviewees could be counted and compared to the total number of possible ones to give an objective score to the performance of the farm according to SNM. In its first year of activity Herenboeren Usseler Es has been functioning and obtaining positive results thanks to management methods that align with the indications of SNM. It could be useful to follow their progression over time and see whether these methods continue to show viability also several years into the future.

Conclusion

In this research, the performance of a community farm in Enschede on the key components of Strategic Niche Management was examined by interviewing members of the management board on their social network governance. SNM in regenerative agriculture suggests how such farming niches need to abandon the competitive nature of today's agricultural regime, focusing on creating a social and environmental value and obtaining the needed shelter to experiment and demonstrate their potential. Herenboeren Usseler Es has demonstrated that the key components of SNM are deeply rooted in its strategy by establishing collectiveness around food production, producing social and environmental value rather than focusing on value in exchange and producing research with educational institutions. It is doing so also with innovative and creative methods of self-governance and integration. These include involving members in decision making by organizing them in different governing bodies, guaranteeing a stable and fair wage to the farmers and collaborating with the municipality for numerous social services that benefit both the city and the value of the farm's existence.

Herenboeren Usseler Es is a newly active agricultural niche that has been working successfully, with full member capacity, plans to expand and significant media coverage for such a small reality. A success that could be explained by its ability to cover requirements across all the strategic components of SNM. The only weaknesses have been identified in the need to improve cooperation with other local farmers, on which they are already working on, and the limited ability the single farm has in triggering effective reformism. Still, an ability that can be seen when considering that the farm is part of a larger movement with ties in national politics.

In conclusion, while capital intensive food production is capable of bringing products to the tables of wealthier countries, it is responsible for global environmental issues and inequalities. Another great issue is the disconnection between the consumer and the way the food is produced, the farmer and the land. An alienation in our supermarket shelves that favors the persistence of the abovementioned challenges. Herenboeren Ussler Es provides a reality that attempts to reconcile the consumer with food production, the farmer, the land and environment by re-establishing the intrinsic social value that evolves around food. These characteristics recall the "new peasantries" described by Van der Ploeg, while their management strategies align with the indications of SNM. By doing so, initiatives like Herenboeren provide an important social perspective to the mitigation of environmental problems. As changes in the landscape and fractures in the regime occur due to climate change, it becomes even more important that agricultural niches consider the strategic components of SNM to penetrate in the regime. Ultimately, bringing the needed socio-environmental sustainability into the dominant socio-technical trajectories.

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Appendix A: Consent form

Informed Consent Form

- This research's purpose is to understand how strategic niche management theory can be used to understand the strengths and weaknesses in a community farm's networks. I am interested in understanding with who and what local relationships the farm has that enable it to function, comparing them with what is expected by literature to understand how community farms are able to exist, expand and possibly also reflect on what could be done to benefit the farm's network.
- This research is part of a Bachelor Thesis from the University of Twente. The analysis of the actors involved in the farm's network according to existing

literature can be an indication of how the farm is performing. If interested, the members of the farm can have full access to the research.

- The participants must be aware that this research will be published by the University as procedure for bachelor theses.
- Participants are entitled to withdraw from the research at any time.
- If the participant feels like any type of questions asked during the research regard confidential information, they are perfectly entitled to refuse to respond.
- Contact details of the researcher:
 - Email: d.gentilini@student.utwente.nl
 - Phone Number: +39 3349757788

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Consent Form

YOU WILL BE GIVEN A COPY OF THIS INFORMED CONSENT FORM

<i>Please tick the appropriate boxes</i>	Yes	No
Taking part in the study		
I consent voluntarily to be a participant in this study and understand that I can refuse to answer questions and I can withdraw from the study at any time, without having to give a reason.	<input type="checkbox"/>	<input type="checkbox"/>

I understand that taking part in the study involves responding to questions about actors such as political institutions, businesses, organizations etc. the farm has a connection with.

I understand that the information I provide will be used for the completion of a bachelor thesis that will be rendered public by the university.

I understand that personal information collected about me that can identify me, such as [e.g. my name], will not be shared beyond the study team.

I agree that my information can be quoted in research outputs

I agree to be audio recorded.

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I give permission for the answers to the questions that I provide to be archived in anonymized transcripts so it can be used for future research and learning.

Signatures

Name of participant [printed].

Signature

Date

I have accurately read out the information sheet to the potential participant and, to the best of my ability, ensured that the participant understands to what they are freely consenting.

Researcher name [printed]

Signature

Date

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