



Buorkje tusken it beamtegrien

A return to farming styles in relation to landscape and nature management in the Noardlike Fryske Wâlden

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Wageningen University & Research

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Samenvatting

Achtergrond

Binnen een bepaalde streek bestaat er een grote diversiteit in de manier waarop boeren hun bedrijf vormgeven. Zo bestaan er verschillen in bedrijfsomvang, intensiteit, fokstrategie, beweidingssysteem, gebruik van technologie, financiële resultaten, marktgerichtheid, milieu-impact en nog veel meer. Om de diversiteit in de manier waarop een bedrijf kan worden georganiseerd en ontwikkeld te duiden, kan het bedrijfsstijlenconcept gebruikt worden. De definitie van een bedrijfsstijl is driedig en bestaat uit overtuigingen en ideeën over wat een goede boer is, de positionering met betrekking tot technologie, markten en beleid, en de feitelijke bedrijfsvoering waarin alle activiteiten een consistent geheel vormen.

Het rapport dat voor u ligt is een casestudie naar bedrijfsstijlen in de Noardlike Fryske Wâlden. Deze streek ligt in het noordoosten van Fryslân en kenmerkt zich door een kleinschalig, besloten coulisselandschap. Het gebied bestaat voornamelijk uit kleine percelen omzoomd door een netwerk van houtwallen (dykswâlen) of elzensingels en verspreid liggende pingoruïnes en dobben. Het overgrote deel van de bedrijven in deze streek zijn melkveehouderijen. De boeren uit deze streek zijn verenigd in het agrarisch collectief Noardlike Fryske Wâlden (NFW) waarvan meer dan 583 leden actief bijdragen aan het beheer van landschap en natuur door deel te nemen aan Agrarisch Natuur en Landschapsbeheer (ANLb). NFW streeft actief het zelfsturingsmodel na om hun missie, een vitale landbouw, in balans met landschap, milieu en natuur, te verwezenlijken. De vereniging kent een rijke geschiedenis die teruggaat tot begin jaren 90. In 2016 heeft een grote beleidswijziging ervoor gezorgd dat de subsidieaanvraag voor agrarisch natuurbeheer of landschapsbeheer niet meer individueel maar voortaan via het collectief verloopt. Daarmee is het collectief sinds 2016 verantwoordelijk voor de ruimtelijke afstemming, contractverlening, controle en uitbetaling van individuele boeren. Naast de taken rondom het ANLb en PNb (particulier natuurbeheer) bestaat het collectief uit een viertal themagroepen en organiseert het innovatieprojecten rondom de thema's kringlooplandbouw, natuurinclusieve landbouw, agrotourisme en de energietransitie.

Het onderzoeksrapport *Maat houden* naar bedrijfsstijlen en het beheer van landschap en natuur in de Noardlike Fryske Wâlden, geschreven door De Bruin & Van der Ploeg (1991), vormt de basis voor dit onderzoek. Aan de hand van zowel kwalitatieve als kwantitatieve methodes hebben zij vier bedrijfsstijlen geïdentificeerd, te weten: de Bedaarde boer, de Fokker, de Zakelijke boer en de Utsjonger. Daarnaast lieten ze zien dat binnen één bedrijfsstijl het gebruik van de fysieke omgeving samenhangt met de opvattingen over de gewenste productieomstandigheden. Zo draagt elke stijl zijn eigen ontwerp van landschap en natuur in zich.

Onderzoeksdoel

In dit onderzoek ben ik teruggegaan naar de Noardlike Fryske Wâlden met als doel om hernieuwd inzicht te krijgen in de bedrijfsstijlen van deze streek en te onderzoeken welke ontwikkelingen en verschuivingen er in de afgelopen 30 jaar hebben plaatsgevonden. Hierbij probeer ik antwoord te geven op de volgende onderzoeksvragen: (1) Hoe hebben de vier bedrijfsstijlen van destijds zich in de afgelopen 30 jaar ontwikkeld en is deze indeling nu nog relevant? (2) Wat zijn de verbanden tussen de huidige bedrijfsstijlen en de relaties met het landschap, de opvattingen over de landschapsdynamiek en de deelname aan ANLb? (3) Welke rol heeft de ontwikkeling van het agrarisch collectief gespeeld in de mogelijke ontwikkelingen en verschuivingen in bedrijfsstijlen met betrekking tot natuur en landschap in de afgelopen 30 jaar? Om deze vragen te beantwoorden zijn de twee concepten bedrijfsstijlen en self-governance gecombineerd in het theoretisch raamwerk.

Methode

Het onderzoek bouwt voort op uitkomsten van eerder bedrijfsstijlenonderzoek door terug te keren naar een gebied waar in het verleden bedrijfsstijlenonderzoek is gedaan en de ontwikkelingen rondom bedrijfsstijlen in de voorbije periode te bestuderen. Nooit eerder is na zo'n lange tijd onderzoek gedaan naar de ontwikkelingen in bedrijfsstijlen. Deze longitudinale aanpak maakt het onderzoek vernieuwend en experimenteel. De onderzoeksopzet omvatte een uitgebreide literatuurstudie in combinatie met twee rondes van semigestructureerde diepte-interviews gebruikmakend van een sneeuwbalmethode. In de eerste ronde heb ik me gericht op tien sleutelactoren die actief zijn binnen NFW. Deze mensen kunnen beschouwd worden als streekkenners, zij hebben vanuit hun verschillende achtergronden inzicht in de regionale diversiteit aan landbouwbeoefening. De tien sleutelactoren bestonden uit vier huidige bestuursleden, twee oud-bestuursleden, een schouwer en drie stakeholders die lid zijn van een van de themagroepen. Door deze interviews heb ik een eerste indruk gekregen over diversiteit, de continuïteit en verandering van bedrijfsstijlen, de samenhang met landschap en natuur en de rol van NFW. Op basis van input uit de eerste ronde heb ik vervolgens vijf boerenbedrijven geselecteerd voor de tweede ronde, zodanig dat de brede scala aan regionale bedrijfsstijlen zo goed mogelijk werd gedekt. Het zijn bedrijven waarvan ik veronderstelde dat zij sterke gelijkenissen vertonen met een van de vier bedrijfsstijlen van destijds. In deze interviews heb ik mij gericht op de specifieke bedrijfsstijl van de respondenten, door te vragen naar de bedrijfsvoering en de onderliggende strategische keuzes, normen en waarden van de boer(en) met betrekking tot (beheer van) landschap en natuur. Bovenal heb ik vragen gesteld over het ontwikkelingspatroon van het bedrijf in de afgelopen 30 jaar en de continuïteit en verandering van de specifieke bedrijfsstijl.

Bevindingen

Ten eerste blijkt uit dit onderzoek dat er na 30 jaar nog steeds sprake is van diversiteit in landbouwbeoefening waarin stijl-specifieke kenmerken van de vier bedrijfsstijlen van destijds in doorklinken. Tegelijkertijd bestaan er uiteenlopende opvattingen over de dynamiek van bedrijfsstijlen in het algemeen en de ontwikkeling van de vier specifieke bedrijfsstijlen. Voor een deel kunnen deze verschillen in opvattingen worden toegeschreven aan uiteenlopende, meer of minder complete interpretaties van het begrip bedrijfsstijlen door respondenten. Rekening houdend met deze methodologische beperking van de gekozen onderzoeksopzet, zijn er toch een aantal voorzichtige conclusies te trekken. Enerzijds wijzen respondenten op stijlverschuivingen op bedrijfsniveau richting de Zakelijke boer, ten koste van de Bedaarde boer, Fokker of Utsjonger. Sommigen spreken over geleidelijke verschuivingen van de ene naar de andere bedrijfsstijl, terwijl anderen voorbeelden geven van een abrupte breuk in bedrijfsstijl rondom de bedrijfsovername. Anderzijds wijzen respondenten op ontwikkelingspatronen in lijn met de bedrijfsstijl waardoor de stijlen in de loop der tijd zijn geëvolueerd. Zo worden biologische boeren of boeren die produceren voor een nieuwe duurzame melkstroom met een toeslag op de melkprijs als de hedendaagse varianten van de Bedaarde boer beschouwd. Het onderscheidende kenmerk van de Fokker, waarbij de verkoop van hoogwaardig fokvee een belangrijke bron van inkomsten vormt, lijkt grotendeels verdwenen. Echter, het streven naar hoogproductieve koeien is nog steeds terug te vinden bij de huidige topmelkers, die zich daarmee als de hedendaagse Fokker laten beschouwen. Kijkend naar de zelf-classificaties van respondenten, zijn deze enerzijds een bevestiging van de continuïteit van de bedrijfsstijlen van destijds, omdat de bedrijfsstijlen van destijds in bepaalde mate zijn te herkennen in de huidige begrippen. Anderzijds laten ze een verandering zien, omdat de benaming van de bedrijfsstijlen destijds minder herkenning oproept en nu andere begrippen worden gebruikt om de regionale diversiteit te benoemen. Uit deze classificaties komt een duidelijk tweedeling naar voren langs de schaal van landbouwintensiteit: Extensieve boeren (waarin kenmerken van de Bedaarde boer en Utsjonger worden weerspiegeld) en Intensieve boeren, waarin stijl-specifieke kenmerken van de Zakelijke boer en Fokker worden weerspiegeld). Dit patroon komt overeen met de analytische dichotomie tussen Boerenlandbouw en Ondernemerslandbouw. Voor de analyse van de tweede onderzoeksvraag heb ik de twee stijl-groepen Extensieve boeren en Intensieve boeren gebruikt. Samenvattend kan ik concluderen dat de bedrijfsstijlen van destijds zowel een bepaalde continuïteit als verandering laten zien, waarbij wellicht nieuwe benamingen nodig zijn om de regionale diversiteit aan landbouwbeoefening te duiden.

Ten tweede geeft dit onderzoek aanwijzingen dat het eerder sterk aanwezige spanningsveld tussen met name de Zakelijke boer en het typisch kleinschalige landschap de afgelopen 30 jaar is verminderd. Er lijkt tegenwoordig sprake te zijn van een breder, meer bedrijfsstijl-onafhankelijk gedragen waardering voor het typische landschap, inclusief een wijdverbreid besef dat boeren een sleutelrol vervullen bij het in stand houden van dit waardevolle landschap. Anderzijds laat dit onderzoek zien dat een dergelijk spanningsveld nog steeds aanwezig is, alhoewel er geen duidelijke en eenduidige verbanden zijn gevonden tussen bedrijfsstijlen en deelname aan ANLb. Daarom veronderstel ik dat ANLb als geheel te veelzijdig is om duidelijke verbanden te onderscheiden. In plaats daarvan moet onderscheid worden gemaakt tussen de drijfveren en belemmeringen voor Landschapsbeheer (in het besloten landschap) en Natuurbeheer (in het open landschap). Landschapsbeheer lijkt massaal te worden opgepakt door zowel Extensieve als Intensieve boeren in deze streek. Stijl-specifieke verschillen zijn echter wel terug te vinden in uiteenlopende drijfveren voor deelname en uitvoering van het Landschapsbeheer. Voor Natuurbeheer is het minder eenduidig, maar zijn er wel aanwijzingen dat er een verband bestaat tussen bedrijfsstijlen en de integratie van ANLb in de bedrijfsvoering. Daarnaast spelen voor zowel de deelname aan Landschaps- als Natuurbeheer andere belemmeringen een rol die niet gekoppeld zijn aan een bepaalde bedrijfsstijl.

Ten derde laat deze studie zien dat de ontwikkeling van het agrarisch collectief NFW een belangrijke rol heeft gespeeld in het verminderen van het eerder genoemde spanningsveld. Het huidige brede draagvlak voor het behoud van het kleinschalige landschap en de massale deelname aan Landschapsbeheer kunnen grotendeels worden toegeschreven aan het werk van NFW en de voormalige coöperaties. Aan de hand van verschillende strategieën is NFW erin geslaagd boeren van uiteenlopende bedrijfsstijlen te motiveren om deel te nemen aan ANLb. NFW heeft een open en inclusieve houding naar alle boeren en gaat met uiteenlopende boeren om door ANLb, Pnb en diverse projecten als losse onderdelen te benaderen, zodat boeren zelf kunnen kiezen waar ze gebruik van willen maken. NFW wordt als koploper gezien als het gaat om de uitvoering van de collectieve gebiedsgerichte aanpak van ANLb en projecten rondom natuurinclusieve en kringlooplandbouw. De vereniging fungeert via verschillende denktanks, verwijzend naar de themagroepen en afdelingen, als creatieve broedplaats en aanjager van innovatie. Op deze manier creëert NFW een platform waar nieuwe ideeën worden ontwikkeld, projecten en experimenten worden opgezet en de opgedane kennis wordt verspreid onder boeren in de streek. NFW heeft een duidelijke missie naar meer verweving. De doelen van NFW sluiten in dat opzicht aan bij de stijl-specifieke mogelijkheden die besloten liggen in de Bedaarde boer en Utsjonger van destijds. Echter, door ook in te spelen op de specifieke mogelijkheden en beperkingen van andere regionale bedrijfsstijlen, weet NFW een grote gemêleerde groep boeren mee te krijgen.

Al met al heeft dit onderzoek geleid tot interessante inzichten in de continuïteit en verandering van de bedrijfsstijlen zoals destijds zijn onderscheiden in de Noardlike Fryske Wâlden en de betekenis daarvan in relatie tot landschap, natuur en het agrarisch collectief NFW. Aanvullend longitudinaal bedrijfsstijlenonderzoek, inclusief meer kwantitatieve methoden, is evenwel nodig om deze eerste inzichten verder te onderbouwen en te verdiepen.

Executive summary

When zooming in on a certain region, one could find a great diversity in how farmers farm. Differences in farm size, intensity, breeding strategy, investment strategy, future prospect, financial performance, market orientation, environmental impact, and many more. The concept of farming styles could be used to grasp all these differences in how farming can be organised and developed. A farming style consists of a set of beliefs and ideas of what a good farmer is, the positioning towards technology, markets and policy, and the actual agricultural practices that form a consistent whole.

In this case-study I zoomed in on the *Noardlike Fryske Wâlden*. This region lies in the North-eastern part of *Fryslân* and is characterised by a typical small-scale, closed landscape. The rural landscape mainly consists of small parcels bordered by wooded banks or alder tree belts, interspersed with pingo ruins and pools. The dominant land use is dairy farming. The farmers of this region are united in the agri-environmental collective Noardlike Fryske Wâlden (NFW). More than 583 members actively contribute to the management of landscape and nature by participating in agri-environmental schemes (AES). NFW aims for a viable agricultural sector in balance with landscape, environment, and nature by following a self-governance model. The association has a rich history, dating back to the early 1990s. In 2016 a major policy change has taken place. Henceforth, the AES application is no longer made individually, but via the collective. That means that since 2016 the collective is responsible for the spatial coordination, contracting, control, and payment of individual farmers. In addition the tasks concerning AES and PNM (private nature management), the collective consists of various theme groups and organises innovation projects to respond to the latest developments in for example circular farming, nature-inclusive farming, agritourism, and the energy transition.

The research report *Maat houden* on farming styles and the relation with landscape and nature in the Noardlike Fryske Wâlden, written by De Bruin & Van der Ploeg (1991), forms the basis for this study. Based on a mixed method study they identified four farming styles: *Bedaarde boeren*, *Fokkers*, *Zakelijke boeren* and *Utsjongers*. In addition, they showed that within one farming style the use of the physical environment is strongly related to the views on the desired production conditions. In this way, each style contains its own design of landscape and nature.

In this study I went back to the Noardlike Fryske Wâlden with the aim to gain renewed insight into farming styles in this region and to explore what changes and shifts have taken place over the last 30 years, answering the following research questions: (1) How have the four farming styles as identified by De Bruin & Van der Ploeg (1991) evolved over the past 30 years and is this categorisation still relevant today? (2) What are the linkages between the current farming styles and the farmer-landscape relationships, farmers' views on landscape dynamics and the participation in Landscape and Nature Management? (3) What role has the evolution of the agri-environmental collective NFW played in the possible changes and shifts in farming styles related to nature and landscape over the past 30 years? To answer these questions the two concepts 'farming styles' and 'self-governance' are combined in the theoretical framework.

This study builds on findings of previous farming styles research by returning to a region where farming style research has been done in the past and examining the dynamics in farming styles over the past period. Never before has research been done on the dynamics of farming styles over such a long time period. The longitudinal approach makes this study innovative and experimental. The study design consisted of an extensive literature review and two rounds of semi-structured in-depth interviews by using a snowball sampling technique. In the first round I focused on ten key actors who are actively engaged in NFW. These people can be considered region experts, who have a clear overview of the

regional farming diversity due to their different backgrounds. The ten key actors consisted of four current board members, two former board members, an auditor, and three stakeholders who are members of one of the theme groups. These interviews provided me with a broad impression of the current farming diversity, the continuity and change of farming styles, the linkages with landscape and nature and the role of NFW. Based on input from the first round I selected five farms with divergent farming styles for the second round, in such a way that the wide range of existing farming styles is covered as best as possible. These are farms that I assumed had strong similarities with one of the four farming styles from 30 years ago. In these interviews I focused more on the specific respondents' farming style. This includes how the farming operations are developed and organised today, as well as the underlying strategic choices, norms and values of the farmer related to (management of) landscape and nature. Above all, I focused on the farm development over the past 30 years and the dynamics of the specific farming style.

Firstly, this study shows that after 30 years there is still a diversity in farming in which style-specific characteristics of the four farming styles from 1991 are resonated. Nevertheless, there are divergent views on the dynamics of farming styles in general and the development of the four specific farming styles. In part, these differences in views can be attributed to divergent, more or less complete, interpretations of the concept of farming styles by respondents. Taking into account this methodological limitation of the chosen study design, still a number of tentative conclusions can be drawn. On the one hand, respondents indicated shifts in farming style at farm level towards the *Zakelijke boer*, at the expense of the *Bedaarde boer*, *Fokker* or *Utsjonger*. Some described gradual shifts from one farming style to another, while others gave examples of an abrupt break in farming style during farm succession. On the other hand, respondents point to farm development pathways in line with the farming style, which illustrate how farming styles have evolved over time. For example, organic farmers or farmers that produce for a new sustainable dairy label with a surcharge on the milk price are considered by respondents as the contemporary *Bedaarde boeren*. The distinctive characteristic of the *Fokker*, whereby the sales of high-quality breeding stock form an important source of income, seems to have largely disappeared. However, the pursuit of high yielding cows can still be found among the current *topmelkers*, who can be regarded as the contemporary *Fokkers*. Examining the self-classification schemes of respondents, it shows that these are on the one hand a confirmation of the continuity of farming styles of 30 years ago, because the four farming styles can be recognised to a certain extent in today's terms respondents use to grasp farming diversity. On the other hand, they illustrate a change of farming styles of 30 years ago, because the names of the farming styles of 30 years ago evokes less recognition and different terms are now used to grasp farming diversity. From these classifications, one clear pattern could be found along the scale of farming intensity in which two groups can be identified: (1) Extensive farmers, in which characteristics of the *Bedaarde boer* and *Utsjonger* are reflected, and (2) Intensive farmers, in which style-specific characteristics of the *Zakelijke boer* and *Fokker* are reflected. This pattern corresponds to the analytical dichotomy between Peasant Agriculture versus Entrepreneurial Agriculture. I used the two style-groups Extensive farmers and Intensive farmers for the analysis of the second research question. In summary, I can conclude that the farming styles of 30 years ago show both continuity and change, whereby new metaphors or labels may be needed to indicate the regional diversity in farming styles.

Secondly, this study provides indications that the major field of tension between, in particular, the *Zakelijke boer* and the typical small-scale landscape has diminished over the past 30 years. Today there seems to be a broader, more style-independent, appreciation for the typical landscape including a widespread awareness that farmers fulfil a key role in preserving this valuable landscape. On the other hand, this study shows that a field of tension is still present. Zooming in on the management of landscape and nature, this study shows that no clear and unequivocal linkages between farming styles and participation in AES could be found. I suggest that AES as a whole are too versatile to discern clear linkages. Instead, a distinction should be made between the motives and barriers for Landscape Management (in the closed landscape) and Nature Management (in the open landscape). Landscape Management seems to be taken up en masse by both by Extensive and Intensive farmers in this region. Style-specific differences can still be found in the different motives for participation and how the

Landscape Management is carried out. In the case of Nature Management it is less clear, but indications are given that there is a linkage between farming styles and the integration of AES in the farming operations. Besides that, other barriers for both the participation in Landscape and Nature Management play a role that are not linked to a particular farming style.

Thirdly, this study shows that the evolution of NFW has played an important role in reducing the aforementioned tension. The broad support for the small-scale closed landscape and massive participation in Landscape Management today can be largely attributed to the agency of NFW and former agri-environmental cooperatives. By using different strategies, NFW has succeeded in motivating farmers with divergent farming styles to participate in AES. NFW has an open and inclusive attitude towards all farmers and deals with divergent farmers by approaching AES, PNM and various projects as separate components. This way farmers can choose what they want to make use of and where they want to be involved in. NFW is seen as a frontrunner when it comes to the implementation of the collective region-specific approach of AES and projects related to nature-inclusive and circular agriculture. By creating various think tanks, referring to the theme groups and departments, the association functions as a creative incubator and driver of innovation. In this way, NFW forms a platform where new ideas are developed, projects and experiments are set up, and the gained knowledge is disseminated to other farmers in the region. NFW has a clear mission towards more interweaving, which underlines the values of the so-called Peasant Agriculture. In that respect, the objectives of NFW are in line with the style-specific possibilities embedded in the *Bedaarde boer* and *Utsjonger* farming styles as identified in 1991. However, by also responding to the possibilities and constraints of other regional farming styles, NFW manages to get a large diversified group of farmers on board.

All in all, this study has led to interesting insights into the continuity and change of farming styles in the Noardlike Fryske Wâlden in the period 1990-2020, the significance of farming styles in relation to landscape and nature, and the role of the agri-environmental collective NFW. However, more longitudinal farming styles research, by using quantitative methods, is needed to further substantiate and deepen these initial insights.

1 Introduction

In many landscapes in the Netherlands, agriculture plays an important role in the appearance of the landscape. At the same time, the landscape determines which forms of agriculture can be practiced. Therefore, a farm can be seen as a building block of the landscape (Hendriks & Stobbelaar, 2003). The decisions a farmer makes take place within a certain ecological, socio-economic, and cultural context. Not a single farm is the same but there are many and large differences between farms. This concerns the way in which the whole set of farming operations is organised and in which direction the farm is developing over time. For example, there are differences in farm size, intensity, breeding strategy, investment strategy, future prospect, financial performance, market orientation, environmental impact, etc. (Dirksen et al., 2013).

To grasp the differences in how farming can be organised and developed the concept *farming styles* could be used. A farming style consists of a set of beliefs and ideas of what is a good farmer, the positioning towards technology, markets and policy, and the actual agricultural practices that form a consistent whole. In the 1990s, much research has been done in search for patterns in farming styles. Research on farming styles in specific regions in the Netherlands, including De Achterhoek (Roep et al., 1991), De Gelderse Vallei (De Bruin et al., 1991), Het Westelijke Veenweidegebied (Roep, 2000) and De Noardlike Fryske Wâlden en Zuidelijk Westerkwartier (De Bruin & Van der Ploeg, 1991) showed that there is a great diversity in farming styles within the same region and landscape. In addition, the farming style is linked to the farmers' relationship, consisting of both attitudes and practices, with landscape and nature. Farmers strive to adjust the land(scape) within their farm boundaries in accordance to their landscape preferences (Stobbelaar et al., 2006).

The research report *Maat houden* on farming styles in the Noardlike Fryske Wâlden, written by De Bruin & Van der Ploeg (1991), forms the basis for this study. De Bruin & Van der Ploeg (1991) identified four different farming styles among dairy farmers in this region: *Bedaarde boeren*, *Fokkers*, *Zakelijke boeren* and *Utsjongers*¹. However, much has changed in the Dutch rural area over the last 30 years. Firstly, farmers have stopped farming, farms have been taken over by a new generation of young farmers, and farms have been developed further in a certain direction. Secondly, agrarian, environmental and nature policies have undergone many and major changes, certainly in the last decades. The withdrawal of the milk quota in 2015, the introduction of the phosphate trading system since 2018, and the current nitrogen crisis since 2019 have had major impact on farmers' room for manoeuvre and decision-making. Lastly, the landscape has changed over time (Rijksoverheid, n.d.; Aanpak Stikstof, n.d.).

During the same period, two small agri-environmental cooperatives (VEL and VANLA²) have developed towards one larger and professionalised self-governing agri-environmental collective Noardlike Fryske Wâlden (from here on NFW) covering the whole region (Wiskerke et al., 2003). NFW now plays a key role in the rural governance of this region. Since 2016, NFW functions as applicant and final beneficiary of agri-environmental schemes (AES), and is thereby responsible for the region-specific and tailored AES system (BIJ12, n.d.). Main tasks of the collective are firstly promoting and recruiting farmers to integrate the conservation of nature and preservation of landscape in their farming operations, and secondly the actual implementation: spatial coordination, contracting, control, and payment of participating farmers (Ministry of Economic Affairs, 2016; Westerink et al., 2020).

¹ The four farming styles are given emic names as a metaphor of the particular style. Literally translated, a *Bedaarde boer* means calm/laid-back farmer, *Fokker* means breeder, *Zakelijke boer* means business farmer, *Utsjonger* means stayer. In this study I always refer to the Dutch-Friesian names, because the translation leads to subtle differences in meaning.

² Vereniging Eastermar's Lânsdouw (VEL) and Vereniging Natuur en Landschapsbeheer Achtkarspelen (VANLA) see **section 5.1**.

In this study I return to the Noardlike Fryske Wâlden to find out what has happened over the last 30 years, answering the following research questions: (1) how have the four farming styles as identified by De Bruin & Van der Ploeg (1991) evolved over the past 30 years and is this categorisation still relevant today? (2) are there still linkages between farming styles and farmer-landscape relationships in general and the management of landscape and nature in particular? (3) and what role has the evolution of the agri-environmental collective NFW played in the possible shifts and changes in farming styles and farmer-landscape relationships? In short, this study can be seen as a sequel of *Maat houden*. to look back on what has been described in the past and compare that with the current circumstances, to discover which findings still stands and what has changed. Never before have farming styles been reanalysed for the same region after such a long time frame. Finally, what makes this study distinctive from previous farming styles studies, is that a link is made between self-governance and farming styles.

1.1 Research objectives and relevance

The first objective of this case study is to gain renewed insight into farming styles in the Noardlike Fryske Wâlden by delving deeper into the dynamics of farming styles over the last 30 years. Until now, the lack of empirical knowledge about the continuity and change of farming styles is often criticised as a theoretical weakness. This study can therefore be seen as a first step towards more longitudinal farming styles research, to learn more about the resilience of farming styles. In doing so, I explore whether the study by De Bruin & Van der Ploeg (1991) is a snapshot and is of no use after several years, or whether this study is still valuable today. The second objective is to re-identify the linkages between the current farming styles and landscape and nature, and to explore which changes and shifts have taken place in these relations. The third objective is to link 'farming styles' with 'governance' to get a clear understanding of the role of the agri-environmental collective NFW in the possible changes and shifts mentioned above.

Relevance of farming styles

Farming styles research provides a clear overview of the farming diversity in a particular region and, at the same time, clarifies why and how farmers farm in diverging ways. An insight in farming styles can provide greater recognition for farmers with alternative ways of farming, which are often dismissed as irrational. However, farming styles research is especially relevant for agricultural consultants, policy makers, researchers, NGOs, nature organisations, and other stakeholders in the region. The findings of farming styles research provide them with tools to better understand the farming diversity, as is understood by farmers themselves. This creates a more complete overview than the dominant discourse on agriculture. For example, farming styles research could show that farms that are often regarded as unviable do indeed have future prospects (Bremmer et al., 2014). In addition, farming styles research could show that farming styles contain different possibilities and limitations in relation to societal concerns, such as landscape and nature management, agri-environmental performances, uptake and interest in new rural development activities, and creation of rural employment (Oostindie, 2015). In this way, different farming styles will respond differently to policies. Based on the findings of farming styles research different policy instruments can be designed for specific farming styles to stimulate certain 'desirable' farming styles and/or maintain the valuable diversity.

1.2 Research questions

This study answers the following research questions:

1. *How have the four farming styles as identified by De Bruin & Van der Ploeg (1991) evolved over the past 30 years and is this categorisation still relevant today?*
2. *What are the linkages between the current farming styles and the farmer-landscape relationships, farmers' views on landscape dynamics and the participation in Landscape and Nature Management?*
3. *What role has the evolution of the agri-environmental collective NFW played in the possible changes and shifts in farming styles related to nature and landscape over the past 30 years?*

The first research question consists of two parts. Firstly, it is a comparison between the current diversity in farming styles and the four farming styles as described by De Bruin & Van der Ploeg (1991). Secondly, it examines the continuity and change of a farming style at farm level and the development of the four farming styles in itself over the last 30 year. This question contains a clear hypothesis. I assume that there have been changes and shifts in farming styles. The question is to what extent these changes lead to the need for a 'new' categorisation in farming styles.

The second research question focuses on the linkages between farming styles and landscape and nature. Firstly, it is a search for the current linkages between farming styles and landscape and nature. Secondly, it is a comparison between the linkages now and the linkages found 30 years ago, to examine possible changes and shifts over the last 30 years. To analyse the linkages between farming styles and landscape and nature, I look at various aspects: the farmer-landscape relationships in general, consisting of both attitudes towards the landscape and actual use of the landscape; the farmers' views on landscape dynamics over the last decades; and the motives or barriers to participate in agri-environmental schemes (AES) for Nature and Landscape Management.

The third research question examines the role the development of the agri-environmental collective NFW has played in the possible changes and shifts as described in the above research questions. In this question I dive deeper into the link between self-governance and farming styles to address the following sub-questions: (1) how has the agri-environmental collective NFW developed over the past 30 years? (2) what specific strategies does NFW use to promote AES among farmers with divergent farming styles? (3) how does the agri-environmental collective deal with divergent farmers today? (4) what makes NFW a frontrunner?

2 Conceptual framework

2.1 The concept of farming styles

As already mentioned in the introduction, there are many ways of farming. The concept of farming styles originates from Evert Willem Hofstee, founder of the chair group Rural Sociology at the Wageningen University. In order to make *"the rich variety of agrarian life in our society"* more tangible, he introduced the concept of farming styles. Hofstee defines farming styles as: *"a within a group generally accepted way of organising and running a farm"* (translated from Hofstee 1985, p. 227). With this concept, Hofstee showed that farming (within one subsector, e.g. dairy farming) is organised and developed differently in different regions.

The concept of farming styles was revived and further unfolded by Van der Ploeg in the 1990s, which led to a series of publications. Research on farming styles in, for example, *De Achterhoek* (Roep et al., 1991), *De Gelderse Vallei* (Bruin et al., 1991), *Het Westelijk Veengebied* (Roep, 2000) and *De Noardlike Fryske Wâlden en het Zuidelijk Westerkwartier* (De Bruin & Van der Ploeg, 1991) showed that apart from differences in farming styles between regions there are also differences in farming styles within one region.

Van der Ploeg came up with the following definition:

"Farming style refers to a cultural repertoire, a composite of normative and strategic ideas about how farming should be done. A style of farming involves a specific way of organising the farm enterprise: farm practice and development are shaped in part by the cultural repertoire, which is in turn tested, affirmed and if necessary adjusted through practice. Therefore a style of farming is a concrete form of praxis, a particular unity of thinking and doing, of theory and practice." – (Van der Ploeg, 1993, p. 241).

The concept of farming styles gives a holistic view on farmers. The multiplicity of aspects that comes together in the definition of a farming style can be explained by identifying three intertwined levels or components (Bremmer et al., 2014):

- **A cultural repertoire.** A cultural repertoire is a set of knowledge, skills and symbols of meaning selectively used by individuals and groups to construct "strategies of action" (Swidler, 2001, p. 284; Holley, 2011). This 'normative' component of the definition refers to a set of beliefs and ideas on what is a good farmer. It is a specific perspective on reality, a specific way to seeing coherence and giving meaning. This set of beliefs matches with other farmers that are farming according to the same style, and clashes with farmers that follow a different style. In short, the farming style forms the farmer's identity.
- **Position.** A farming style is a specific set of interrelations with markets (market orientation) and technology, and response to agrarian, environmental, and nature policies, and other demands from society. It is about the positioning of the farm externally, the way in which the network with the external world is build and maintained. This component is not properly reflected in the quotation from Van der Ploeg (1993).
- **Practice.** A farming style is a specific organisation and development of the process of agricultural production (Jansen, 2020). This component refers to all farm operations, activities or practices that are moulded and combined into a consistent workable entity. This component refers to the visible outcome of the two above mentioned factors.

In addition to this threefold definition, Bremmer et al. (2014) lists a number of considerations that are important for a good understanding of the concept of farming styles. I have partially adopted these considerations and made some adjustments where necessary in the list below:

1. Farming styles are often referred to as farmer names. Here lies a possible misunderstanding, because it is not about the personal characteristics in the first place, but about the farming

strategy of a farm. Van der Ploeg (1991) used the concept *modes of ordering* by Law (1994) to explain that farming styles are about the normative framework of strategies, in other words the mechanisms that shape social life (Van der Ploeg, 2003). This is a very fine distinction, because the farmer's characteristics and his/her farming strategy are in continuous interaction. Above all, it indicates that farmer typologies and farming styles are related.

2. A farming style is an ideal type. Not every farmer can be easily classified under a certain farming style. Some farmers position themselves between two or more farming styles or show overlap in different styles. Nevertheless, Bremmer et al. (2014) stated that in general one farming style is dominant. De Bruin & Van der Ploeg (1991) show that farming styles can be seen as clusters of farms along a spectrum of e.g. intensity (see **figure 1**).
3. The use of the concept farming styles is not only to identify the diversity among farming, but also to identify differences in farm development trajectories or development patterns. The future prospect can differ greatly between farms. One farmer can be in the process of phasing out the farm to eventually cease the farming operations, because there is no successor present. Whilst another farmer is further developing his/her farm towards the new generation of young farmers. The different development patterns can be seen as a fourth dimension of a farming style. In addition, by developing a farm, a farmer can be in transition towards another farming style. The specific farming style can thus change over time for the same farm and/or farmer.
4. The concept of farming styles emphasises that more than one farming style can be optimal, depending on the time and place, and even within the same time and place. Therefore, it is possible to find a range of different styles in regions with the same ecological, economic and institutional conditions (Van der Ploeg, 2013). The question is not to what extent a farmer acts rationally, but what rationality a farmer follows. This rationality can be explained as the pursuit to be(come) a 'good farmer'.
5. Linked to the previous point, farming styles are often displayed in a two-scale graph or cartesian coordinate system. For example, the position of the farming style is determined on the basis of the dimensions: scale of farming (e.g. in milk yield per cow or farm size in ha) and intensity of farming (the number of cows per person) (see **figure 1**). The obtained overview shows that there are farming styles that score high on both variables, on only one variable or on not a single variable.

2.1.1 The construction of portraits

Descriptions of farming styles are often given in portraits. A portrait is to be understood as an ideal type of farmer, it is a specific story of an imaginary farmer (Swagemakers & Wiskerke, 2006). In the use of portraits the interface or parallel between a farming style and a farmer type comes back, as earlier mentioned in point 1 and 2. Portraits are constructed by the researcher and based on a number of interviews. The portraits can be described by quotes from these interviews that are representative for this particular farming style. In the following chapter I elaborate on the portraits used to explain the four farming styles as identified by De Bruin & Van der Ploeg (1991).

2.1.2 Farming styles in the Noardlike Fryske Wâlden

Due to the increasing pressure from agriculture on the typical small-scale landscape and neglected maintenance of landscape amenities in the Noardlike Fryske Wâlden in the 1990s, a farming styles research was conducted to explore the desired development direction and spatial planning of the region. This study formed a dissent to the then prevailing discourse in which only two categories of farms existed, the frontrunners/vanguards/stayers (*koplopers* or *blijvers*) and the stragglers/losers (*achterblijvers* or *wijkers*). The first group consisted of farms that followed the script of agricultural modernisation by scaling up, intensifying, and specialising the farm. The second group consisted of farms that resisted this pathway and would have had no future prospects and eventually disappear. By contrast, this study showed that there was much more diversity in farming. De Bruin & Van der Ploeg

(1991) identified four farming styles: (1) *Bedaarde boeren*, (2) *Fokkers*, (3) *Zakelijke boeren*, and (4) *Utsjongers*, with each their own development pattern. Based on their findings they recommended a region-specific tailor-made approach involving various forms of interweaving that match the opportunities embedded in the different farming styles.

This section is a summary of the key findings of the research report *Maat houden* by De Bruin & Van der Ploeg (1991). In this section the four different farming styles are explained on the basis of graphs and portraits which will be referred to later in this study.

The intensity of the milk production (milk yield per cow) and the scale of production (the number of cows per farmer) are the two dimensions on which a first 'social map' has been created (see **figure 1**). A social map is a schematic overview that shows the heterogeneity in farming styles. In this figure, clusters have been made of names that complement, correct and overlap each other. For further research, one of the most typical names was taken from each cluster to identify and describe the differences between the most important farming styles. This is how the four farming styles were created.

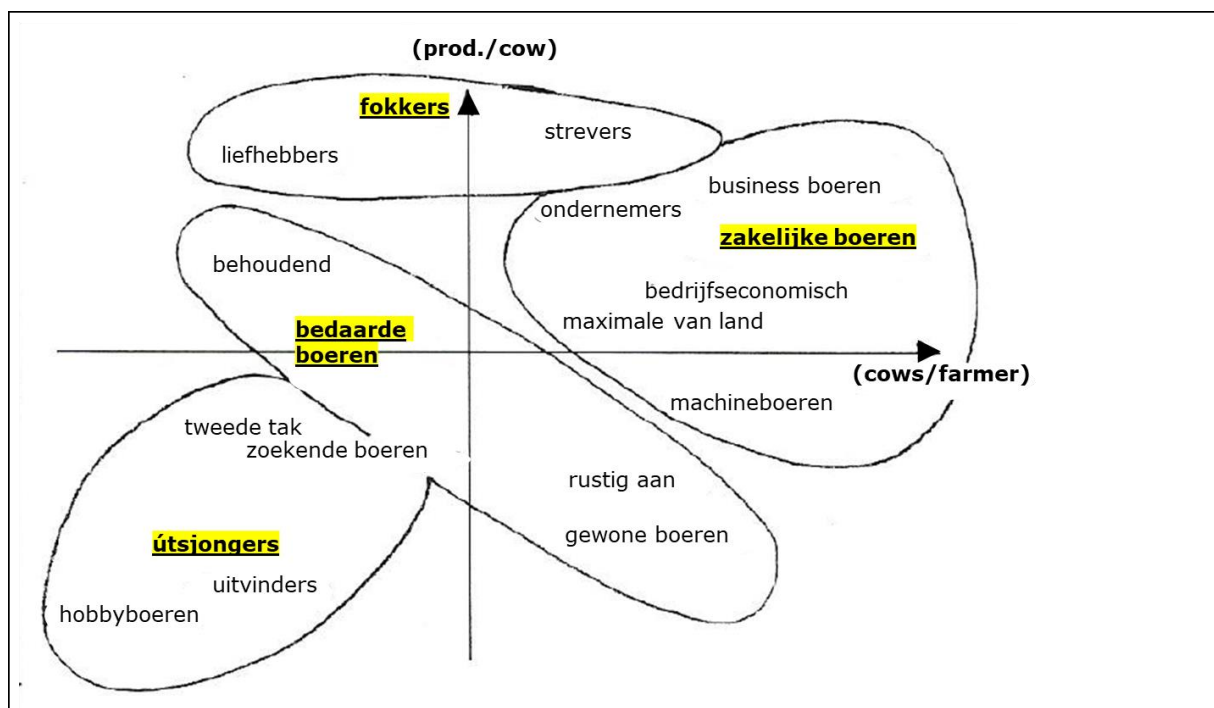


Figure 1 – Social map of farming styles found in NFW by using the dimensions scale of farming in number of cows per farmer on the x-axis (cows/farmer) and intensity of farming in milk production per cow on the y-axis (prod./cow). (The other terms can be translated as: strevers = achievers; liefhebbers = cowmen; business boeren = business farmers; ondernemers = entrepreneurs; bedrijfseconomisch = economic/commercial; maximale van land = highest yields; machineboeren = machine farmers; behoudend = conservative; rustig aan = relaxed/calm/slow; gewone boeren = ordinary farmers; tweede tak zoekende boeren = second branch searching farmers; uitvinders = pioneers; hobbyboeren = hobby farmers) (adapted from De Bruin & Van der Ploeg, 1991).

Portrait 1: The *Bedaarde boer*

"I am not an extreme farmer and do not pursue the highest results. Besides producing milk, the revenues from livestock sales (for beef) is an important pillar. Since I have only little debt, I do not have to get the most out of it. Furthermore, I try to organise my work in such a way that I have time for other activities."
(translated from De Bruin & Van der Ploeg, 1991, p. 31)

Important characteristics:

- Gradual and refined farm development based on own capital and labour, so that the farm operations remain manageable.
- Cost saving and debt and risk avoiding. In later studies on farming styles in Fryslân a similar farming style is labelled as *economical farmers* (Van der Ploeg, 2000). Economical in this context is defined as keeping overall costs at low levels.
- A high-yielding cow is not a goal. Instead, the production per cow is aligned with the available amount of roughage. Breeding towards dual purpose cows, such as the *Groninger Blaarkop*, or a moderate production per cow is the goal.
- Revenues from livestock sales (for beef) is a significant source of income.
- Relatively small farm size. A disadvantage of this is that the takeover of the farm by the next generation is seen as more complicated.
- Low levels of external inputs.
- Relatively extensive grassland use.

The *Bedaarde boer* is moderate in all aspects: the milk yield per cow, stocking density, farm scale, grassland use intensity, etc. The general emphasis is on the liveability of the farm.

Portrait 2: The *Fokker*

"I enjoy breeding and it is my passion and my life to take care of the cattle, and to keep the milk flowing. I have to pay a lot of attention to roughage harvesting, because the high milk yield requires a well-thought-out feed ration. I get revenues from the sale of high-quality breeding stock." (translated from De Bruin & Van der Ploeg, 1991, p. 31)

Important characteristics:

- Aiming for high (quality) milk yield per cow. This focus is the prioritised goal of this farming style and results in a significantly higher average milk production per cow, compared to the other farming styles. The strive for the highest milk production per cow is seen as a sport or passion of the farming profession. The high milk production per cow is the starting point, not the availability of roughage.
- Much attention to livestock care. To achieve a high milk yield per cow, livestock care is central to this farming style. Proper cow care consists of optimal feed quality with the use of concentrates (high protein and VEM³ values), hoof care, and clean sheds to prevent diseases. Within this farming style a distinction can be made between farmers who focus on individual care of the livestock and farmers who focus on management by using technical solutions, such as automated concentrate feeders and management programs.
- Breeding is an important element and aimed at highly productive cows.
- Revenues from the sales of high-quality breeding stock is a significant source of income.
- Relatively high feed costs.

Livestock care forms the basis of the *Fokker*. All aspects of the operational management (the breed, feed quality, shed, etc.) should be optimal to gain the highest milk production. *Fokkers* love their cows, but there is also an underlying belief that high yielding cows is ultimately the most profitable.

³ The unit VEM (Voeder Eenheid Melk) is based on the Dutch net energy system. A VEM value represents the net energy content of a specific fodder type for dairy cattle (Spek, 2020; Eurofins, n.d.).

Portrait 3: The *Zakelijke boer*

"For me, the economic result is paramount. The rapid farm development in the past forced me to get the most out of it. A high milk production per cow is not a goal itself; the production per cow and the size of the herd are attuned to the roughage production." (translated from De Bruin & Van der Ploeg, 1991, p. 31)

Important characteristics:

- Focus on economic production or output. Not the highest milk production, but the financial return per litre of milk is put central. The production per cow is tuned to the optimal prudential calculations.
- General aim for large farms, both in terms of scale and intensity (e.g. high stocking density), in order to produce milk at the lowest costs per litre.
- Combining intensive grassland use with cost savings. The *Zakelijke boer* has invested in the land, so the land must earn back its investment. To save costs, concentrates are produced on own land, and artificial fertilizers and/or concentrate use are lowered.
- Dynamic or jumpwise farm development pattern. Most farmers have scaled up and intensified their farms whereby large investments have been made in a relatively short timeframe.
- Entrepreneurial attitude. There is a general belief that a good farmer is alert and flexible to respond to (technical) innovations and dares to take risks.
- Highly mechanised. The high mechanisation level is considered profitable given the large farm size.

The *Zakelijke boer* does not strive for the highest milk yield but tries to produce as cheaply as possible. There is a common belief that you have to keep growing and investing to keep the farm profitable. The *Zakelijke boer* experiences a so-called investment spiral, a vicious circle of investments, where the farm needs to grow further in order to pay the debts of earlier investments (also known as *rat race*, *race to the bottom* or *technology treadmill* (Cochrane, 1958) in sociology).

Portrait 4: The *Utsjonger*

"I try to keep costs under control as much as possible. I supplement the relatively small size of the herd and milk quota with an extra income, both from on and off-farm activities. In this way, I look to the future with confidence." (translated from De Bruin & Van der Ploeg, 1991, p. 31)

Important characteristics:

- Relatively small farm size. A disadvantage of this is that the farm succession is seen as more complicated.
- Relatively low milk production per cow. Intensification and upscaling is seen as a choice, rather than a necessity.
- Farm multifunctionality forms the distinctive characteristic. Alternative on and off-farm activities are sought to improve the value of own labour and thereby creating future prospects for the farm. The Friesian term *útsjonger* has two meanings. On the one hand, it means that this farmer will continue and sustain along the same lines. On the other, it means that the farmers gives a new twist to the farm.
- Overall cost saving attitude. This applies even more to *Utsjongers* compared to other farming styles. Major farm expansions and large investments based on debt capital are rejected. The farms have been built up relatively slowly, step by step, with own labour and capital. Due to the low cost level, these farmers can still earn a decent income from their farm.
- This farming style is often seen by farmers with other farming styles as not viable in the future. By contrast, the *Utsjongers* believe that because of the industrial way of farming *Zakelijke boeren* are developing in the wrong direction. In the *Utsjonger's* belief a good farmer is not just profit-driven, but has a heart for his/her cows and meadows.

For the *Utsjonger* there is less need for upscaling. By looking for alternative sources of income the *Utsjonger* can keep the relatively small farm viable.

2.1.3 Linkages between farming styles and nature and landscape in the Noardlike Fryske Wâlden

De Bruin & Van der Ploeg (1991) showed that farmers are strongly aware that they are the creators, users and managers of the landscape. The majority of farmers are positive about the preservation of the typical landscape of the Noardlike Fryske Wâlden. However, agricultural modernisation, including scale-enlargements and intensification, exerts pressure on the small-scale landscape. There is a tension between agriculture and landscape and nature, but the tension is not uniform and differs per farming style. This section examines the linkages between the four farming styles and diverging views on nature and landscape, and actual use and integration of nature and landscape in the farming style found 30 years ago. This involves a complex continuous interaction between views, use and integration. On the one hand, views on farming operations are influenced by the possibilities or barriers of nature and landscape. On the other hand, views on nature and landscape are influenced by the vision on the desirable farming operations and farm development.

To explore the farmers' views, De Bruin & Van der Ploeg (1991) used contrasting pictures, whereby farmers had to specify their preferred picture. After analysing the responses, the preferences or idealised images of farmers could be ordered on the basis of two dimensions. Dimension 1 'Micro production conditions' consists of two variables: cubicle sheds vs. traditional farm buildings and uniform grassland vs. diverse grassland. Dimension 2 'macro nature of the landscape' consists of one variable: large-scale open landscape vs. small-scale closed landscape. **Figure 2** shows the social map in which the four farming styles are placed in relation to both dimensions.

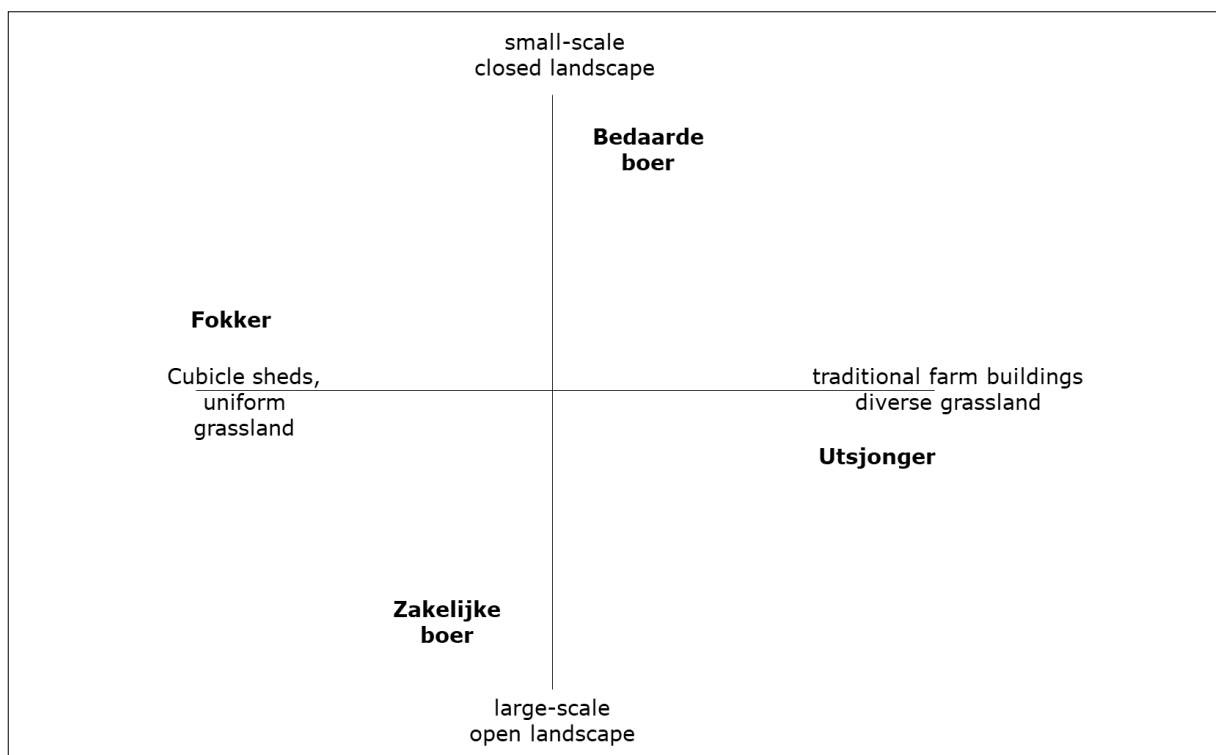


Figure 2 – Social map of the four farming styles in the Noardlike Fryske Wâlden by using the dimensions 'micro production conditions' and 'macro nature of the landscape' (translated from De Bruin & Van der Ploeg, 1991).

De Bruin & Van der Ploeg (1991) showed that the divergent use of the physical environment is strongly related to the views on the desired production conditions. In this way, each style contains its own design of landscape and nature. As mentioned before, *Bedaarde boeren* and *Utsjongers* farm relatively extensively and on a small-scale. Therefore the small-scale closed landscape is seen as workable for these farmers. Especially *Bedaarde boeren* attach great value to the traditional way of farming that suits this landscape. *Fokkers*, however, indicate that they prefer a certain enlargement of the landscape. Due

to the small-scale, labour cannot be optimally utilised and could therefore be a hindrance to future business developments. *Fokkers* have been able to adapt their farming operations to the small-scale, but the high stocking density and high milk yield per cow requires an intensive grassland use. They prefer modern farm buildings and highly productive, uniform grasslands. Lastly, there is a strong tension between the farming style of the *Zakelijke boer* and the use of and view on nature and landscape. The farming operations of the *Zakelijke Boer* necessitates scale-enlargements and intensified land use. It is mainly the *Zakelijke boeren* who have intervened most strongly in the landscape in the past. *Zakelijke boeren* have a strong preference for a so-called 'polder farm', a farm in a large-scale open landscape with a systematic spatial planning. They generally prefer modern farm buildings and highly productive grasslands. The wooded banks and alder tree belts are considered a major hindrance for further upscaling and intensification.

Finally, the four farming styles have different prospects for the interweaving of agriculture and the management of landscape and nature. Especially the *Zakelijke boeren* (and to a lesser extent the *Fokkers*) resist an economic (re)valuation of nature management. In the first place, it does not suit their farming operations to spend productive labour on the management of natural values. Due to the high level of specialisation in these farming styles side activities are difficult to integrate. In addition, the fear of barriers with regard to the desired production conditions forms an important driver to reject nature management as an economic activity. *Zakelijke boeren* and *Fokkers* have a predominantly one-sided emphasis on agricultural development in the region. They generally opt for a segregation of agriculture and nature. Whereas *Bedaarde boeren* and *Utsjongers* offer prospects for various forms of interweaving.

2.2 Self-governance

Political modernisation can be summarised as structural processes of change within the political domain of society (Van Tatenhove et al., 2000). By using political modernisation as an analytical concept, three phases in political development of Western states since the Second World War can be distinguished: early modernisation, anti-modernisation and late modernisation. Each phase is characterised by dominant views on politics, policy steering (read: specific types of governance) and specific interrelations between state, market and civil society (Van Tatenhove et al., 2000; Arts et al., 2006). It is not the scope of this study to explain each phase in depth. Very briefly: (1) Early modernisation (after WWII) is dominated by optimistic views on government intervention; (2) Anti-modernisation (1970s and 1980s) is characterised by pessimism and distrust of government intervention; (3) Late modernisation (1990s onwards) shows a two-dimensional shift in governance (Van Tatenhove et al., 2000). In this study I dive into the phase of late modernisation to explain the emergence of self-governance as a new mode of governance (Termeer, 2009), new governance arrangements (Runhaar et al., 2017) or new institutional arrangements (De Bruin, 1997).

Processes of late modernisation reflect different modes and shifts of governance (Arts et al., 2006). The late modernisation phase is better known as the (paradigm) shift *from government to governance*. Put differently, the old paradigm of top-down, state-led command and control ways of steering has shifted towards new forms of governance and policy instruments, such as: co-management, network arrangements of public and private actors, public-private and civil-private partnerships (PPP), emission trading systems, certification systems, and self-governance of business organisations (private standards) (Arts et al., 2006). In general, two shifts in governance can be identified: multilevel governance shifts (vertical), and multi-sector governance shifts (horizontal), whereby four different labels can be attached to these shifts (see terms in parentheses). Multilevel or vertical governance shifts show a move away from the national government towards higher supranational (e.g. EU) and global levels of policymaking (*internationalisation*), and towards lower regional and local levels of policy-making (*decentralisation*). Multi-sector or horizontal governance shifts show a move away from the government towards the civil society (*participation*), and from the government towards the market (*self-regulation*) (Lemos & Agrawal, 2006).

In the above paragraph, governance has two definitions. In the first definition it is a general term for the different ways in which society is shaped and organised by institutions, actors, including formal organisations (i.e. government) and informal arrangements, rules, norms, power relations and practices. In the study of governance, we try to answer the question: who makes the rules and norms and how do they shape our daily lives? Governance happens at different scales, at a microscale, by informal institutions at the household/family level, to large scale, by formal institutions at the supranational level. In the second definition, used in the phrase 'from government to governance', governance is placed as the opposite of government. Herein the term government refers to the governance mode in which the government coordinates in a hierarchical way and tackles social issues. Whereas, the term governance refers to a governance mode which is more complex than government policy only. In short, governance refers to multi-level, multi-sector, multi-actor, cross-scalar and multi-rule arrangements that lead to new networks between the state, market and civil society. This phrase illustrates the changing role of the government: the government moving from a provider of public services to a facilitator.

Self-governance can thus be seen as a new mode of horizontal governance, shifting the rulemaking from the government to the private sector. However, self-governance can sometimes also be seen as a new mode of vertical horizontal governance, shifting from a national level to a region or local level of rulemaking. In this way, self-governance is a bottom-up approach or grassroots movement for region-specific decision making and collective action. In a search for a suitable definition for self-governance, several contrasting definitions appear to exist. Wiskerke et al. (2003, p. 12) used the definition made by Ostrom (1990) and refers to self-governance or self-organisation as a "*bottom-up governance of local civil society beyond the market and short of the state, making use of associations, informal understandings, negotiations, regulations, trust relations and informal social control rather than official coercion*". It is striking that the market (and to a lesser extent the state) is not part of self-governance, whilst in much literature self-governance is actually the result of private actors. Kooiman (2003, p. 79) used however a very simple definition: "*self-governance refers to the capacity of social entities to govern themselves*", but is therefore less specific and does not spark one's imagination. Runhaar et al. (2017) classified self-governance as governance arrangements that are initiated by private actors, such as farmers, companies, NGOs, and sometimes citizens, which operate autonomously and are partly based on informal rules. In short, this definition is broader than just initiated by market actors. In this study three different forms of arrangements are found in practice that are classified under self-governance: (1) NGO-individual farmer cooperation, (2) supply chain governance, and (3) agri-environmental cooperatives (until 2015).

The first two forms of self-governance are closely related and are both considerably different from the latter. In the first two, front-running market actors, sometimes in partnerships with NGOs, are the initiators. "*They have developed new proactive strategies as a growing number of supply chain certification systems wherein business regulate the sustainability performance of their suppliers, by using their market power in selecting appropriate suppliers*" (Driessen et al., 2012, p. 153). These certification systems are often developed in partnerships with environmental, consumer and/or development NGOs (Driessen et al., 2012). An example of the first form is the cooperation of NGO Birdlife Netherlands and individual farmers, that form together a farmers' group *Gildeboeren*, creating a new dairy brand *Weide Weelde*. Birdlife Netherlands supports these farmers to implement conservation measures for meadow bird species by means of knowledge and advice, acquisition of funding, and development of new business models (Runhaar et al., 2017). An example of the second form is the development of an implementation of the label 'On the way to planet proof' initiated by the dairy factory *FrieslandCampina*. In addition, FrieslandCampina and the NGO *Natuurmonumenten*, a private nature management organisation, have recently entered into a partnership. Both examples show that these forms have strong similarities, although they differ in origin. Moreover, the examples show that NGOs broaden their scope from lobby and action groups towards a cooperative partner for proactive firms (Vermeulen et al., 2010).

In this study I omit the first two arrangement forms of self-governance and focus on the third arrangement form to explain the development and functioning of an agri-environmental collective. However, it must be said that not all scholars classify agri-environmental collectives as self-governing groups anymore. Runhaar et al. (2017) suggest that agri-environmental cooperatives can only be classified as a form of self-governance until 2015. As from 2016, the AES (agri-environmental schemes) system is substantially revised. With this revision, agri-environmental cooperatives have merged into larger agri-environmental collectives and have been given a greater role in the selection of farmers, contract making and monitoring the compliance of AES. From a governance perspective, the agri-environmental collectives under the 'new style' AES should now be classified as a form of public-private governance (Runhaar et al. 2017). Westerink et al. (2020) also show that because of the change since 2016, agri-environmental collectives had to become larger and adopt characteristics of a public agency. They use the concept of boundary organisations to explain the shifting role of agri-environmental collectives. A boundary organisation is defined as an organisation that function as an intermediate between two social worlds (Miller, 2001; Boezeman et al., 2013), for example between science and politics or in this case between farmers and government. Using these concepts, Westerink et al. (2020) conclude that an agri-environmental collective must, to an increasing extent, combine the identity of a self-governing group of farmers with the identity of a boundary organisation to enable a good collaboration between farmers and government. In conclusion, both Runhaar et al. (2017) and Westerink et al. (2020) emphasise that self-governance is dynamic and that the form of governance can change over time. In addition, they show that a self-governing group does not operate in a vacuum, but is always connected in some way to other stakeholders, in particular to the government, in order to determine the boundaries of self-governance.

Self-governance is a gradual process without a clear end-station. The definition of self-governance I use in this study is based on three distinctive characteristics:

- The origin. Self-governance arrangements are initiated by private actors, often from the feeling of 'we can do it better ourselves'.
- A certain autonomy. Although there can be a strong relationship with the government, a self-governing group is governed outside the scope of the government. It is an autonomous entity.
- A form of collective decision-making or participatory democracy. This is described by Ostrom (2005, p.132) who stated that self-governance implies that *"actors who are major users of the resources are involved in making and adapting rules within collective-choice arenas regarding the inclusion or exclusion of participants, appropriation strategies, obligations of participants, monitoring and sanctioning and conflict resolution"*.

By using this definition of self-governance, agri-environmental collectives can still be considered as self-governing groups, and the concept of self-governance provides a useful framework to approach agri-environmental collectives. To describe the dynamics and development over time from the emergence of agri-environmental cooperatives to the process of professionalisation that has led to the merging into agri-environmental collectives (see **chapter 4**). Furthermore, this concept offers tools to approach the duality of the internal and external relationships of an agri-environmental collective. 'Internally' with the different farmers and possible frictions and tensions that exist or arise between them. 'Externally' with the government and other stakeholders in the region. Above all, the concept of self-governance can help to understand the relation between the agri-environmental collective and farming styles. This concept is used to answer the third research question and related sub-questions.

3 Methodology

The study design follows a similar research approach of earlier farming styles research. What is new, is the special eye for the dynamics of farming styles over a longer period. In the study design I complemented available methodological tools for farming styles research with a longitudinal approach. In this case study I returned to the region where farming styles research was done by De Bruin & Van der Ploeg (1991) to examine the continuity and change of farming styles as earlier identified. Never before have farming styles been re-examined after such a long time. The longitudinal approach made this research innovative and experimental.

In previous farming styles research a mixed method approach of both qualitative and quantitative methods is often used to create a categorisation in farming styles. These 'classic' farming styles studies consisted of three research steps: in-depth interviews, a statistical factor analysis and a survey (Bremmer et al., 2014). The first step consists of in-depth interviews with region experts and farmers. These interviews provide insight into the diversity in how farmers give meaning to farming and create congruence on their farm in which the three components of farming styles are resonated. In these interviews various topics are discussed, such as the farm history, technical and economic aspects of the production process, the division of labour and daily practice, and the underlying strategic choices, norms and values of the farmer(s) and his/her family. The second step is a statistical factor analysis, used to compare key figures and accounting data from different farms. In this way, from a large number of variables, a number of underlying/explanatory variables are defined. On the basis of the findings from the first and second research steps portraits of farming styles can be drawn up. In the third step these different portraits are included in an extensive survey for farmers in the particular region. In this survey farmers are asked to what extent they recognise themselves in the different portraits. The study design of this study is limited to a qualitative research method of both a literature review and in-depth interviews, which can be compared with the first research step of a classic farming styles research.

3.1 Literature review

To get acquainted with the concept of farming styles and to get a clear picture of how and which farming styles were described, I performed a literature review on earlier farming styles research from the 1990s. In particular the research report *Maat houden* by De Bruin & Van der Ploeg (1991) was studied in detail. Additionally, a literature review was done on the recent history and development of agri-environmental collectives in general and the agri-environmental collective NFW in particular.

3.2 Interviews

Two rounds of semi-structured in-depth interviews were conducted by using a snowball sampling technique. In the first round I focused on ten key actors who are actively engaged in NFW. These people can be considered as region experts of which it is assumed that they have broad and clear picture of the farming diversity in the region and who often visit different farms and/or speak with different farmers. The ten key actors consisted of four current board members, two former board members, an auditor, and three stakeholders and members of one of the theme groups. Based on input from the first round I selected five farms with divergent farming styles for the second round, in such a way that the wide range of existing farming styles is covered as much as possible. These are farms that I assumed had strong similarities with one of the four farming styles from 30 years ago.

However, almost all farmer respondents were dairy farmers or linked to dairy farming. I have insufficient empirical data of other agricultural subsectors (see **section 5.3.2**) to conduct a proper qualitative analysis on the overall regional farming diversity. Therefore, the findings are limited to dairy farming. When the terms farm, farmer or farming are used, it only refers to dairy farming, unless specified otherwise. The interviews from both rounds provided valuable empirical material for this study. In the remainder of this report I do not address the respondents of round 1 and round 2 separately, but use quotes from both rounds interchangeably. Each respondent has been anonymised but has been given a separate code containing the round number and respondent number, so that the quotes can possibly be traced back.

For each interview, a list of open questions and topics was prepared. This list formed the basis of the interview, but was not a strict protocol. The interviews were audio-recorded, and notes were made during the conversations. All interviews were transcribed *in verbatim* to make sure no data got lost. The transcripts were iteratively coded and analysed with Atlas.ti software.

4 Agri-environmental Collectives

Due to a major policy change, 160 agri-environmental cooperatives (in 2012) have merged and changed into 40 agri-environmental collectives since 2016 (Runhaar et al., 2017). The recent history of agri-environmental cooperatives, the range of tasks and activities, and the transformation into agri-environmental collectives are elaborated in this chapter. Before diving into the content, it is noteworthy to mention that in literature many different names are used for the same self-governing groups of farmers: farmers' groups, farmers' associations, farmer cooperatives (Termeer et al., 2013), territorial cooperatives (Swagemakers & Wiskerke, 2010), environmental cooperatives (ECs) (Renting & Van der Ploeg, 2001; Wiskerke et al., 2003; Termeer et al., 2013; Ministry of Economic Affairs, 2016), local environmental cooperatives (LECs), agri-environmental cooperatives (Runhaar et al., 2017), (regional) farmer collectives (Runhaar et al., 2017; Dik et al., 2018; De Vries et al., 2019), and agri-environmental collectives (Westerink et al., 2020). The plethora of names has partly to do with the fact that the Dutch names are difficult to translate into English. In this chapter I selected two names: agri-environmental cooperatives, referring to the self-governing farmers' groups until 2016; and agri-environmental collectives, referring to the self-governing farmers' groups since 2016.

4.1 The emergence of Agri-environmental Cooperatives

Agri-environmental Cooperatives (*Agrarische Natuurverenigingen*, ANVs) are regional initiatives organised by farmer groups and often citizens whose aim is to promote nature, landscape and environmental measures in their working area. Cooperatives have a rich history. The first cooperative was formed in the 1980s. Since the early 1990s the number of cooperatives has taken a leap. In 1990 there were only about 10 cooperatives, whilst in 2006 that number had already grown to 150 cooperatives. Since then, cooperatives have been an important player in rural landscapes. Two environmental policy developments have had a major influence on the rapid rise of cooperatives: (1) The Nature Policy Plan (*Natuurbeleidsplan*) from 1990, and (2) the process of administrative renewal *Sturing op Maat* from 1993 and the subsequent administrative experiment on cooperatives in 1996. In 1999, the first umbrella organisation *In Natura* was founded, followed by a national umbrella organisation *Natuurlijk Platteland Nederland* (NPN) in 2003 (Westerink et al., 2020). NPN had played an important role in the shaping and implementation of *Programma Beheer*, and in increasing the acceptance of AES among farmers to stimulate participation.

Most cooperatives were founded by an interplay of motives: (1) as a protest or counterbalance against environmental policies that could lead to a limitation of agricultural development possibilities; (2) as a desire for self-governance; (3) to become a better cooperation and consultation partner with other stakeholders in the working area; (4) to tackle problems offensively instead of defensively; (5) to contribute to knowledge development; (6) to respond to the opportunities offered by *Programma Beheer* (a subsidy scheme for nature management since 2000) and other allowances/subsidies for AES; and lastly, (7) due to efforts from *LTO (Land- en Tuinbouworganisatie)* to establish associations in specific areas (Oerlemans et al., 2006). All in all, a great diversity in cooperatives could be found, not only based on which motives they were founded, but also differences in regional context, organisational structure, participation rate, size of working area, number of members, relation/collaboration with stakeholders, role of citizens, activities, and general approach. Between 2000 and 2003, as part of *Programma Beheer*, the cooperatives functioned as an intermediary contract partner between farmers and the government. They drew up collective nature management plans and were responsible for the recruitment and payment of participating farmers (Westerink et al., 2020). In 2003, however, the cooperatives were forced to stop functioning as a final beneficiary of subsidies under pressure of the European Commission. Because under the current regulation of the common agricultural policy (CAP) only individual farmers could be the final beneficiaries.

4.2 Activities of Agri-environmental Cooperatives

The general aim of agri-environmental cooperatives is often summarised as to implement and promote AES that enables farmers to manage landscape and nature. Examples are meadow bird protection and maintenance of landscape amenities on farmland (Westerink et al., 2020). However, a much broader range of activities can be identified. Oerlemans et al. (2006) created a clear overview of six different clusters of activities (see **box 1**). These activities constitute the entire range of tasks of a cooperative.

Activities organised by Agri-environmental Cooperatives

1. Promoting and implementing AES by members such as:
 - Landscape amenities (wooded banks, hedgerows): no/little effect on agricultural production and implementation of agricultural practices.
 - Species management & field management (meadow birds, botanical, etc.): effect on agricultural production and implementation of agricultural practices (e.g. mowing) as a collective or individually.
 - Field margin management: arable field-, fauna, flower, ditch margins, roadsides.

By supporting SAN (*Subsidieregeling agrarisch natuurbeheer*) applications from members, drawing up farm nature plans (*Bedrijfsnatuurplannen*), closing SAN collective management agreement plans, providing information and courses on AES. A powerful tool used by cooperatives is to educate farmers both about the SAN scheme itself and the specific conservation measures.

2. Promoting and implementing environmental measures:
 - Reduce mineral losses, using mineral balance tools, and monitoring
3. Policy influencing and cooperation with other partners/stakeholders:
 - Interlocutor in rural regions
 - Lobbying for nature policies
 - Involvement of citizens and cooperation with NGOs to increase social support for activities
4. Contributing to research and knowledge building
 - Testing measures, gaining experience and knowledge on results to improve AES.
5. Developing, promoting, mediating of so-called broadening activities for members:
 - Private services: recreation/rural tourism, agriculture & care, water services, regional products.
 - Public services: increasing accessibility, public facilities, public communication
6. Implementing of projects and contract work:
 - Green contract work for municipalities/land managers/private individuals
 - Implementation of projects for provincial and national government

Box 1 – Activities of Agri-environmental Cooperatives (translated from Oerlemans et al., 2006, p. 13).

4.3 From Agri-environmental Cooperatives to Agri-environmental Collectives

The CAP reform for the period 2015-2020 made it again possible for cooperatives to be applicant and final beneficiary of AES (Dik et al., 2018). From 2011 to 2014, pilots with four cooperatives were done. These so-called CAP-pilots included *"the design and monitoring of new management options, spatial coordination of measures on multiple farms, and control and payment organised by the cooperative"* (Westerink et al., 2020, p 393). It became clear that for a successful implementation of the 'new style' AES, based on large-scale participation of cooperatives as applicants and final beneficiaries, a major reorganisation and professionalisation was needed. Responding to this CAP change and with the introduction of the new AES system in 2016, the Dutch government decided to stop individual applications of AES, but only allow joint applications. The government was convinced that this change would enhance the effectiveness and efficiency of AES, which had been so much criticised previously

(Kleijn et al., 2001; Kleijn & Sutherland, 2003; Kleijn et al., 2011; RLI, 2013). Because of this, 160 agri-environmental cooperatives merged and changed into 40 agri-environmental collectives covering the whole countryside (Westerink et al., 2020; Ministry of Economic Affairs, 2016). So since 2016, the AES system has been implemented by these 40 collectives that work with region-specific management plans and related management packages.

The evolution to agri-environmental collectives resulted in an increased workload. To improve coordination, collectives now consist of more professional staff members. Westerink et al. (2020) made a clear comparison between cooperatives and collectives (see **table 1**). This provides a clear overview of the changes since 2016, regarding the upscaling and professionalisation.

Table 1 – Agri-environmental cooperatives and agri-environmental collectives compared (Westerink et al., 2020).

	Agri-environmental Cooperatives	Agri-Environmental Collectives
Since	1990	2016
Members	Farmers (participants and non-participants in AES) and often citizens	Farmers (participants in AES)
Number	App. 160 (2012)	40 (2016)
Founded by	Farmers	Agri-environmental Cooperatives
Governance tasks (Westerink et al., 2017)	Recruitment of participants, extension, organising exchange and learning, monitoring of results	In addition: design of on-farm measures, spatial coordination, contracting, control and payment of individual farmers
Requirements		Certification, control of administration
Size	25-750 farmers	35-1500 farmers
Working area	Local-regional	Regional
Legal form	Association, cooperative or foundation	Association
Personal risk for board members	Low	High
Professional staff (fte)	0-6	1-7
Certification	No	Yes
Administrative burden	Low	High

The new AES system uses the so-called front door-back door principle (see **figure 3**). At the front door, a 6-year contract is concluded between the collective and the government, based on the region-specific management plan composed by each collective. This management plan describes the types of conservation activities that are used to achieve the targets. The contract is *"a results-based obligation to realise specific habitats on a specified land area at a budget per habitat based on the average payments per hectare for the different activities"* (Ministry of Economic Affairs, 2016, p. 4). At the back door, the collective concludes contracts with farmers and other private land managers who are members of the collective. These AES contracts consists of the specific activities and payments needed at field level (Ministry of Economic Affairs, 2016). Between the front and back door regional fine-tuning, tailoring takes place. The collective plays an active role in the spatial coordination and selection of farmers who are suited to carry out AES.

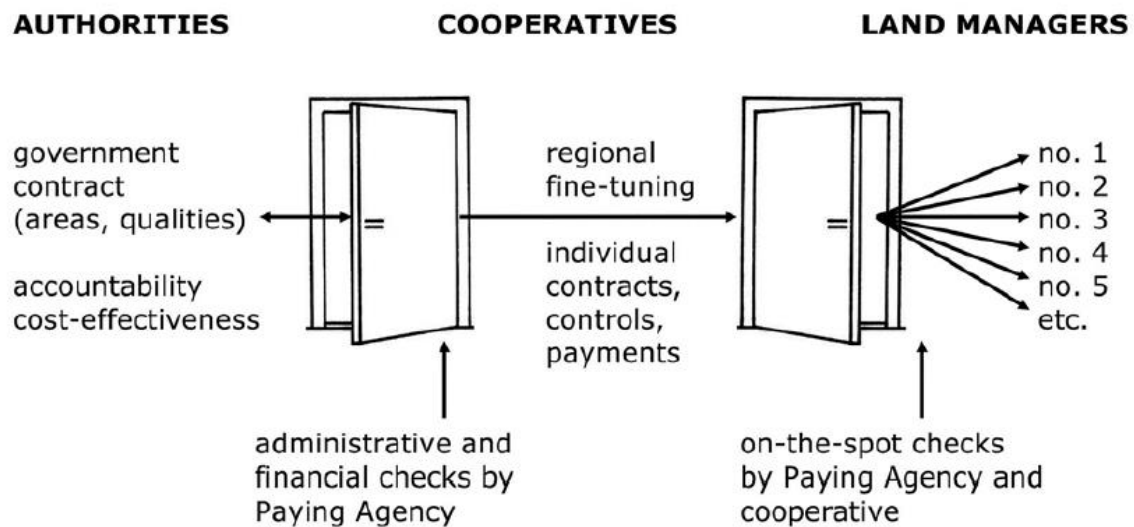


Figure 3 – The front door-back door system of the Dutch AES system with a key role for agri-environmental collectives as applicants and final beneficiaries (Ministry of Economic Affairs, 2016; Westerink et al., 2020).

In short, the collective is applicant and final beneficiary of the government contract. Subsequently, the collective pays and enforces AES contracts with individual farmers. Due to this, the role of the government has been reduced and performs a random double check, consisting of an administrative and financial check, at most. Currently, there is broad consensus for this collective and region-specific approach of AES. In this approach collectives form a key link between farmers and the government and making agreements with farmers about Nature and Landscape Management (GLB, n.d). AES are assumed to be more effective and efficient because of the collective, region-specific, and tailored approach (BIJ12, n.d.).

5 Area of research

In this chapter I zoom in on the agri-environmental collective NFW. Firstly, I discuss the evolution and founding of NFW and reflect on the changes in focus. Secondly, I discuss how the current association functions, the place it occupies within the administrative divisions, the current objectives and the organisational structure. Lastly, I briefly describe the landscape of the Noardlike Fryske Wâlden with its specific landscape amenities and composition of general farming types to paint a picture of the area of research.

5.1 The evolution of NFW

The history of the development of NFW dates back to the early 1990s. It was the first time farmers in the Noardlike Fryske Wâlden were held responsible for environmental issues. The national government introduced a new policy to reduce acidification. This new policy had far-reaching consequences, because it was based on segregation in land use (*functiescheiding*), resulting in separate areas or zones designated as nature, where farmers had to leave, and other areas that were designated as agriculture, where farmers were given space to farm. When the municipality of Tytsjerksteradiel implemented this new policy on the small-scale closed landscape, all wooded banks and alder tree belts were marked as 'vulnerable to acidification'. As a result, farmers in this municipality were suddenly very limited in their farming operations. Due to the new policy, these farmers felt that they were no longer able to farm properly under the new regulations.

Als je een nieuwe stal bouwde dan mocht je een depositie hebben van maximaal 15mol per hectare, maar ze zouden de bestaande bedrijven wel gedogen tot een maximum van 30mol. Maar stel je voor als hier de boel afbrandde, dan moest ik de boel weer opnieuw bouwen en dan moest ik wel aan die 15mol voldoen. En omdat die wallen hier allemaal om de stal heen staan hier - dat heb ik wel even uitgerekend - kon ik nog 1 koe en 2 kalven aanhouden om aan de voorwaarden te voldoen. (R1-8)

In addition, more trends played a role. The small-scale landscape was under pressure from agricultural upscaling, the quality of the landscape amenities deteriorated, and at the same time there was an increasing interest in landscape preservation. A group of farmers from Eastermar took matters into their own hands. They did not protest against the new regulation, but opted for a totally different approach in which farmers themselves became responsible for the preservation of the landscape and went in search for other solutions to reduce ammonia emissions.

Wij zeiden, we hebben hier altijd geboerd met die wallen. De boeren hebben die wallen zelf gemaakt en altijd onderhouden.[...] En nu moeten we hier opeens weg? Toen hebben we gezegd, wij willen het hier wel onderhouden maar dan moeten we er wel een vergoeding voor hebben.[...] Dat is zendingswerk geweest, maar uiteindelijk hebben we dat bij het ministerie van Landbouw voor elkaar gekregen en ook bij de gemeente. De gemeente was autonoom in het aanwijzen als verzuringgevoelig, maar die heeft het niet aangewezen als verzuringgevoelig. Dat vertrouwen hebben we gekregen. (R1-8)

All this led to the establishment of the *Vereniging Eastermar's Lânsdouwe* (VEL) and a couple of months later the *Vereniging Natuur- en Landschapsbeheer Achtkarspelen* (VANLA) in 1992 (R1-2, R1-8, R2-15). With the help of Wageningen University, an action plan was drawn up by the VEL and submitted to the Ministry of VROM (Housing, Spatial Planning and the Environment). The minister of that time was persuaded of this plan. Subsequently, the plan was implemented as a policy experiment (*Voorbeeldplan*),

part of the national policy on Spatial Planning (*Vierde Nota Ruimtelijke Ordening*). This was one of the first major steps in which the associations were given space from the government to self-govern.

In de jaren 90, met de VEL VANLA, toen zijn hier verscheidene biologen geweest. En mensen uit Wageningen en ook uit Den Haag, met beleidsmakers en... toen is er een hele bewustwording op gang gezet van het landschap. (R2-15)

Both associations can be considered as the first agri-environmental cooperatives of the Netherlands. The affiliated farmers of the VEL and VANLA were pioneers. The aim for self-governance and tailor-made, region-specific policies was unique and coursed against the prevailing policy. Central to the approach of the associations was the farmer's own responsibility and local knowledge. The farmers have always lived and worked in the region and know best how to preserve the landscape and carry out the management as part of their farming operations. Furthermore, both associations strove for an interweaving of agriculture, landscape, nature, and the environment, rather than a segregation in domains and land use (*functiescheiding*). Such an integrated approach should lead to viable farms and to an overall improvement of the liveability of the region. The members of the association were stimulated to learn more about the soil-plant-animal cycle. At that time the concept of circular farming was introduced.

One respondent explained that the change in thinking about agriculture did not come without any struggle. As pioneers, they experienced much resistance from other farmers in the beginning.

Het was begonnen met de VEL. En toen hebben wij aangegeven hoe het kon en die boeren werkten hier ook allemaal meteen aan mee. Maar je kwam nog niet buiten het gebied of je werd met de nek aangekeken. 'Hoe konden wij nou wat aan het milieu doen? Het ging ten koste van het rendement van de boerderij'. Maar dat was helemaal niet zo. (R1-8)

Similar associations were established in other parts of the Noardlike Fryske Wâlden: *Vereniging Agrarisch Landschapsbeheer Dantumadeel (VALD)*, *It Kollumer Grien*, *Wâld en Finnen* and *Vereniging Agrarisch Natuur- en Landschapsbeheer Smelne's Singellân*, with the idea to expand the preservation of the landscape and roll out the concept of circular farming. One respondent explained that the other associations piggybacked on the work of the VEL and the VANLA (R1-3). The same respondent explained that there was a group of passionate farmers with a clear mission that inspired other farmers.

Toen liep ik ook mee met die club en er waren echt mensen, van die diehards jonge, die beten zich helemaal in dat agrarisch natuurbeheer vast. Dat vond ik prachtig. Maar gaan jullie maar naar de provincie toe, want ik zat dan soms bij de provincie te klepperen met de oren van, kan dat ook? En moet dat zo? En die jongens die...[onderhandelden over een beheervergoeding met de politiek]. (R1-3)

During an anniversary event of the VEL and VANLA in 2002, the then minister of Agriculture praised both associations. He said that he was willing to conclude a regional contract with all farmers in the region. That could mean major step towards more self-governance. In September 2002, all six associations formed one umbrella organisation NFW with an office in Burgum to have a stronger voice for the whole region. Only in 2005 the provincial government signed a declaration of intent for a regional contract. In 2009, the provincial executive council appointed NFW as a regional coordinator for AES within the framework of the Provincial Subsidy System for Nature and Landscape (SNL). From that moment on, NFW coordinated AES for the six affiliated associations. One respondent explained that over time all governmental bodies agreed that farmers should be compensated to maintain the landscape.

In de loop der tijd is de hele politiek veel meer Fryske Wâlden-minded geworden. De Gedeputeerden die achter onze werkwijze staan en die snappen ook wel, dat kan niet meer voor zakgeld. Nee, er moet ook wat tegenover staan, want anders blijft het landschap niet behouden. (R1-3)

The CAP reform for the period 2015-2020 made it possible for associations to be a collective applicant and final beneficiary of AES. Responding to this CAP change and with the introduction of the new AES system in 2016, the Dutch government decided to stop individual applications of AES, but only allow joint applications via so-called agri-environmental collectives (see **section 4.3**). From 2016, the associations merged as one agri-environmental collective NFW wherein the former associations have become departments. However, the VEL and VANLA voted against a merger and are separate associations to this day (see **figure 4**).

Although the 6 associations already cooperated with each other for more than 13 years, for many farmers the policy change in 2016, whereby the 6 associations merged into one agri-environmental collective, felt like it was imposed by the province. One respondent explained that the loss of self-identity and self-governance of the particular associations may be one of the reasons why the VEL and VANLA voted against a merger. While other farmers were convinced that the merger would lead to more self-governance for the whole region.

De provincie doet eigenlijk hoofdzakelijk zaken met de collectieven, niet meer met de ANV's. En vandaar dat het ook...voor sommigen voelt het wat afgedwongen. Met name de VEL en de VANLA hebben daar wel heel veel problemen mee. Ze zijn bang dat ze hun eigen stukje identiteit zijn verloren. (R1-7)

Since 2016, NFW has an office in Bûtenpost and is applicant and final beneficiary of AES for the whole working area of NFW (see **figure 9**). In that role, NFW submits an regional application to the province every 6 years. Besides that, at least 17 projects have been organised since 2017. NFW is certified as a collective for private nature management, PNM (*particulier natuurbeheer, PNB*), since September 2018 and has actively started implementing this since 2019. Between 2019 and 2020 NFW was part of a CAP pilot for the forthcoming CAP reform in 2023. One of the novel instruments of the future CAP are so-called eco-schemes, as part of pillar 1. It is still unclear what the precise role of NFW will be in the new CAP, but this may lead to additional tasks and organisational changes. Finally, as of 2021, NFW and several other stakeholders in Northeast Fryslân have set up a field lab (*Fjildlab*) which includes many new projects to develop new revenue models for farmers. All in all, with the aim to strengthen the circular economy and move towards a sustainable agricultural sector.

In summary, **Figure 4** shows a timeline of the evolution of NFW showing the important achievements in the development of a self-governing body, including the conducted research projects and development of AES.

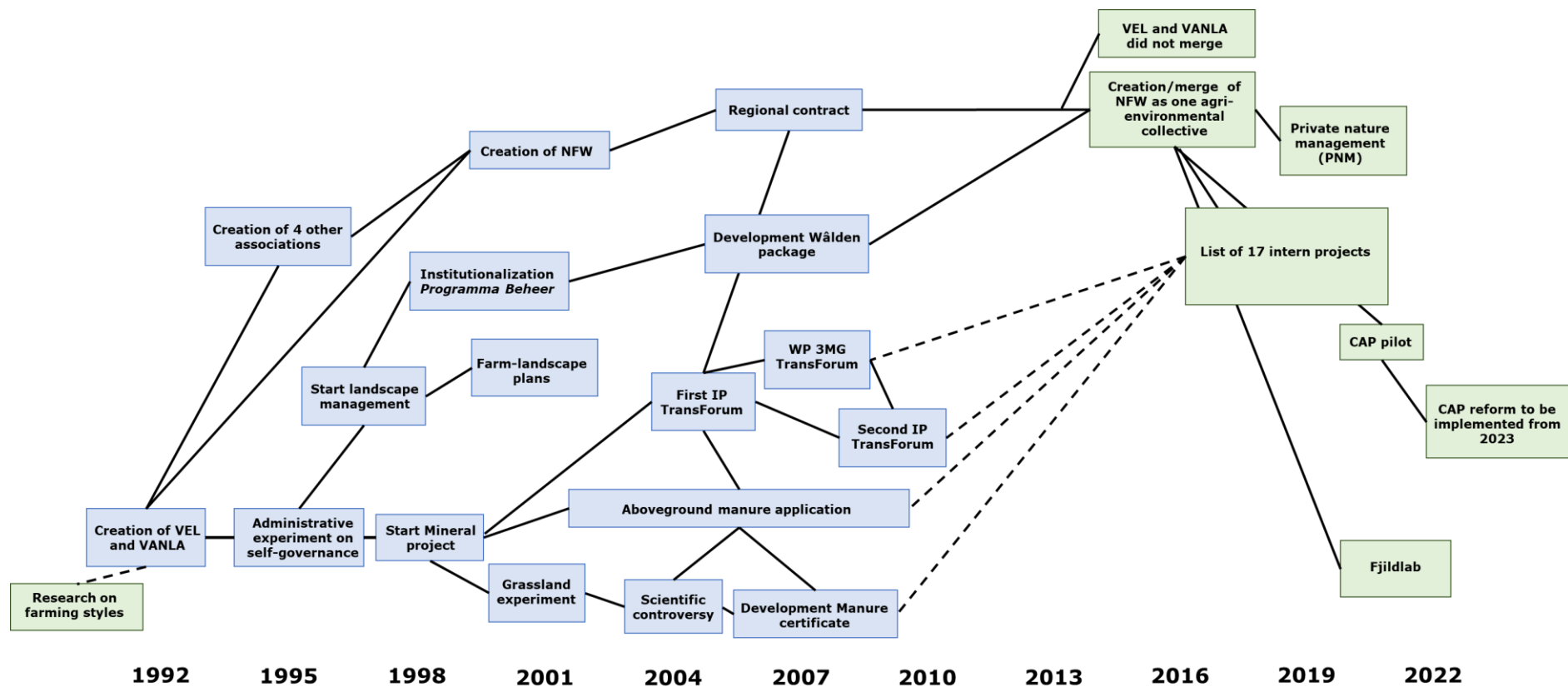


Figure 4 – Time line of the development of the agri-environmental collective NFW (adapted from Van der Ploeg et al., 2010).

Shifting focus

Reflecting on the development of NFW in the last 30 years, the mission and vision, as once written down by the VEL and VANLA, have remained virtually unchanged. The interweaving of agriculture, landscape, nature and environment is still put central. However, it seems that the prioritisation of objectives has shifted over the years. While at the foundation of the first two associations the environment was one of the priorities, reducing environmental pollution with the concept of circular farming. Now, the main task of the current agri-environmental collective is the organisation and coordination of AES. AES are seen as the priority, whereas projects related to reducing environmental pollution is an additional task offered to a small group of interested farmers.

Ik denk wel [dat de rol is veranderd], want het is nu meer een collectief. Het gaat nu meer om geld voor de boeren binnen te halen. En toen was het echt wel voor Wageningen, onderzoekers, en allemaal dingen. Projecten bedenken... (R2-15)

This shift is reflected by the names that were given to the associations (see **figure 5**). The VEL and VANLA were founded as environmental cooperatives in 1992. A couple of years later, four other associations were founded. They were called agrarian nature associations. A key actor explained that these 'new' associations were mainly concerned with landscape and nature management and not with the environment, by reducing environmental pollution. Furthermore, the umbrella organisation NFW, established in 2002, was primarily set up to collectively coordinate AES and is later recognised as formal applicant and final beneficiary of AES, as part of the new AES system. However, because of the development of a field lab since 2021 renewed attention is given to the interweaving of agriculture and environment.

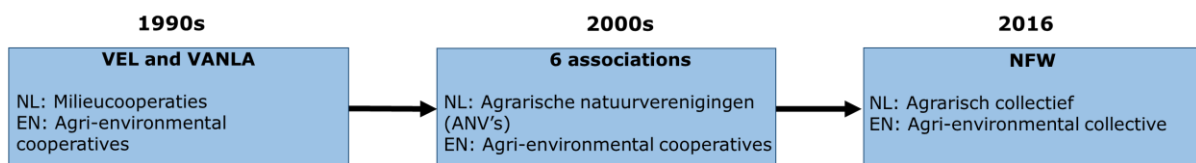


Figure 5 – Visualisation of the shifts in terminology. Important to note is the differences in translation. While in the English terminology, the term environment is still included, it has disappeared in the Dutch terminology

5.2 NFW today

NFW profiles itself as a regional partner. The organisational structure of NFW is complex and not easy to subdivide into an internal and an external structure. Stakeholders, both public and private, are an internal part of NFW. In this section I discuss the place NFW occupies in an administrative sense, the current objectives and the interweaving of stakeholders in the organisational structure of NFW.

NFW and AES

Since 2016, the association NFW is one of the 40 agri-environmental collectives that cover the entire country. All these 40 collectives are united in the national umbrella organisation *BoerenNatuur*. In addition, NFW is one of the 7 agricultural environmental collectives in Fryslân that are connected through the *Kollektivenberied Fryslân* (KBF). The main tasks of these agri-environmental collectives is to coordinate AES in their working area. In **box 2** gives a brief description of the functioning of the current AES system in the working area of NFW. The working area of NFW covers 4 municipalities and the former municipality of *Kollumerlân*, now part of the new municipality *Noardeast-Fryslân*. The total budget for AES is established by EU subsidies from CAP Pillar 2, co-financing by the Province and a small part from the Water Board for specific hydrological measures. NFW currently has almost 800 members, both farmers and other private land managers, of which 583 members participate in AES. The size of the working area is 53,551 hectares (total area of the municipalities summed). Below is a list of some figures to give an impression of the scope of NFW in spatial sense. NFW is responsible for:

- 975 km of alder tree belts and 104 ha of wooded banks (40-45% of all landscape amenities)
- 28 ha arable land
- 98 ha surface water
- 337 pingo ruins and pools
- ha habitat for meadow birds
- 1.600 ha tolerance area for geese

AES in the Noardlike Fryske Wâlden

The AES system works on the basis of four large habitat types and the category water. The four habitat types correspond to the agricultural nature types of the Index Nature and Landscape: A11 open grassland, A12 open arable land, A13 dry network and A14 wet network (see **figure 12**). When a farmer wants to participate in AES, he must be member of NFW. When the farmer's property falls within one of the four demarcated habitat types, the farmer is able to apply for the management packages that fall under the specific habitat type. Based on a collective approach, in consultation with, among others, office workers, management directors (for meadow bird protection) and/or neighbouring farmers, it is decided whether the farmer can actually receive a management package. A management package is based on an AES contract for a maximum of 6 years. After 6 years, the farmer must submit a new application for the same management package(s) to the NFW office for the next 6 years. At the beginning of the AES contract, an advisor visits the farmer to provide practical information on how to carry out the correct management.

To check the farmer's performance(s), in other words whether the management is carried out properly, NFW has set up its own monitoring body: the audit commission. At least once every 6 years, the audit commission comes by to check the implementation of the management package. In addition, the *NVWA* (Netherlands Food and Consumer Product Safety Authority) carries out random controls on behalf of the *RVO* (Netherlands Enterprise Agency). Lastly, the municipality and *Omgevingsdienst* are involved in issuing permits for the end cut (as part of the management package for wooded banks and alder tree belts) or the complete removal and compensation of landscape amenities, and enforcing the conservation duty of landscape amenities as part of the Law on Nature Protection (*Wet Natuurbescherming*).

Box 2 – Brief description of the functioning of the AES system in the Noardlike Fryske Wâlden (Bij12, n.d.; NFW, personal communication, 18 February 2020; R2-15).

Furthermore, **Figure 6** shows the place NFW occupies in the structure of administrative bodies and subdivisions. The lines represent the direct relationships of policy, legislation and money flows between government agencies and related independent organisations with regard to AES.

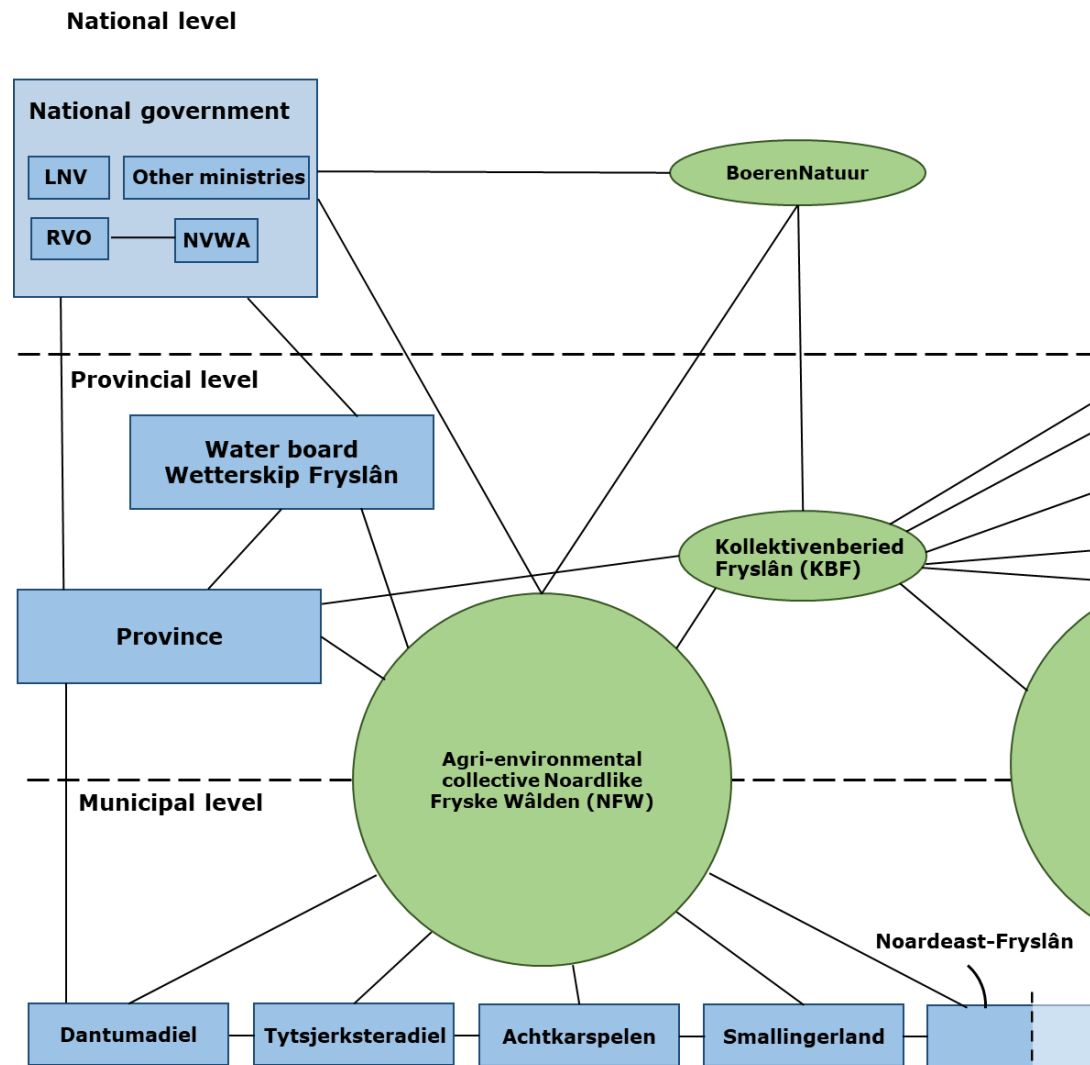


Figure 6 – Visualisation of the position of NFW as a self-governing body amidst a network of government agencies (blue boxes) and related independent governing bodies of AES (green circles).

Objectives of NFW

In **Box 3** the current mission and vision of NFW are written down. This shows that the association has a much broader scope than just the coordination of AES and PNM. NFW profiles itself as an important regional partner that is keen to cooperate with other stakeholders and develop innovation projects.

Mission

The association NFW strives for a thriving agricultural sector, at the heart of society (*'midden yn 'e mienskip'*), which is intertwined with the cultural-historical landscape and associated nature values.

Vision

Attention to biodiversity and circular agriculture is of great importance for the viability of the agricultural sector that provides food, employment and quality of life in the region. In addition, preserving the historical and nature values of the National Landscape makes the region attractive for residents and visitors.

Box 3 – Mission and vision of the agri-environmental collective NFW (translated from Vereniging Noardlike Fryske Wâlden, 2021, p. 5).

Based on the mission and vision, NFW has formulated a number of general objectives:

- To promote the common interests of members who manage landscape and nature in the Noardlike Fryske Wâlden.
- To develop a sustainable and economic viable agricultural sector in balance with the environment and management of nature and landscape.
- To strengthen the specific nature and landscape values in the Noardlike Fryske Wâlden.
- To develop knowledge and promote and coordinate research with regard to the relationships between various management measures and nature and landscape development.

Based on the above objectives, NFW is engaged in the following tasks:

- Safeguarding a reward system for nature and landscape managers through AES and PNM.
- Setting up other revenue models and reward systems, for example 'friends of NFW'.
- Unburdening members:
 - Play as an intermediate for AES and PNM.
 - Support with other administrative tasks, such as the *Gecombineerde Opgave*.
- Organising projects related to nature-inclusive and circular agriculture.
- Regional development: forming strategic alliances with other stakeholders and governmental bodies.
- Raising awareness for NFW, such as:
 - Sharing knowledge on AES and PNM tasks
 - Sharing practical knowledge on landscape management, biodiversity and circular agriculture
 - NFW as a regional partner
 - Promoting/branding the National Landscape Noardlike Fryske Wâlden

Organisational structure of NFW

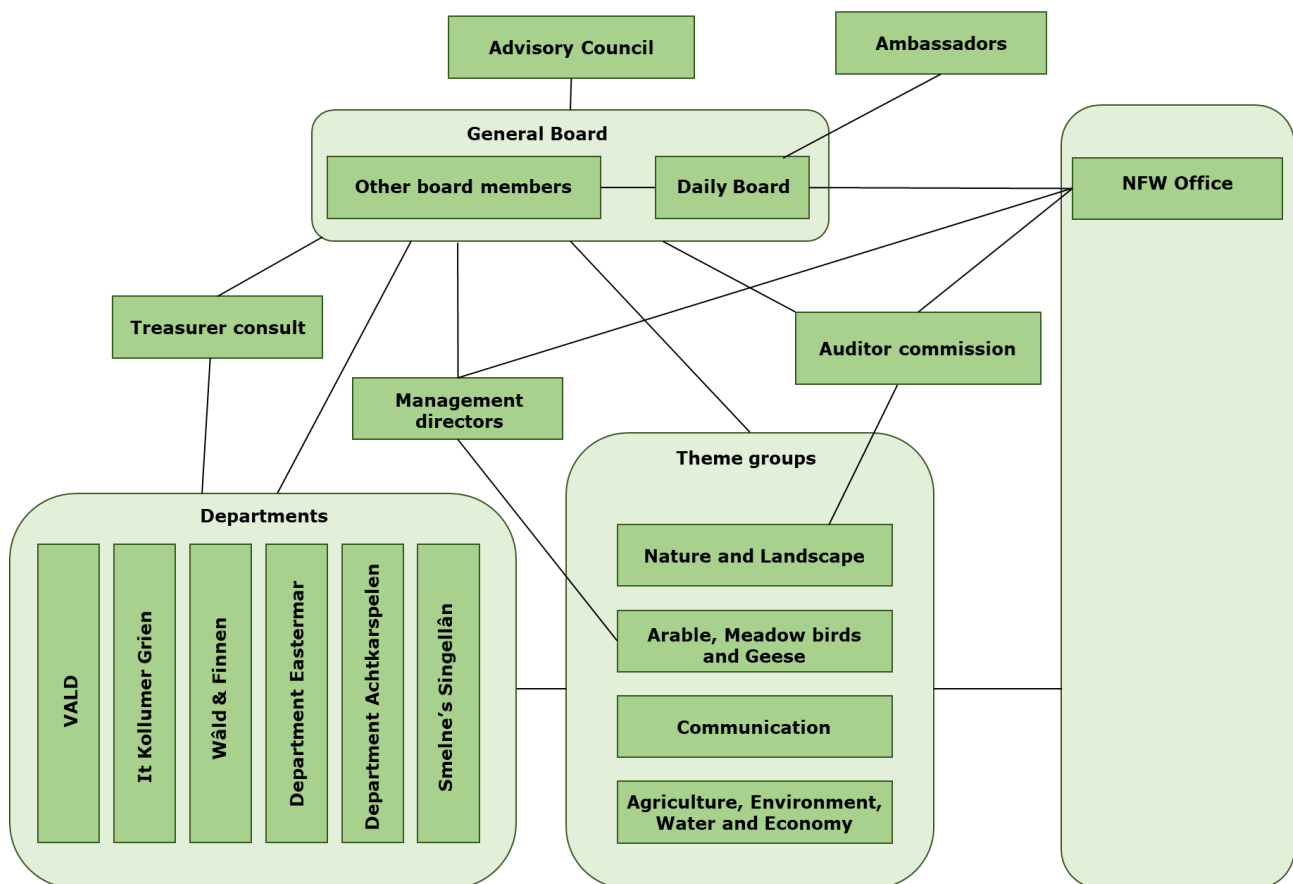


Figure 7 – Organogram of the agri-environmental collective NFW.

Figure 7 shows the organogram of NFW. NFW consists of 6 departments that together form NFW. Each department is equal to a sub-area, in this way the following departments exist:

- Department VALD: *Vereniging Agrarisch Landschapsbeheer Dantemadee*
- Department IKG: *It Kollumer Grien*
- Department W&F: *Wâld en Finnen*
- Department *Eastermar* (in formation)
- Department *Achtkarspelen*
- Department *Smelne's Singellân*

Within the organisational structure a distinction is made between a general and daily board. The general board consists of representatives from all 6 departmental boards and is responsible for policy-related tasks, whereas the daily board works on executive tasks. There is overlap between the daily and general board, whereby the three board members of the daily board also take place in the general board. The chairman of the general and daily board comes from the region, but does not specifically represent a department.

Each department has a departmental board. The departmental boards form the link between the general board and the NFW members. The departmental boards have a task in promoting the involvement of the members and keeping the distance between the association and its members short. Departmental board members have direct contact with members and can support or report problems where possible. In addition, the departments have their own budget, linked to the number of members that are covered by the department, to develop departmental activities. The departmental boards also play a role as a think tanks of the association, bringing in new ideas. Lastly, the departmental boards have a controlling function, whereby the treasurer of each departmental board takes place in the treasurer consult to review the concept budget.

Furthermore, NFW has a professional office with 10 staff members, an auditor commission (*schouwcommissie*), 16 management directors for meadow birds (*beheerregisseurs*) and 4 theme groups. The office carries out all administrative tasks for its members. Besides that, the office develops various projects with members and other stakeholders, such as knowledge institutions, consultancies, entrepreneurs and government agencies. The office is both responsible for steering the auditors and the management directors for meadow birds. Lastly, three staff members of the office are so-called theme coordinators, who are each responsible for the coordination of a particular theme group. 16 Management directors for meadow birds coordinate 15 meadow bird habitats, so-called mosaics. These directors are contact persons for both farmers conserving meadow birds and local voluntary birdwatchers (*vogelwachters*). There are several meetings per year where all management directors discuss the current situation regarding the meadow bird protection in NFW. The auditor commission consists of 17 auditors (*schouwers*), who all come from the region. A selection for the management units to be audited is made annually by the office. Based on this selection, the fieldwork is divided among the auditors. The overall objective is to visit all participants of AES for an audit once every 6 years.

In addition to the departments, NFW has four theme groups: (1) Nature and landscape, (2) Arable and meadow birds, and geese, (3) Agriculture, Environment, Water and Economy, (4) Communication. These theme groups consists of stakeholders and at least one board member of each department. Each theme group is chaired by a board member of the general board. These theme groups are also considered as think tanks of the association. Through these theme groups NFW creates spaces where different stakeholders come together and jointly develop ideas, set up projects and make policy. The general tasks of these theme groups are formulated as follows:

- Translating and supporting policy development in the thematic subjects.
- Preparing, completing and implementing work programmes/annual plans.
- Initiating, monitoring, supporting and implementing projects.
- Promoting the tasks of NFW and the National Landscape.

What is special about these theme groups, is that the stakeholders form an internal part of the association. So the discussion and alignment between stakeholders already takes place during the development of ideas and projects of NFW. In the quotes two key actors illustrate the value of these theme groups.

In die themagroepen zitten alle stakeholders. En daar bespreken we eigenlijk alles. Dus als wij iets met beleid willen, dan bespreken wij het eerst in die themagroepen. En in die themagroepen zitten alle [relevante] gebiedspartijen [bij elkaar].[...] Dus wij proberen al in de aanloop naar beleid toe met hen te overleggen. En wat je dan krijgt, is dat er wel eens even hele interactieve bijeenkomsten zijn, dus dan botst het even lekker. Maar uiteindelijk komen we er wel. En dat leidt ertoe dat ...als je dat maar blijft doen - we komen 4 keer per jaar bij mekaar - dan word je een soort van partner in crime. Dus, natuurlijk de gemeente heeft zijn eigen rol, wij hebben onze eigen rol, dat snappen we van elkaar. Maar laten we vooral kijken van, waar kunnen mekaar vinden? En waar dat niet lukt, daar moeten we even kijken hoe kunnen we dat oplossen. Want ja, het kan niet zo zijn dat het probleem in stand blijft. (R1-2)

In die themagroepen zitten ook boeren in en dan zijn er vaak ideeën die bij de boeren wegekomen. En dan wordt er bekeken, is dat haalbaar, ja of nee? En kan het idee van boer A ook wat betekenen voor boer B, dus eigenlijk voor alle leden van het collectief? [...] er zit dus wel een bepaalde know-how en die kennis, die kunnen we natuurlijk in dit gebied ook wel exploiteren. Dus ik vind het gewoon een aanjager. (R1-4)

Figure 8 provides an overview of the 4 theme groups and connected stakeholders.

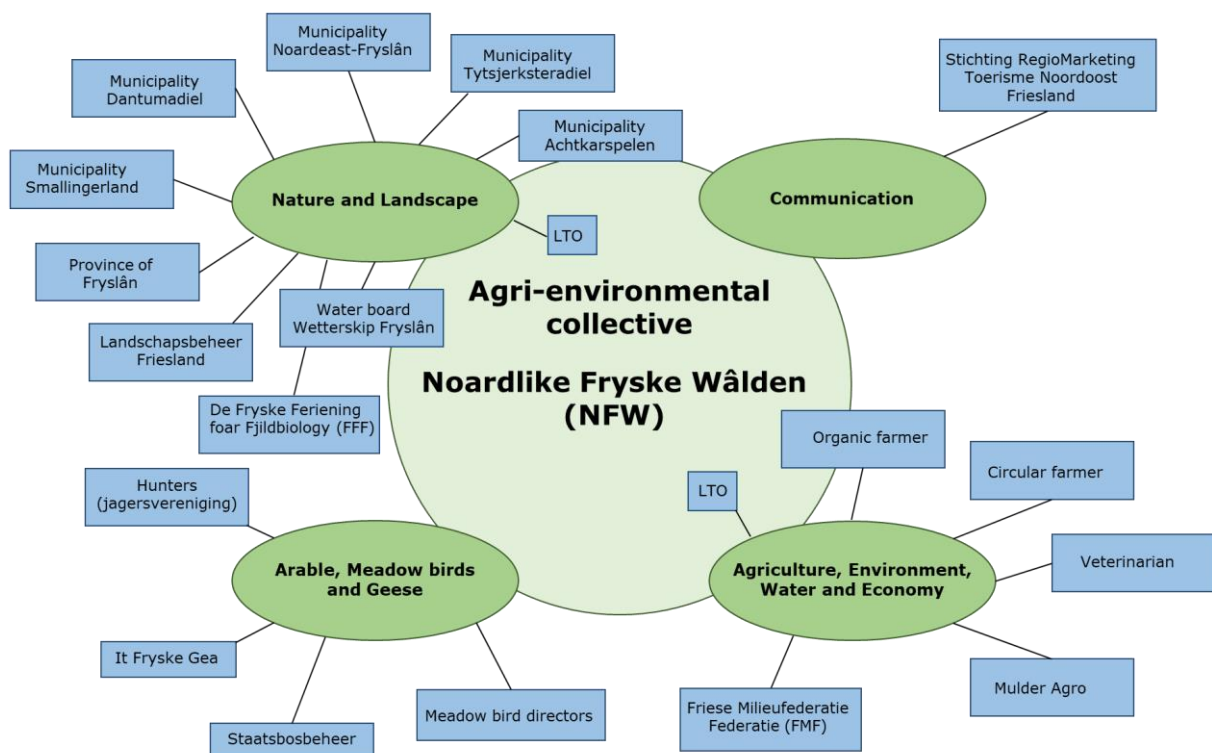


Figure 8 - Visualisation of the 4 theme groups and participating stakeholders. Important to note is that these are only the stakeholders mentioned during the interviews. There may be more participating stakeholders that are not included in this figure.

One key actor explained that making partnerships with stakeholders is crucial to pursue a self-governance model. NFW is eager to make agreements with other stakeholders, for example taking over earlier municipal tasks, and then NFW has the responsibility to comply to the agreement. By building

partnerships, NFW creates space to self-govern and thereby becomes an indispensable regional partner that gets closer and closer to its mission.

Op die manier kunnen wij het model van zelfsturing voeden. Dus wij kunnen zeggen, geef het maar aan ons, dan is het van ons en dan redden we het ermee. Dan moeten we het ook doen hè. Dan laten we zien dat we dat waard zijn. Des te meer je naar je toetrekt, des te meer heb je ook invloed en inspraak. Des te minder je naar je toetrekt, des te minder inspraak heb je. Dus je moet vooral aan de lat staan voor iets. En dan kan je wat voor mekaar krijgen. (R1-2)

To respond to the latest developments in for example circular farming, nature-inclusive farming, agritourism, and the energy transition, NFW initiates its own projects or participates in other regional projects. The running projects of NFW are listed in **box 4**. This gives an impression of the scope in which NFW is involved in.

Projects

1. More from manure, less CO₂ (2018-2021)
2. Nature within the community (2019-2027)
3. Water storage on high sandy soils (2018-2020)
4. Color circle (2019-now)
5. Education
6. Biodiversity monitor
7. Bokashi (2018-2020)
8. Birds and prosperity Fryslân (2019-2020)
9. Go Grass (2019-2025)
10. Field trial upgrading slurry manure (2018-2019)
11. Economic value for peat
12. Landscape restoration in collaboration with *Landschapsbeheer Friesland* (2017-2021)
13. Cows and herbs (2017-2020)
14. Revenue models nature-inclusive agriculture (2017-2019)
15. Landscape restoration *Centrale As* (-2020)
16. Energy transition
17. Better Water
18. CAP pilot
19. Fjildlab

Box 4 – List of current projects that are initiated by NFW or where NFW is involved in. The last project: Fjildlab is actually not one project, but is a field lab that includes several projects (Vereniging Noardlike Fryske Wâlden , n.d.).

Lastly, NFW has an advisory council that provides the general board with solicited and unsolicited advice and 4 ambassadors who are committed to promoting NFW's work.

5.3 Description of the landscape

The Noardlike Fryske Wâlden lies in the north-eastern part of the province of Fryslân (see **figure 9**). This region is characterised by its typical *coulisselandschap*, internationally known as *bocage*. This is a closed, small-scale mosaic landscape consisting of a network of fields surrounded by alder tree belts and wooded banks, interspersed with hundreds of pingo ruins and pools. A rich biodiversity can be found related to the landscape amenities. NFW is seen as the most intact and extensive *coulisselandschap* of north-western Europe (Stobbelaar & Kuijper, 2007). For these reasons, since 2004 a large part of the Noardlike Fryske Wâlden is designated by the government as National Landscape (Tuinstra et al., 2014).

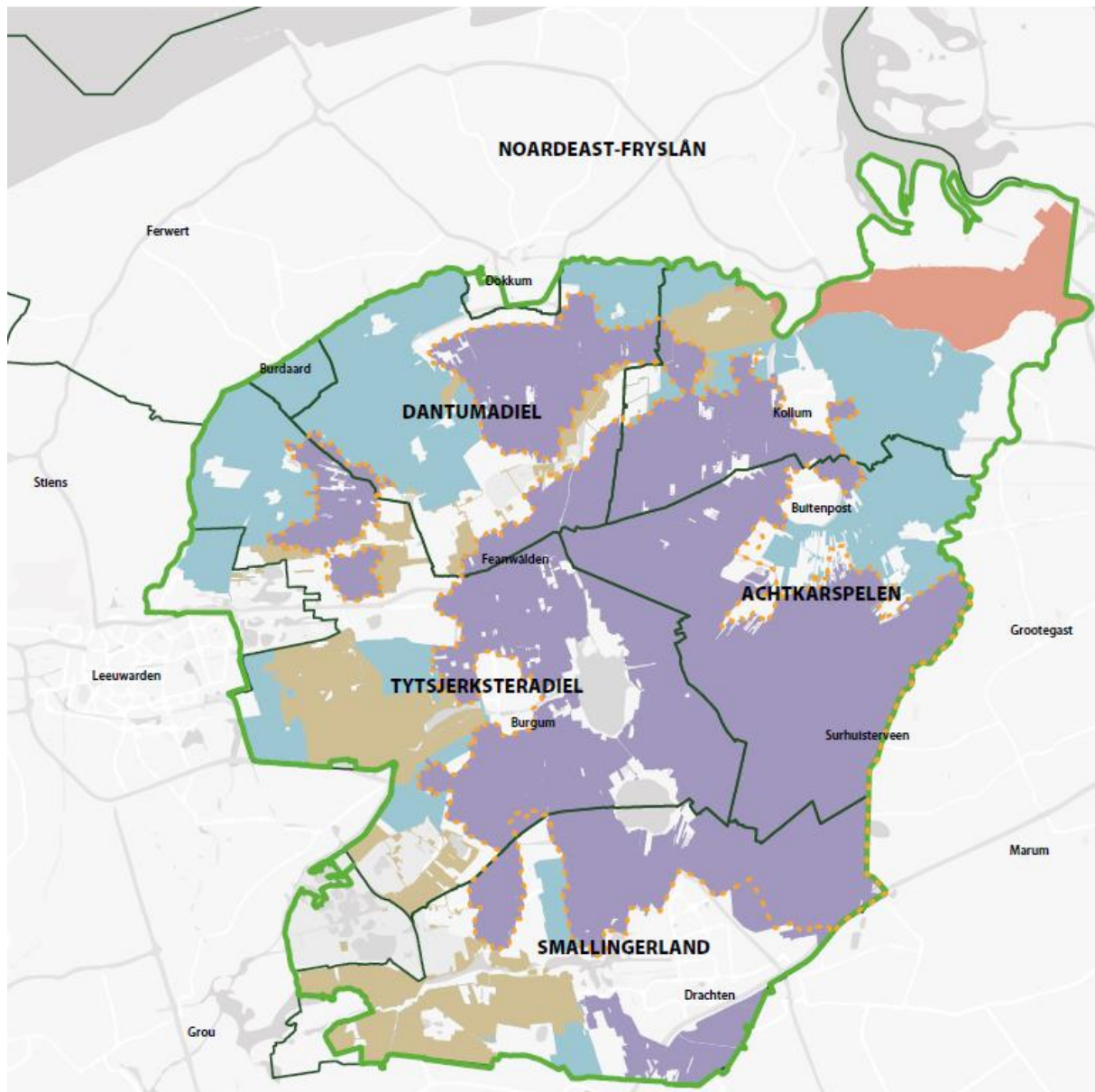


Figure 9 – Map of the working area of NFW. The different colours refer to the habitat types, as described in the AES system (see **box 2**). Purple is 'dry network', which means that agricultural fields are bordered by 'dry' linear vegetation, such as wooded banks and alder tree belts; light blue is open grassland, important as breeding habitat for meadow birds and overwintering habitat for geese; brown is 'wet network', which means that agricultural fields are bordered by water features, such as ditches, ponds, streams, etc.; pink is open arable land. In addition, the light green line is the demarcation of the working area of the collective NFW; the orange dotted line is the demarcation of the National Landscape; and the dark green lines are the municipal boundaries (Vereniging Noardlike Fryske Wâlden, 2019).

Zooming in on the region, besides the typical *coulisselandschap* there is a diversity in other landscape types which more or less coincide with the habitat types (Slabbers et al., 2009). Roughly speaking, there are two major different landscapes: the closed, small-scale landscape on the higher sandy soils, and the vast, open landscape on the lower peaty-clay soils around the lakes, and in the western and northern parts (Wiskerke et al., 2003).

5.3.1 Landscape amenities

Alder tree belts in the wet areas and wooded banks on the dryer areas form a vast network that has cultural-historical, ecological, recreational and scenic or aesthetic values. In the past, both landscape amenities were constructed and maintained for purely agricultural purposes: (1) as demarcation of the farmer's property; (2) as a living natural barrier to keep livestock in a pasture; (3) as shade and shelter for livestock; (4) for timber production used on the farm; (5) as a wind breaker to prevent erosion or crop damage; (6) as part of the drainage system; and (7) as varied fodder for livestock (De Boer, 2014).

From an ecological point of view, these landscape amenities are of great value: as habitat for certain species, as corridor for movement of certain species and as a source to influence the biotic and environmental conditions of adjacent fields (Forman & Baudry, 1984). In this section the difference between alder tree belts and wooded banks is explained in more detail.

An alder tree belt (*elzensingel*) consists of one or two belts of dense vegetation alongside a ditch. In **figure 10a** a two-sided belt is shown, in this figure the vegetation is so dense that the watercourse is completely shaded. Through this, there is hardly any plant growth in the ditch to impede the drainage. The vegetation can be subdivided into a tree, shrub and herb layer. The alder (*Alder glutinosa*) is often the predominant species (De Boer, 2014).

Wooded banks (*dykswâl* or *houtwal*) consist of an earthen wall and on top vegetated by a trees, shrubs and herbs. The earthen wall is often made from soil on both sides, creating shallow dry trenches on both sides (see **figure 10b**). There is often a big difference in the herb layer between the sunny and shady side of the wooded bank. Flower rich, nutrient poor vegetation grows on the sunny side, whilst lichen, mosses and ferns grow on the shady side. The tree species is predominantly common oak (*Quercus robur*) (De Boer, 2014).

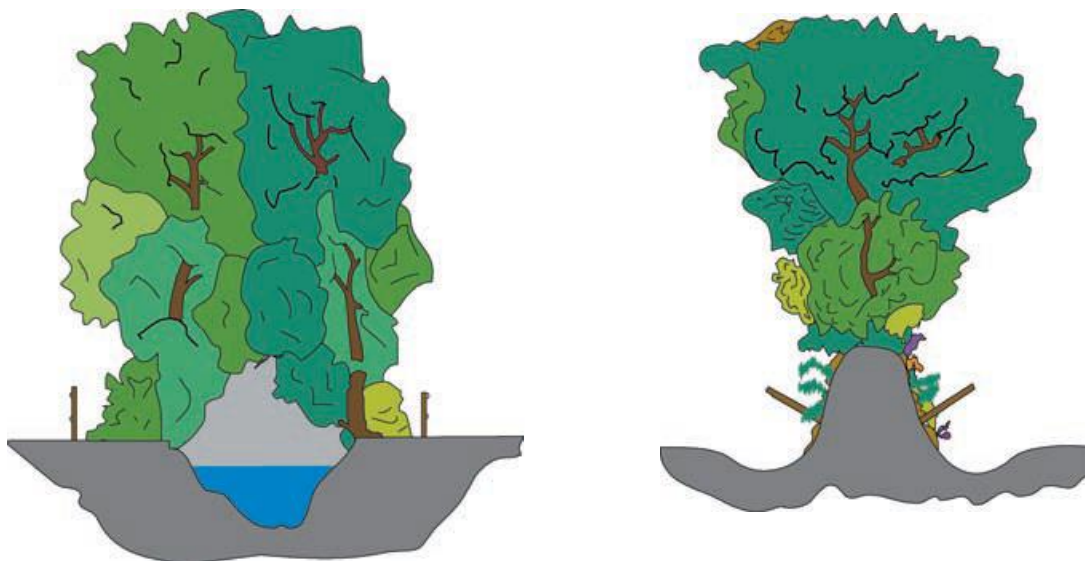


Figure 10 – (a) Cross-section of a two-sided alder tree belt; (b) Cross-section of a wooded bank (De Boer, 2014).

5.3.2 Composition of general farming types

The landscape is an old cultural landscape that has a rich history in cattle or dairy farming. The composition of agriculture in subsectors or general farming types (see **table 2**) shows that this is still the predominant land use. A small detail is that certain farming types, such as horse husbandry and sheep or goat farming, which have a small share in the land use, is not included in the table. These five farming types are (partly) linked to the soil type, because the soil type determines what crop can be grown (R1-1). Subsequently, the soil type is linked to the landscape type (see **figure 9**).

Farming types	Nr. of farms
Arable farming	23
Dairy/cattle farming	746
Pig farming	10
Poultry farming	21

Table 2 - Land use composition in different subsectors or general farming types in the working area of NFW in 2018/2019 (NFW, personal communication, 18 February 2020).

6 Dynamics of farming styles

In this chapter I discuss the findings around the first research question:

How have the four farming styles as identified by De Bruin & Van der Ploeg (1991) evolved over the past 30 years and is this categorisation still relevant today?

These findings are subdivided into three sections. In the first section I elaborate on to what extent the farming style-specific characteristics of the four farming styles are recognised in current farming. In addition, I discuss the different farm development pathways respondents gave to illustrate which shifts have taken place between farming styles at farm level and how specific farming styles have evolved over the last 30 years. In the second section I zoom in on the self-classification schemes respondents made to grasp the current regional farming diversity in search for links with the four farming styles from 30 years ago. In the last section the key findings are briefly summarised.

6.1 Dynamics of the four farming styles

When I asked about how the four farming styles have developed over the last 30 years, there appear to be divergent perceptions which can be summarised in two most prominent ones. The first perception consists of the view that nothing has changed in the categorisation of farming styles as described by De Bruin & Van der Ploeg (1991). All four farming styles can still be found in the Noardlike Fryske Wâlden. The second perception consists of the view that a major shift has taken place towards the *Zakelijke boer*. In other words, farmers in general have become more business-minded. Consequently, a standardisation has taken place in which the diversity in farming styles has decreased. The majority of respondents have this perception and that is why I call this the dominant perception from here on. Nevertheless, within the dominant perception, different views or sub-perceptions can be distinguished to what degree this standardisation has taken place. In the quotes below five key actors give their view on the development of the four farming styles that fit the dominant perception.

- (1) *Ik denk wel dat je nu minder dan vroeger de bedaarde en de utsjonger gaat tegenkomen.* (R1-1)
- (2) *In die 30 jaar is er heel wat gebeurd. Ik vermoed zelf dat de zakelijkheid op de bedrijven, door de melkprijs gedreven, groter is geworden.* (R1-2)
- (3) *De hele melkveehouderij is zakelijker geworden. Mijn collega's ook, die zijn ook...ieder dubbeltje wordt eerst omgedraaid.* (R1-3)

Two key actors put more emphasis on the development towards more standardisation. The four farming styles have come closer together. There are less extremes and farms are now more alike. While one respondent observed a clear shift towards the *Zakelijke boer*, another respondent observed a shift towards the middle.

- (4) *De diversiteit is afgenomen denk ik. Het is allemaal wat gestandaardiseerd, zeg ik dan. Ze zijn allemaal druk om rendement te halen. En dat is intensief gebruiken binnen de grenzen die mogelijk zijn, zo moet je bekijken.[...] Ja, niet iedereen, er zullen wat Bedaarde boeren tussen zitten en er zullen ook nog wel een paar tussen zitten die toch nog wel naar productie kijken, die dat als ideaal hebben. Maar dat zijn enkelingen.* (R1-8)

- (5) *De vier bedrijfsstijlen zijn er allemaal nog, alleen de verwevenheid is toegenomen, het is meer door elkaar gaan lopen.[...] Ik zie dat de lijnen niet strakker zijn geworden. Er is een verschuiving naar het midden toe.* (R1-7)

In this section I elaborate on the four farming styles as identified by De Bruin & Van der Ploeg (1991) separately. I discuss the style-specific characteristics of the particular farming style I identified in farmers' stories and to what extent respondents recognised characteristics in today's farming. Thereafter, I discuss the specific farm development pathways of each farming style that were raised in the interviews. These pathways provide some insight into the continuity or resilience of farming styles.

6.1.1 Dynamics of the *Bedaarde Boer*

"I am not an extreme farmer and do not pursue the highest results. Besides producing milk, the revenues from livestock sales (for beef) is an important pillar. Since I have only little debt, I do not have to get the most out of it. Furthermore, I try to organise my work in such a way that I have time for other activities."
(translated from De Bruin & Van der Ploeg, 1991, p. 31)

Although several respondents believed that the *Bedaarde boer* has largely disappeared in the last 30 years, the interviews revealed that some style-specific characteristics can still be found in today's farmers.

A couple of farmers described themselves or other farmers that closely match the characteristics of the *Bedaarde boer*. A farmer described his own farming strategy as follows:

Lage kosten in elk geval. Geen machineboer. Ik probeer de kosten laag te houden, want de kosten die je niet maakt, die hoef je ook niet terug te verdienen. En.... ja, ik ben meer een gevoelsboer zal ik maar zeggen en daar bedoel ik mee dat...ik weet bijvoorbeeld van de koeien niet wat het vet- en eiwitgehalte is. En de fokkerij, daar ben ik niet rationeel mee bezig. Ik kijk gewoon naar de koeien.
(R2-12)

This farmer wondered aloud whether striving for a high milk yield per cow is the most optimal farming strategy. By asking that question, he gives an insight into his view; aiming for high-yielding cows is not necessarily the best financial choice.

Maar het hangt er ook van af, wil je echt het uiterste eruit halen qua productie. Maar ja, ik denk dan van, als je puur kijkt van wat blijft er over. Dan hoef je misschien niet enorme investeringen te doen. Dat kan best zijn dat het veel efficiënter is om een zuinige boer te zijn, zal ik maar zeggen. Het kan best zijn dat je dan meer overhoudt. Want het is helemaal de vraag...het moet allemaal weer terugkomen, wat je investeert. En ook een koe die 13.000 liter melk geeft per jaar. Het kan best zijn dat die misschien minder efficiënt is dan een koe die 8.000 geeft of 6.000. (R2-12)

In addition, another farmer aptly described two nearby farms that he typifies as *Bedaarde boeren*.

Maar dat zijn niet de bedrijven die heel erg zijn uitgebreid in...qua grootte, zeg maar. Die houden altijd nog wel een beetje dezelfde grootte aan. En die doen ook alles zelf. Maar ja, die hebben misschien ook niet heel veel schuld, dus die melken de koeien ook voor zichzelf. En die halen zeker niet...of tenminste die proberen niet echt het hoogste rendement eruit te halen. En zeker niet de hoogste melkproductie. (R2-14)

When he tried to position his own farming style within the four farming styles a distinctive style-specific characteristic comes to the fore: it is not all about figures.

Ik zie je mezelf nu wel meer als de Bedaarde boer, denk ik. Maar ik kijk ook toch wel, wat blijft er onder de streep over. Dus ik ga niet alles uitrekenen, dat het daar alleen om draait, want...nee, zo

ben ik echt niet. Eigenlijk vind ik daar niks aan, want dan gaat alles ten koste daarvan. Maar ik hang er misschien wel een heel klein beetje tussen in, ik weet het eigenlijk niet. (R2-14)

Another key actor elaborated on this by describing the *Bedaarde boer* as the social farmer who values free time and does not need to spend all of his time working on and improving the farm.

De Bedaarde boer wil ook gewoon een sociaal leven hebben. Die kijkt ook een beetje meer naar zijn omgeving. Dus wat meer een sociale boer, die past goed voor zichzelf, die gaat ook op vakantie. Rustig...hallo, ik leef ook nog een keer. (R1-4)

When another key actor enumerated all nearby farmers that he considered as a *Bedaarde boer*, he described a farmer with a chronic illness who consciously farms slowly and keeps the farm small, so that he is still able to manage the farm on his own (R1-8). Yet another key actor explained that the farmers who have no successor are often *bedaald*.

Nou dat is misschien ook wel degene die geen opvolger heeft. Die denken, ik hoef niet zo erg mee te gaan in het grote geraas. (R1-10)

Several farmers who have expanded in the last 30 years, describe their farm development as very gradual, step-by-step (R1-5, R2-13, R2-15).

We hebben niet in één keer een grote sprong gemaakt, door bijvoorbeeld een grote boerderij er bij te kopen of zo iets, nee dat niet. Het is gewoon altijd heel geleidelijk doorgroeid... Elk jaar weer wat quatum erbij en elk jaar weer wat meer melken. Weet ik hoe vaak we 2, 3 of 4 hectare land er weer bij kochten. Het ging altijd in stukjes. (R2-15)

Finally, little attention is paid to the revenues from livestock sales (for beef) as a substantial source of income. Based on the interviews I got the impression that this style-specific characteristic has become less important nowadays. It seems that dual purpose breeds are mainly used to breed a resilient cow, rather than having a high added value when selling cull cows.

Dubbeldoel heb ik er ook wel een beetje inzitten, maar dat is omdat ik er wat meer gras in druk en wat minder krachtvoer. Dus dan heb ik ook een iets andere koe nodig. Vleesvee is eigenlijk niet rendabel. Want vleesvee, ja die grond is 50.000 euro de hectare. Als jij dat op geld gaat zetten en dat rendement...ja, die koe die vreet een beetje van dat gras, en die groeit wat en je verkoopt die koe. Daarvoor is de vleesprijs niet hoog genoeg.[...] Er zijn er hier een paar bedrijven die hebben wel vleesvee, maar ja dat is een beetje voor de hobby. Die hebben de grond afbetaald, die hebben er geen financieringslast meer opzitten. (R1-1)

Farm development pathways

When I specifically asked about the development of the *Bedaarde boer*, three development pathways were highlighted: (1) the *Bedaarde boer* has converted from conventional to organic agriculture; (2) the *Bedaarde boer* has become a *Zakelijke Boer*; (3) the *Bedaarde boer* has ceased farming.

1. From *Bedaarde boer* to organic farmer

Farmers that have converted from conventional to organic agriculture in the last 30 years are generally the more extensive farmers. One key actor argued that mostly small and extensive farmers have converted to organic agriculture (R1-4), while another key actor argued that it were not necessarily the smaller farms that have converted (R1-8). In addition, two key actors explained that conversion to organic has been a serious option in the past, but ultimately did not convert because they could not agree with the principles (R1-3) or because of issues related to leased land (R1-3). They explained that the conversion is much less obvious now, because they have invested in upscaling and have become more intensive (in cows per hectare).

2. From *Bedaarde boer* towards *Zakelijke boer*

As already mentioned in the introduction of this chapter, many key actors observed a shift in which the *Bedaarde boer* has increasingly become a *Zakelijke boer*. Many key actors described a gradual process in which investments and expansions have continuously increased. As a result, farmers who follow a step-by-step growth pattern have now become capital-intensive farms with also high debts. A key actor illustrated the extreme difference between investments of his own farm at the time and now.

Het kost wel een vermogen voor boeren die door willen investeren. Dat was in onze tijd anders.[...] kapitaalintensieve bedrijven zijn het zo langzamerhand. Wat dat betreft hadden wij het veel makkelijker. Want in 1975 had ik die ligboxstal gebouwd, nou en toen kregen we ook nog rentesubsidie, 5%. ... paste ons dat ook wel, want op een gegeven moment gaf ons dat meer dan 12% rente, bij de bank uit 1980 weet ik nog wel. (R1-8)

Another key actor also described a world of difference when it comes to investments now and 30 years ago.

Want toen was het gewoon zo, een trekker betaalde je van de lopende rekeningen. In de ruilverkaveling moesten wij een overbedeling van 7000 gulden contant afrekenen. Dat deden we van de lopende rekening, we melkten 40 koeien. Mijn vrouw en ik zeggen vaak nog tegen elkaar, toen we 40/45 koeien melkten hadden we het financieel makkelijker dan de laatste jaren met 80 koeien. En ik ben niet de enige die dat zegt. (R1-5)

According to several key actors this fading of the *Bedaarde boer* farming style is caused by an interplay of factors that can be summarised as the ongoing modernisation. The low milk prices are often considered to be the main driver of this trend. Due to the low milk prices, farmers are forced to intensify, expand and specialise. For farmers it is more difficult to make sufficient returns now. It requires a business attitude to keep the farm profitable.

*Je kunt je afvragen of die categorie door het niet meestijgen van de melkprijs nog steeds de gelegenheid heeft om *Bedaarde boer* te zijn. Ik denk dat heel veel boeren misschien wel onder tucht van de bank en andere externen, en ook omdat ze zelf die beslissing genomen hebben, want je bent er als ondernemer zelf ook bij, in een bepaalde richting gekomen zijn. Door de afschaffing van de melkquotering en later de fosfaatrechten, kijk wat de grondprijs doet..., zijn er minder *bedaarde boeren* overgebleven. (R1-2)*

Several respondents stated that the farm succession is often a turning point in farming style. During the process of farm succession often large investments are made to make the farm profitable for the next generation. The question here is to what extent the *Bedaarde boer* farming style is maintained when a young farmer builds up more and more debt capital.

*Binnen die *bedaarde* zie je dat het *zakelijke* karakter is toegenomen. Bedrijven ontwikkelen. De bedrijfsvoering blijft misschien wel gelijk, en de visie blijft vaak wel gelijk, maar als je je buurman erbij koopt, wat gebeurt is, omdat je een bedrijfsopvolger hebt en je krijgt 2 miljoen extra schuld op je rekening staan, ja, dan ga je soms ook andere keuzes maken in je bedrijfsvoering, omdat die rente betaald moet worden. Zo werkt het gewoon. (R1-2)*

According to other respondents it is not only large investments that lead to differences. They clearly observe a pattern in which young farmers often have a different view on how farming should be done. These young farmers have a clear aim for large, high-tech, industrial farms.

Respondent 2: *Ja, want dat hoor je ook wel heel vaak, dan wil de zoon het toch heel anders hebben.*

Respondent 1: *Dan moet alles over de kop.*

Respondent 2: *Als je nu [naam van boerenzoon] hebt, hij heeft op een gegeven moment gezegd, ik wil wel boer worden, maar ik doe het op m'n eigen manier. En dat is echt compleet anders dan dat zijn vader en zijn oom het ooit hebben gedaan.*

Respondent 2: *Die is heel erg in het groot.*

Respondent 1: *Alles heel gestructureerd, fabrieksmatig [...]*

Respondent 2: *Die zegt, alles wat ik met de telefoon kan regelen, dat doe ik met de telefoon. En daar hoef ik zelf niets aan te doen. Zo'n type boer. (R2-15)*

Dat zie je ook wel vaak als er wisseling van de wacht is. Als er een jonge boer komt, nou ja, dan moet het allemaal een beetje anders. Dan moet het allemaal moderner. Dat is wel een beetje mijn indruk.[...] Al die jongens die van de Hogere Landbouwschool af komen, hebben maar één doel en dat is groot, groot, groot, groot. Die hebben hele hoge ambities. Dat kun je niet allemaal realiseren, want je bent natuurlijk gebonden aan wat je hebt. (R2-14)

From the last quote the question arises whether it is indeed often a radical change in farming style or a big step in the same direction as where the farm was already developing to.

One key actor indicated that he has indeed abruptly changed his farming style from a *Bedaarde boer* to a *Zakelijke boer*. Looking back at the past, he explained that he did not necessarily want to be a *Bedaarde boer*, but the expensive milk quota kept him *bedaar*d. It was only when the milk quota was abolished that he found an opportunity to expand his farm significantly.

Toen was ik meer een bedaarde boer. Kijk, ik nam de boerderij van opa over en er was 25 hectare land bij en daar konden wij ons mee redden. Op een gegeven moment kwam er een ligboxstal en dan moet er wel een tandje bij om het financieel vol te houden. Nou ja, toen kwam er heel veel land hier in de buurt vrij, dus heb ik al wat land gekocht, maar het quotum was me veel te duur. Ik dacht dat quotum, dat gaat er wel eens af en dan kan ik melken. Dus wel 10/15 jaar hebben wij eigenlijk wat te bedaar d geboerd.[...] Te veel land en te weinig zakelijk.

...

Ja, en toen het melkquotum eraf ging toen gaven beide jongens ook wel aan, ja wij willen ook wel boer worden. Oh, ik denk, dan moet er wel wat veranderen. Want dat kon niet op die manier. En toen zijn we dus zakelijker begonnen te denken... we hebben zoveel land, nou dan moeten er ook 2 koeien op een hectare. Dat vond ik gewoon, 2 koeien op een hectare. (R1-3)

Furthermore, other examples were given of farmers who, on the one hand, have style-specific characteristics of a *Bedaarde boer*, but feel the need to expand to keep the farm profitable.

Wat we willen doen is een combinatie van verduurzamen, maar ook nog wel wat meer schaal eronder brengen, om toch genoeg massa eronder te houden, zodat je ook de lening kunt dragen die de investering vraagt. Dat is het idee. (R1-9)

Two key actors showed that they have not completely reconciled themselves with the scale-enlargements. This struggle could be considered as a 'remnant' characteristic of the *Bedaarde boer*. For example, one key actor indicated that the scale-enlargements go very fast these days.

Het gaat wel hard hoor. Ik vind het wel heel snel gaan. Je moet er wel heel goed bijblijven anders ben je snel achterop in de sector.[...] Met name in de schaal. Als je in de schaal ziet dat je nu uiteindelijk in 10/15/20 jaar de schaal ziet verdubbelen, de omvang. Dat vind ik wel vrij snel gaan. Maar dat moet ook wel want de marge die loopt er helemaal onderuit. (R1-9)

The other key actor explained it as a quandary farmers struggle with. According to him, many farmers do want to farm in a more sustainable and nature-inclusive manner but are convinced by the bank to intensify and scale up in order to make the farm profitable for the next generation, so-called future proof.

Maar het is nog steeds de economie die leidend is. Er moet wel goed geboerd kunnen worden. En dat blijft ook altijd zo. En natuurlijk kun je aan de kostenkant heel veel doen als je iets extensiever bent. Dan kun je ook iets extensiever met je bedrijf omgaan. Maar zodra er een overname komt en de Rabobank financier zegt van kijk, ja je moet eigenlijk wel 100.000 kilogram meer gaan melken, wil je uit die kosten komen. Dan is er...het voelt heel vaak dubbel. Het zijn dezelfde organisaties die aan de ene kant groen mee gaan denken en aan de andere kant gaan zeggen van,...] het moet wel opgebracht worden en dan is intensiveren altijd nog, hoe gek het ook klinkt,...] nog steeds het beste verdienmodel. (R1-7)

Although some respondents observe major changes in farming styles during farm succession, other key actors observe a certain continuity within the *Bedaarde boer* farming style, passed on from generation to generation.

Een bedaarde boer is vaak een familietrekje. Je hebt bepaalde genen die erin zitten. En als pa bedaarde is, dan is de zoonlief ook bedaarde, vaak. Daar zitten niet zoveel grote verschillen tussen. (R1-4)

Als er dan opvolging is gekomen bij de bedaarde boer, dan blijven die over het algemeen wel bedaarde. Maar de kunst is dat het ook een levensvatbaar bedrijf blijft, waar ook weer perspectief in zit. (R1-9)

3. Stopping *Bedaarde boeren*

Several respondents indicated that it is mainly the *Bedaarde boer* who has stopped farming in the last 30 years. Various causes are mentioned for this pattern. One key actor mentioned the increased competition as the main cause. The *Bedaarde boeren* were not able to expand and modernise (R1-9). Whereas another respondent argued that it is sometimes a conscious choice not to follow the script of modernisation but to phasing out and/or sell the farm (R2-12). Other respondents argued that the *Bedaarde boeren* have often stopped because they did not have a successor (R1-3, R1-7, R1-10, R2-12). No respondents came up with examples in which an *Utsjonger* was forced to stop earlier, because of financial problems.

Dit beeld wat ik nu schets, daar zie ik er ook heel veel van die zijn al gestopt. Die zijn niet doorgegaan. De boeren die te zuinig zijn en niet durven investeren, die zijn afgevalen. Die hebben gewoon niet die schaal kunnen bijvolgen. (R1-9)

Degene die op een gegeven moment geen opvolger hadden. Joh, mijn tijd duurt het wel. En die zijn gemiddeld zo'n beetje gestopt. Ik ken geen boeren die moesten stoppen en er zijn ook geen boeren die vroegtijdig geëindigd zijn. (R1-3)

6.1.2 Dynamics of the *Fokker*

"I enjoy breeding and it is my passion and my life to take care of the cattle, and to keep the milk flowing. I have to pay a lot of attention to roughage harvesting, because the high milk yield requires a well-thought-out feed ration. I get revenues from the sale of high-quality breeding stock." (translated from De Bruin & Van der Ploeg, 1991, p. 31)

Several key actors indicated that the 'real' *Fokker* whereby the revenues from high quality breeding stock sales is an important part of the operating profit, has disappeared.

Kijk, ik mag graag een goeie koe fokken, maar dat is niet meer voor een KI. Door dat genonderzoek met hun eigen bedrijven, wordt er eigenlijk bijna niet meer ingekocht bij een fokker. (R1-5)

Nou het fokken is allemaal veel minder. Daar zijn ze hier niet meer mee bezig.[...] De fokkerij was vroeger misschien ook wel wat gebaseerd op gebruikseigenschappen, maar veel meer op exterieureigenschappen. Maar ik heb het idee dat de koeien hier allemaal op gebruikseigenschappen worden geselecteerd, niet meer op fokkerij. Want er wordt ook niets meer verdiend met fokkerij. Tenminste, het stelt niks meer voor hier. (R1-8)

Other key actors still perceived clear style-specific differences between farms that correspond with the dichotomy between the *Zakelijke boer* and the *Fokker*. The first focuses on margin per litre milk, while the latter focuses on the highest milk yield per cow.

De fokker is misschien meer op technische resultaten uit. En de zakelijke boer is misschien meer op marge uit, marge per liter. Hoe moet ik het zien? De fokker is misschien meer uit ook het ideaalbeeld van de ideale koe, en de hoge indexen; hoge productie, efficiënt dier, voerefficiëntie. Dat heeft een zakelijke man ook wel, maar een zakelijk iemand kan ook Jerseys gaan melken of Fleckviehs. Dan niet die extreem hoge melkproductie, maar je hebt wel die marge per liter. (R1-9)

One farmer demonstrated that he puts the care of the cattle at centre stage of his farming operations. This style-specific characteristic came to the fore when he described why he has opted for zero grazing instead of pasture grazing.

Ik pak mijn voordeel wel in de stal door het daar efficiënt te doen. En doordat ik heel gecontroleerd mijn koeien kan huisvesten en heel goed kan voeren op de maat en ook uitgebalanceerd kan voeren, heb ik weinig input van middelen en heel weinig verval van mijn koeien. ... Als je dat allemaal goed afstelt, heb je natuurlijk gezondere koeien. En als je gezondere koeien hebt, dan gaat je rendement vanzelf omhoog. (R2-11)

Farm development pathways

When I specifically asked about the development of the *Fokker*, two development pathways were highlighted: (1) the *Fokker* has become a *Zakelijke Boer*; and (2) the *Fokker* has become a *topmelker*.

1. From *Fokker* towards *Zakelijke boer*

One key actor observed that also the typical *Fokker* has shifted towards the *Zakelijke boer*, for the same cause as mentioned earlier. Due to the low milk prices, farmers have more difficulty to make sufficient returns now and are forced to become a *Zakelijke boer*. In addition, one key actor indicated the large influence feed suppliers, banks, accountants, veterinarians and breeding firms have on the decision-making of farmers, pushing farmers in the direction of modernisation.

Nee, het gaat niet zoveel meer om de productie, denk ik. De koeien gezond houden, daar zijn ze wel veel mee bezig. Maar om nou hoge productie als ideaal, nee, die zitten hier niet meer tussen.[...] Wat geeft het meeste rendement? En als ze het zelf niet bedenken, nou dan bedenkt de Rabobank het wel, en de veevoerleverancier. (R1-8)

2. From *Fokker* towards *topmelker*

A number of respondents speak of a *topmelker* when they refer to typical *Fokker* of today who strives for the highest milk yield per cow (R1-2, R1-7, R1-10). *Topmelkers* are farms that rank high in the list of annual operating averages MPR (milk production registration) from CRV, the largest dairy cow breeding firm in the Netherlands.

Je hebt boeren die topmelker zijn en die willen gewoon hun koeien ook het beste van het beste gras voeren. Dus die hebben er een hekel aan als er een paardenbloempje tussen staat. Die willen daar niks mee te maken hebben, die gaan compleet helemaal voor de koeien. (R1-7)

6.1.3 Dynamics of the *Zakelijke Boer*

"For me, the economic result is paramount. The rapid farm development in the past forced me to get the most out of it. A high milk production per cow is not a goal itself; the production per cow and the size of the herd are attuned to the roughage production." (translated from De Bruin & Van der Ploeg, 1991, p. 31)

As mentioned earlier, most key actors are convinced that more farmers follow the farming style of a *Zakelijke boer* today than 30 years ago. A large group of the farmer respondents identified themselves with the farming style of the *Zakelijke boer* or mentioned style-specific characteristics of the *Zakelijke boer*. One key actor gave his own description of a *Zakelijke boer* that is very much in line with the description of the farming style.

En hier heb je dus een aantal boeren die nog wel helemaal in die opschalingsmodus staan, strakke biljartlakens, singels wat opgekroond...wat palmbomenachtige...dat komt ook nog wel voor. (R1-10)

Another key actor explained the *Zakelijke boer* by zooming in on one style-specific characteristic: earning as much as possible and having a commercial attitude towards professionals visiting the farm (*erfbetreders* in Dutch), including feed suppliers, banks, accountants, sales representatives, veterinarians and breeding firms.

En kijk zo'n saldoboer die is continu met zijn bedrijf bezig om het onderste uit de kan te halen en [...] die onderhandelt ook met zijn voerleverancier, die onderhandelt ook met zijn trekkerleverancier. (R1-4)

Another style-specific characteristic emerged when another key actor explained that he has a clear number of dairy cows in mind as a minimum requirement or norm, with the underlying belief that this is necessary to generate a decent income these days.

Intensief, daar heb ik niks mee. Extensief, maar wel met grotere aantallen. En ik hoef heus geen 500 koeien, maar wel 100 koeien per man, minimaal. (R1-3)

Interestingly, at the same time this farmer indicated that a 'real' *Zakelijke boer* struggles to be a farmer in this region. For a farmer that is fully focused on efficiency, the small-scale landscape is too restrictive.

Als er een boer is die heel zakelijk en efficiënt wil produceren, die gaat naar de polder. Die wil hier niet eens boer zijn. (R1-3)

He cited two examples of farmers that fall in this category and took the opportunity to farm elsewhere.

Ik ken ook iemand die werd uitgekocht. Drachten wilde uitbreiden deze kant uit en toen is hij 10 hectare land kwijtgeraakt. Hij heeft afgewogen, wat doe ik? 10 hectare minder, dus 10 koeien of 20 koeien minder, maar dat wilde hij niet. Hij zei, wat wil ik dan? Die is naar Groningen, naar de klei gegaan. Zonder bomen, prachtig land. (R1-3)

En er is ook iemand, die is van Eastermar naar Amerika toegegaan. Want ja, die kon hier geen boer zijn.[...] Ja, alle beperkingen, die had er geen plezier meer in en die is naar Amerika gegaan. Die melkte daar wel 3000 koeien. (R1-3)

Besides the examples of *Zakelijke boeren* who have moved, little is said about the dynamics of the *Zakelijke boer* in the past 30 years. I got the impression that the *Zakelijke boer* of 30 years ago has not deviated much from its style-specific development pathway towards agricultural modernisation.

6.1.4 Dynamics of the *Utsjonger*

"I try to keep costs under control as much as possible. I supplement the relatively small size of the herd and milk quota with an extra income, both from on and off-farm activities. In this way, I look to the future with confidence." (translated from De Bruin & Van der Ploeg, 1991, p. 31)

As mentioned in **Annex I**, virtually all key actors gave a different meaning to the term *Utsjonger*. When the term is used, reference is made to a farmer that is phasing out the farm in a process of farm cessation in a certain time frame. Instead of a farmer who looks beyond the production of milk and has often other on- and off farm activities to make a decent living and to keep the relatively small farm viable. Nevertheless, by describing themselves as farmers, three respondents gave a description that is very much in line with the *Utsjonger* farming style. The key actor below explained that as an agricultural entrepreneur he is open to other activities and alternative sources of income on his farm.

Kijk ik ben ondernemer, maar mijn hoofdtak is nog wel m'n melkgeld. Maar op het moment dat er een kans ligt...Ik ben ook in de SDE-subsidie gestapt van de zonnepanelen. Ja, dat is gewoon een extra bron van inkomsten. Het agrarisch natuurbeheer is hier ook een bron van inkomsten. Ik kan ook als ondernemer nog zeggen van ja, het is hier ook wel een toeristisch gebied. Op het moment dat ik bijvoorbeeld hier nog een boerencamping kan neerzetten... Dus je moet je als ondernemer ook niet alleen richten op die melkproductie. (R1-1)

In his plea about how a farmer should approach his farm, this farmer shows that he follows a fundamentally different farming style than the typical *Zakelijke boer* or *Fokker*.

Dus ik ben een ondernemer en dan ben ik toevallig melkveehouder. Maar als ondernemer heb ik grond, een stal, wat machines, vee en een arbeider. En die arbeider ben ik ook zelf weer. En als je die arbeider op geld zet, dan is die 40.000...en ik wil als ondernemer ook nog 4% rendement draaien op mijn eigen vermogen. Nou, ik heb er...ik noem maar wat...een half miljoen eigen vermogen onder zitten. En dan ga je in je boekhouderspot zitten kijken van, hoever ben ik er van af? Ja, dan ben ik er nog een heel stuk van af. Maar zo moet je als ondernemer aan die tafel gaan zitten. En dat valt mij wel tegen, dat er onvoldoende mensen op die manier naar hun bedrijf zitten te kijken. ...Je hebt die vijf onderdelen van je bedrijf en daarmee moet je je geld zien te verdienen. (R1-1)

As described by De Bruin & Van der Ploeg (1991) *Utsjongers* around the 1990s were farmers who in a certain way dissent from industrial production. According to the *Utsjonger*, a good farmer is not only interested in profit, but has a heart for his/her cows and meadows. A farmer and farmer's wife who identify themselves with the *Utsjonger* make a statement that corresponds to this.

Ze zeggen ook wel eens, de echte boeren zijn er niet meer. (R2-12)

In this quote they referred to a trend in which sensitivity and craftsmanship have given way to rationality and objectivity. The rational is now much more demanded of a farmer, partly due to the high administrative burdens. According to them, in this way the *Bedaarde boeren* and *Utsjongers* disappear and the entrepreneurs and managers remain.

Farm development pathways

When I asked about the developments of side activities and farm multifunctionality, key actors gave relevant perspectives that provide insights into the development of the *Utsjonger*. In the remainder of this section I use the terms multifunctionality and multifunctional farms to refer to this farming style.

One key actor put particular emphasis on the composition of general farming types (**table 2**), which was much more diverse and there were many small mixed farms 30 years ago. For example, 30 years ago there were a lot of farmers with a hen house. According to him, almost all farmers are fully focused on dairy farming nowadays (R1-3).

Moreover, the interviews revealed that divergent perceptions exist on the development of multifunctional farms. I can roughly divide the respondents into two groups. The first respondent group considered that there are only a few farmers with side activities and the number of multifunctional farmers has not or hardly increased in the last 30 years (R1-1, R1-3, R1-8, R1-10). Whereas the second (smaller) respondent group observed a clear increasing trend in which more and more farmers are searching for side activities (R1-2, R1-7, R1-9). These opposing perceptions could be explained by large local differences. For example, two of the three respondents who observed a growing trend both live on the northwest side of the Noardlike Fryske Wâlden.

Perception 1: No growing trend in multifunctional farms

One key actor argued that there is little to no interest in side activities in the hospitality sector by farmers. That became already apparent from a survey in the 1990s and has not changed since then.

Zij hadden hier ook enquêtes gehouden of er ook boeren waren die belangstelling hadden voor recreatieve takken, Bed & Breakfast, theetuinen, campinkjes. Er was niet één, niet één boer die daar belangstelling voor had. (R1-8)

Perception 2: Growing trend in multifunctional farms

Other key actors did observe a growth in the number of multifunctional farms (R1-2, R1-7, R1-9). Noteworthy is the last quote in which the respondent argued that looking for alternative sources of income is often a response to low returns from the milk production.

We zien dat er een steeds grotere groep van melkveehouders is, die een professionele melkveehouderij hebben, die meer besef hebben, voor zover ze dat al niet hadden, om de natuurinclusieve landbouwaanpak meer in hun bedrijfsvoering tot uiting te laten komen. Die daar een praktische invulling aan willen geven en die daarnaast naar andere verdienmodellen zoeken. Die zeggen van ja, ik heb nu een omvang, ik melk 150 koeien ofzo, kies ik nou voor groter? Vaak kiezen ze niet voor intensiveren, maar voor schaalvergroting... Maar kies ik nou voor groter of heb ik de keuze of de mogelijkheid om op een andere manier een verdienmodel te ontwikkelen? Er zijn voorbeelden van boeren die zeggen van nou, mijn vrouw maakt altijd al yoghurt, misschien kan je dat nou ook voor de buurvrouw doen? En dat leidt tot een stalletje aan de weg en dat leidt tot het verkopen yoghurt en andere producten aan de plaatselijke horecabedrijven. (R1-2)

Je hebt hier ook veel bedrijven die een kaasmakerij, kaaswinkel of camping erbij doen. Dat neemt ook hier langzamerhand, gestaag toe. (R1-7)

Ja, sommige wel.[...] Met name als het rendement uit de melkerij slecht is, zie je ze zoeken naar alternatieven. (R1-9)

From Utsjonger towards non-milking farmer

Finally, examples are given of multifunctional farms that eventually stopped with the (milk) production branch.

Wij hebben al 3 zorgboerderijen in het dorp. Dus het is wel een leuke business, maar er is maar één zorgboerderij die ook nog koeien heeft. (R1-3)

Ik zie dan ook die gaan daar helemaal in op en die stoppen met het melken. Dan gaan ze in een andere neventak op. Camping, gehandicaptenopvang en dat soort dingen. (R1-9)

One key actor explained that they decided for an alternative activity when it turned out that there was no successor.

Toen bleek dat er niet een opvolger was, toen zijn we niet meer verder uitgebreid. Toen hebben we een camping erbij genomen. (R1-8)

Linking the Utsjonger to multifunctionality

Most key actors indicated that they do not observe clear linkages between farms with side activities and the specific farming style of that farm. In addition, I could not discover linkages between farming styles and whether or not a farmer has side activities, based on the farmers' stories specifically. Firstly, the versatility in side activities, from a small stall along the road to a care farm, makes it difficult to find patterns. Secondly, examples are given of divergent farmers who have one or more side activities.

Rather than mentioning style-specific characteristics, many respondents emphasised that choosing for a side activity involves other factors, such as (1) skills and personal preferences, (2) family composition and ambitions of other family members, (3) the farm location, and (4) demand for the concerning products and/or services. These factors can be considered as critical co-shaping conditions of farming styles.

6.2 Current framing of the regional farming diversity

In this section I elaborate on the classification schemes respondents put forward when they tried to describe and interpret the current regional diversity in farms, farming and farmers with the notion of farming styles. Some respondents point strongly to person-related (or farmer-related) characteristics. Whereas others made classifications based on farm-related characteristics. Still others emphasised the differences in backgrounds, preconditions and family dynamics that could explain the diversity. **Figure 11** shows the versatility of farmer names respondents used to grasp the current farming diversity. A remarkable finding is that sometimes the same names are used in different contexts or from different perspectives and thus are given different meanings. In this way, there are large differences between respondents in what they mean by, for example, a cow farmer.

Although the respondents' classification schemes are often a 'narrower' interpretation of the farming styles notion, for example only focus on one of the three components of a farming style (see **section 2.1**), the classifications do offer insights into the current farming styles. On the one hand these classifications can be considered as a confirmation of the continuity of farming styles of 30 years ago, because the four farming styles from 1991 can be recognised to a certain extent in today's farmer names respondents use to grasp farming diversity. On the other hand, the classifications illustrate a change of farming styles of 30 years ago, because the names of the farming styles from 1991 evoke less recognition and different farmer names are now used to grasp farming diversity.

Analysing the classification schemes including the used farmer names, one clear pattern could be found along the scale of farming intensity in which two groups can be identified: (1) Extensive farmers, in which characteristics of the *Bedaarde boer* and *Utsjonger* are reflected, and (2) Intensive farmers, in which style-specific characteristics of the *Zakelijke boer* and *Fokker* are reflected. On the basis of this spectrum, many contemporary style-specific characteristics and farmer names can be placed at a certain side, resulting in roughly two groups (see **figure 11**). Zooming in on one of the two groups, no clear distinction could be made in specific farming styles based on the empirical material.

In *Maat houden* De Bruin & Van der Ploeg (1991) already revealed the same spectrum. Based on structural differences in farming operations, such as grassland use (sward renewal, subsurface drainage systems, land-levelling), fertilizer use, breeding, animal feed, mechanisation, they found a continuous line between the low-dynamic low-input low-output agriculture of the *Bedaarde boeren* and *Utsjongers* that is more in balance with nature, and high-dynamic high-input high-output agriculture of *Zakelijke boeren* and *Fokkers*. The two groups of farming styles can therefore be regarded as two divergent ecological systems.

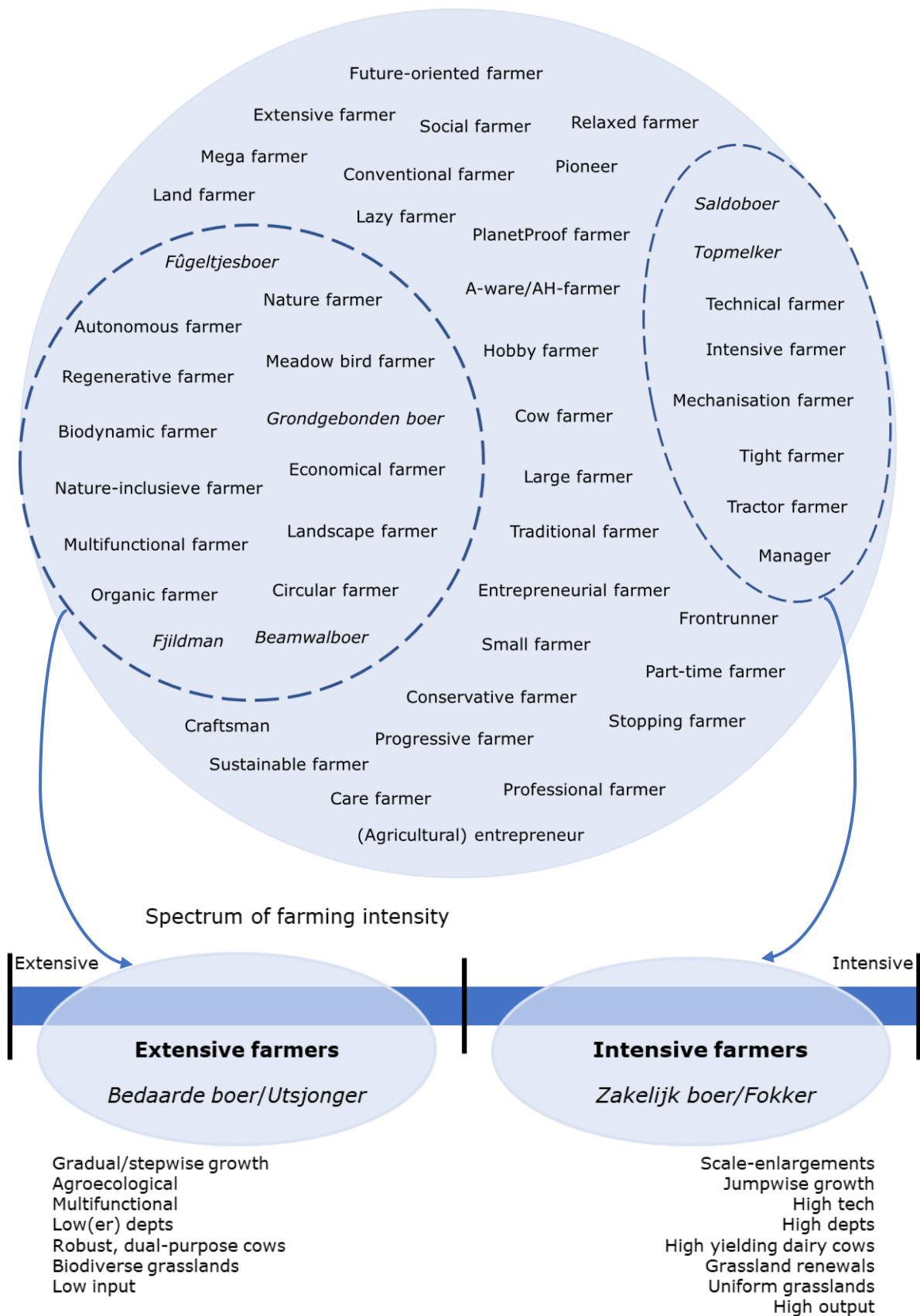


Figure 11 - Word cloud of farmer names used by respondents to grasp the current farming diversity in the Noardlike Fryske Wâlden that can be linked to various degrees with the four farming styles from 1991. This results in roughly two style-groups along the spectrum of farming intensity: Extensive farmers, in which characteristics of the *Bedaarde boer* and *Utsjonger* are reflected, and Intensive farmers, in which style-specific characteristics of the *Zakelijke boer* and *Fokker* are reflected). In **Annex II** I go into more detail on the used perspectives and connected farmer names and key words.

6.3 Key findings

Based on all these findings I can conclude that there certainly is a diversity in farming styles today in which style-specific characteristics from 1991 are still recognised and acknowledged by respondents or strongly resonate in respondents' stories about current farming. At the same time, references are made to meaningful change. Some style-specific characteristics seem to have faded or completely disappeared and new style-specific characteristics seem to have emerged. The farm development pathways of each of the four farming styles can be divided into two groups. On the one hand, some pathways illuminate a change in line with the farming style, and can therefore be seen as an evolution of the same farming style, such as (1) from *Bedaarde boer* to organic farmer, or (2) from *Fokker* to *topmelker*. On the other hand, some pathways illuminate a shift in emphasis from one farming style to another farming style, such as: (1) from *Bedaarde boer* towards *Zakelijke boer*; and (2) from *Fokker* towards *Zakelijke boer*. These shifts in emphasis can be considered as tortuous development pathways which deviate from the style-specific pathway. Some examples show a rather abrupt shift in farming style, while other examples show a more gradual transition.

The *Utsjonger* can be considered as an exceptional farming style that is hard to grasp in today's farming. Indeed, examples are given of farms that fit perfectly in the portrait of the *Utsjonger*. Farms where food is produced on a small scale combined with a wide range of alternative sources of income. But the economical farming strategy and gradual farm development of these farms overlaps with the *Bedaarde boer* farming style. The question arises to what extent these two farming styles still differ today. Should these two farming styles still be considered as two separate farming styles or should or could they be bundled as one farming style? Furthermore, when I asked in a broader sense about farm multifunctionality, having side-activities and alternative sources of income appears to be widespread and not clearly linked to a particular farming style. Farm multifunctionality therefore seems to be operating at another level that may lead to a whole new categorisation of multifunctional farming styles.

The respondents' classification schemes to grasp the current farming diversity again illustrate both continuity and change of farming styles in the period 1990-2020. Clustering the farmer names and style-specific characteristics mentioned in the classification schemes, a clear pattern emerges along the spectrum of farming intensity, in which roughly two groups can be identified: Extensive farmers and Intensive farmers. I used these two style-groups for the analysis of the second research question.

In summary, I can conclude that the farming styles from 1991 show both continuity and change. These findings show that the categorisation by De Bruin & Van der Ploeg (1991) is still relevant to a certain extent, but new metaphors or labels may be needed to indicate the current regional diversity in farming styles.

7 Linkages between farming styles and landscape and nature

In this chapter I discuss the findings around the second research question:

What are the linkages between the current farming styles and the farmer-landscape relationships, farmers' views on landscape dynamics and the participation in Landscape and Nature Management?

When I asked how farmers view the current landscape, their views on how other farmers view the landscape and how they experienced the landscape dynamics over the last 30 years, it appears that divergent perceptions exist. Some respondents perceive clear linkages between farming styles and landscape and nature, while others do not or highlight other linkages that explain differences in farmer-landscape relationships. The findings are subdivided into five sections that correspond with the three parts of this question. The first section covers the divergent views on the farmer-landscape relationship in general. The second section covers the divergent views on landscape dynamics over the past decades. In the third section both the views on farmer-landscape relationships and views on landscape dynamics come together where I briefly discuss the views on the development in the farmer-landscape relationship. In the fourth section I zoom in on linkages between farming styles and the participation in AES. Finally, I compare these findings with the findings of De Bruin & Van der Ploeg (1991) in the last section.

7.1 Views on farmer-landscape relationships

Virtually all farmer respondents indicated that they have a predominantly positive attitude towards the landscape in which they live and work. The views range from acceptance to appreciation and pride of the landscape. In these answers I found no linkages between farming styles and the farmers' attitudes towards the landscape. However, when I asked about the farmer-landscape relationships in a broader sense, some respondents are more nuanced and emphasised that some or many farmers have a dual relationship with the typical closed small-scale landscape. It is striking that two respondents that identified themselves with the *Utsjonger* and/or *Bedaarde boer* speak out on farmers in general who have dual relationship with the landscape. Below I briefly discuss the differences in attitudes towards the landscape and elaborate on the conflicting relationship some respondents mentioned.

Appreciation of the small-scale landscape

In the two quotes below, two key actors express their appreciation for the typical landscape in which they live and work. Both key actors have been participating in AES for years.

Het landschap dat siert de mens. Ja, ik vind het sierlijk. En we hebben nou net een hele mooie herfst gehad. Ja, de meeste bladeren zijn er nu af, maar verschillende bomen met verschillende kleuren, nou dat vind ik prachtig. Als ik dan in het land liep was het net een schilderij. En daar geniet ik van. (R1-3)

Ik voel me thuis in de Wâlden. Nee, ik zou denk ik niet gedijen in een kale wereld. En zo zijn hier toch wel meer boeren, denk ik. (R1-8)

Two respondents from the same farm took it one step further and spoke with great passion and enthusiasm about certain parcels that are even more beautiful than others due to a wide variety of wooded banks, alder tree belts, pingo ruins and ponds close together.

Nou, dat is echt het mooiste...die plaatjes zie je ook altijd. En dat land huren we nu. Met een hele pingo en daar lopen die koeien voor [...]. Maar echt niet te geloven. (R2-15)

The same respondents indicated that the great appreciation is a widespread feeling among the farmers in this region.

Al die boeren waar ik wel mee praat, die vinden het allemaal prachtig. (R2-15)

Acceptance of the landscape

Most key actors stated that the majority of the farmers in the Noardlike Fryske Wâlden are able to farm in the small-scale landscape and accept the hindrances of the landscape.

Intensief of je bent een extensieve, of je bent een bioloog, of je bent een kringloopboer. Ik denk dat de meeste, eigenlijk bijna alle boeren hier wel, die hebben wel in de gaten van ja, die houtwalelementen of de dykswâlen horen er gewoon bij. (R1-1)

Kijk, je hebt hier natuurlijk gewoon de boomwallen, dat is toch wel wat hier het extreemste is, die boompjes. En dat beperkt je natuurlijk in je bedrijfsvoering. Maar je kan het natuurlijk ook als een sterke factor zien. De expansie wordt er wel wat door beperkt. Maar binnen die bedrijfsvoering die er nu is, zijn er een hoop mogelijkheden om een goeie boterham te verdienen.[...] Die omgeving kun je toch weinig veranderen. Boomwallen kan je niet slopen, dat is een illusie, dat mag niet. Dus daar moet je gewoon gebruik van maken. (R1-4)

One key actor showed his acceptance by arguing that the small parcels are actually very workable for pasture grazing.

Wij hebben nou de meeste percelen, die zijn omme nabij de 2 hectare. Ik heb ook wel een paar van een halve hectare en één stuk van 5 hectare. Maar het is meestal zo van, we hebben nu een 200 koeien, die kunnen één dag in zo'n stuk van 2 hectare en dan 's avonds is het kaal. Dan kunnen ze de volgende dag naar een ander stuk. Dat past ons en dat vind ik dan mooi. En dan hoeft ik geen stukken van 10 hectare. (R1-3)

Conflicting relationships with the small-scale landscape

Two respondents stated that most farmers are ambivalent towards the landscape. On the one hand, farmers appreciate the landscape. On the other hand, farmers feel limited by the small-scale landscape and the maintenance of landscape amenities is no priority within the farming operations.

Nou, ik denk dat de helft toch ook wel wilde dat het grootschaliger was en dat ze niet die beperkingen hadden van die kleinschaligheid.[...] Ja, ik denk dat de helft daar wel mee zit. Maar fijn, ze accepteren het allemaal. Maar er zijn ook sommige, die zijn er heel bewust mee bezig hoor. (R1-8)

Die boeren hebben de handen wel vol om de tent draaiende te houden. En dan zijn ze meer met hun grond en hun vee bezig dan met die wallen. Zo is het wel. (R1-8)

Nou, het is een beetje dubbel vind ik bij veel boeren. Ik zie nog wel dat er toch wel stiekem van alles weghalen hoor, dat...als ze hun in de weg staan. Want ja, bomen zijn gewoon lastig vinden ze, ze nemen voedingsstoffen uit de grond, ze geven schaduw en er vallen bladeren en takken. Daar zit een boer niet op te wachten, al dat werk en die negatieve effecten. Dus wat dat aan gaat, dat zit er

toch nog wel diep in hoor.[...] En de andere kant van dat dubbele is natuurlijk, het moet wat opleveren.[...] Er moet een vergoeding tegenover staan en dan oké. (R2-12)

Other key actors spoke of a select group of intensive farmers who have a conflicting relationship with the small-scale landscape.

Als je de allerextreemsten hebt, die zeggen gewoon van nou, die bomen die moeten eraf. Die percelen moeten groter. Het mag niet, want de gemeentelijke verordeningen die houden je ook wel tegen. Maar ze zijn er nog wel. En als je goed denkt vanuit het economisch boeren, ja, dan moet je ook geen bomen hebben. Dan moet je gewoon grote percelen hebben, het moet allemaal recht en strak zijn. (R1-7)

Several key actors gave examples of farmers who neglect the maintenance of landscape amenities, apply for permits for merging fields, or even intervene illegally in the landscape amenity with the aim of destroy and remove the amenity bit by bit.

Er zijn boeren die hebben ze liever kwijt dan rijk. En dat blijft zo. En misschien is dat dan ook de generatie die nog aan het stuur zit. Je ziet boeren, die zien het belang niet van goed onderhoud. Die laten ze wel staan, maar die onderhouden ze kwalitatief niet goed. (R1-9)

We hebben hier ook wel een paar [intensieve boeren] en dan zie je toch weer dat de percelen groter worden, de bomen gaan eruit...[...] Sommigen doen dat illegaal.[...] Kleine boompjes worden omgehakt en glyfosaat wordt toegepast. Dat wordt elk jaar een boompje minder. Je ziet gewoon, de singel soms elk jaar een beetje minder worden en uiteindelijk is hij weg. Ik kan je zo een paar plekken aanwijzen...als je luchtfoto's maakt, dan denk je, hoe kan dat?...dit is een oase in de Wâlden, maar dan eentje zonder bomen. Dus dat is een hele groene, grassige vlakte. (R1-10)

Remarkably, a key actor gave an example of a farmer who has turned 180 degrees in his view on the landscape after he ceased farming.

Maar die man was altijd bezig in de tijd van productie, met elzensingels weghalen, percelen vergroten. Het moest efficiënt ingericht worden en die bomen had hij wel wat werk van. Hij had wel elzensingels. Het was niet zo dat alles weg moest, maar het was wel vrij dun bezaaid. Vrij ondernemend...dan moesten hier en daar een paar staan, maar liever niet. Maar nu spreekt hij hem uit, hoe hij geniet van het landschap en dat hij het prachtig vindt. En uiteindelijk heeft hij wel wat hard zeer van wat hij allemaal heeft gedaan. Dat hij zegt van ja zoals jij het nu doet, vind ik wel mooi. Het landschap is er wel bij gebaat dat er mooie singels staan en dat beslotene dat vindt hij wel mooi. Dus als ondernemer zijnde toen, maar nu als persoon... (R1-9)

7.2 Views on landscape dynamics

In this section I discuss the diversity in perceptions of the landscape dynamics between 1990 and now, which can be roughly structured around three main perceptions: (1) the landscape has improved, (2) the landscape has changed, but the typical landscape has been preserved, (3) the landscape has impoverished. To provide some relevant context to the divergent views, first I briefly elaborate on the landscape dynamics before the 1990s. Finally, I zoom in on the land consolidation programmes and the construction of a new road network *De Centrale As*, which are considered to have had a major effect on the local landscape, according to several respondents.

Views on the landscape dynamics before 1990

Several respondents indicated that in the 1960s, the replacement of wood-burned stoves by gas connections and the introduction of electric fencing led to neglected maintenance of wooded banks and alder tree belts and, in turn, a deterioration of the landscape.

Na de jaren 60, toen er geen houtkachels meer waren en er stroomdraad kwam. Toen zijn die boomwallen verwaarloosd. Daarvoor had iedereen er belang bij...nou ja, dat hout... Ze verkochten het ook gewoon per houtwal in het café [...]. De meeste boeren konden zich met die houtwallen redden in de winter. En dat hout...de dikke eiken die gingen naar meubelmakers, en veel hout ging naar de bakkers, voor de ovens. Zo was dat oorspronkelijk. (R2-15)

At the time of the establishment of the agri-environmental cooperatives, farmers became interested in the maintenance of the landscape elements. The establishment of agri-environmental cooperatives led to an improvement of the landscape. However, there are local differences in the onset of awareness among farmers, partly linked to when the agri-environmental cooperatives were founded.

En je zag echt eind... in de jaren 90 dus echt een verslechtering van de kwaliteit van de singels omdat er te weinig onderhoud aan gedaan werd. Hier en daar wel, maar veel singels waren achterstallig in onderhoud. En eind jaren 90 heeft de gemeente gezegd van, we moeten dat een impuls geven, die elzensingels moeten weer onderhouden worden. En toen hebben we ook de agrarische natuurvereniging hier opgericht. En die heeft ook geld van de gemeente gekregen en van de provincie om dat te faciliteren...om hier ook het agrarisch natuurbeheer op elzensingels te ontwikkelen.[...] En met name eind jaren 90, begin 2000...die eerst 5/7 jaar is er heel veel achterstallig onderhoud bijgewerkt. Dus dan zag je echt een kwaliteitsimpuls van de elzensingels. Ik denk dat het daarmee heel erg vooruit is gegaan in het beheer. (R1-9)

View: the landscape has improved

In line with the above quotes several respondents noted that the landscape has improved in the last 20/30 years, because of the development of NFW, the increased awareness of farmers and the development of AES.

Dit is er en het is nog zoals het 40 jaar geleden was. De kwaliteit is misschien nu wel beter geworden dan 40 jaar geleden. Ik bedoel, het is hier alleen maar beter geworden, ook aan de natuurwaarde, omdat het beter wordt onderhouden. (R2-15)

View: the landscape has changed, but the typical landscape has been preserved

Several respondents mentioned that the landscape has changed due to consolidation programmes, new farm buildings and infrastructure, but it is still a small-scale landscape. One respondent views this positively, while another respondent has a more negative viewpoint.

Het landschap verandert, maar we behouden het landschap. (R1-3)

Het agrarisch natuurbeheer heeft er wel voor gezorgd dat het kleinschalige landschap zo veel mogelijk in stand gehouden werd. Maar er was al veel weggehaald hoor, qua elzensingels en zo. Het was hier toch altijd wel zo dat een boom...ja, elke boom is er één teveel, bij wijze van spreken. Dat was hier toch wel, onder de boeren het idee hoor. (R2-12)

View: the landscape has impoverished

Several respondents noted that the landscape has become more large-scale and monotonous. Fields have enlarged, grasslands have become more uniform and populations of meadow birds have declined drastically. Noteworthy, the increased scale of the landscape is not necessarily perceived as negative by respondents. In the quotes below two respondents explained that the changed landscape is part of

modernisation of agriculture. They argued that the changes have been a necessity to be able to farm efficiently nowadays.

Het is wel allemaal wat grootschaliger geworden.[...] ...die [percelen] zijn overwegend ook wel wat groter geworden en hier en daar wel wat rechter. Dat is toch ook een kwestie van doelmatigheid. Die wordt natuurlijk toch wel doorgevoerd in de loop van de jaren. (R2-14)

De ruilverkavelingen hebben even goed hun sporen nagelaten. Want die zijn hier ook geweest. [...] Er is nog steeds aan perceelvergroting gedaan, wel met behoud van de boomwallen die erin zitten. Maar de dammen worden verbreed tot 11 meter. Dus je moet ook wel enigszins meegaan, anders dan is [het niet meer economisch werkbaar]. (R1-7)

The effect of land consolidation programmes

Like the above quote, many respondents emphasised the effect of land consolidation programmes on the development of the landscape. It appears that the land consolidation programmes were conducted relatively late in this region compared to other regions in *Fryslân*, sometimes not until the late 1990s. According to two farmers these late consolidation programmes were less focused on purely agriculture but nature and landscape values were taken into account.

Respondent 1: Kijk, dat is het geluk van dit gebied. Wij waren hier laat met ruilverkaveling. Dat was pas in 1990 geloof ik, dat we hebben gestemd, nou en daarna moest het dan nog worden opgestart. En toen zat er al iemand van natuur erbij in, in die commissie. En toen waren die natuurwaarden...

...

Respondent 2: Ja, het is gewoon een andere tijdsgeslacht, precies. Toen was er geen geld meer om grote kavelpaden aan te leggen. Want op een gegeven moment in de jaren 60/70/80...dan was het gewoon paden aanleggen, alles dempen, je kreeg er zelfs quatum bij op een gegeven moment. Maar in de tijd dat wij hier met ruilverkaveling begonnen was dat allemaal al gebeurd. Het was hier...die natuur had al een hele grote stem in de ruilverkaveling. (R2-15)

Several key actors argued that because of the land consolidation programmes, the parcellation has become more efficient for farmers, but the programmes did not have a negative impact on the landscape. By contrast, the programmes have actually led to more trees.

We hebben toen nog een ruilverkaveling hier gehad. En toen is er hier en daar nog wel wat versterkt en aangepast. En ook nog wel perceelvergroting gedaan, dus er moest nog wat gecompenseerd worden. Dus het is wel efficiënter ingericht, het landschap. (R1-9)

Dus na de ruilverkaveling staan er meer bomen als voor de ruilverkaveling. (R1-5)

De Centrale As

Between 2013 and 2016 a new road network has been constructed between *Holwert* and *Nijegea*, known as *De Centrale As*. Several respondents refer to this project as a major change in the landscape. However, there are divergent views on whether this large-scale infrastructural project has led to an improvement or deterioration of the landscape. Some key actors pointed to all the measures as part of the extensive landscape restoration project that have led to an improvement of the surrounding landscape, while another respondent was outright negative.

De centrale as is hier in 2013/14/15 in gekomen en heeft denk ik wel voor een kwaliteitsimpuls voor het landschap gezorgd.[...] Op de plek waar hij ligt niet, maar daaromheen wel. Zo zie ik het wel. [...] De laatste herstelprojecten lopen nu nog, maar ik denk dat kwalitatief die singels er wel goed voor staan nu. (R1-9)

Je offert je landschap er wel voor een groot deel aan op. Het mooie, het oude, de sjeu van het landschap wat je had, dat was nu net het mooie ervan. En nu er zo'n weg in ligt, die er eigenlijk helemaal niet eens in past, vind ik, dan is de sjeu eraf. (R2-14)

These findings show that divergent views exist on how the landscape has changed in the last 30 years. The differences in views often seem to be linked to geographical differences within the region, land consolidation programmes and major infrastructural interventions. Based on these views I have not been able to discover any linkages between farming styles and how farmers view landscape dynamics. It is striking that the farmers in the closed landscape were predominantly positive about the landscape dynamics, while two farmers in the open landscape emphasised an impoverishing landscape.

7.3 Views on farmer-landscape relationship dynamics

It is striking that several key actors noted that in general there is now more support and acceptance for the small-scale landscape and more attention for the management of landscape amenities than 30 years ago. Two key actors explained this by a generational difference (see also **section 7.1**, quote R1-9).

Het is een jongere generatie. Die generatie, die heeft minder weerstand tegen het kleinschalige... tegen die wallen. Toen we er mee begonnen waren er ook boeren die absoluut niet mee wilden doen. Want die wilden de wallen er wel af hebben, maar ja, dat mocht toen ook al niet meer, want ze stonden in het bestemmingsplan.[...] En dat hebben we nu niet meer. Ze doen het nu allemaal, zijn ze ermee bezig. (R1-8)

However, other key actors put more emphasis on the fact that the enforcement is now much stricter than 30 years ago. Farmers who might still want to merge and enlarge fields in the small-scale landscape are no longer or hardly able to do so.

30 jaar geleden speelde dat haast niet. Dan maar een boom minder...So what? Maar dat is tegenwoordig, is dat veel feller, vanuit de Noardlike Fryske Wâlden, maar ook vanuit de gemeente. (R1-3)

Als je hier wat rondrijdt, dan zie je toch wel bepaalde delen dat je denkt, hé daar is wat verdwenen. Maar goed, dat kan nu niet meer, want daar zit natuurlijk een hoop controle op. (R1-4)

7.4 Participation in agri-environmental schemes

Several key actors indicated that farmers participate in AES because they have ideals. Farmers in the closed landscape participate because they attach importance to preserving the landscape. And farmers in the open landscape participate because they consider it important that meadow birds are protected.

Ik heb ook iets met boomwallen. Ik vind gewoon, die horen hier bij de streek. Dus die wil ik wel behouden. (R1-3)

Die hebben bepaalde idealen. Dat zijn idealistische boeren. Die zien dat wel zitten. Die hebben er ook lol aan. (R1-4)

Other key actors and respondents observe that some farmers have suddenly become interested in AES, because AES are part of the requirements to produce for a 'new' sustainable dairy label with a surcharge per litre milk. In this way, these labels work as a financial incentive for farmers to participate in AES.

Ik zie hier een boer en die deed er helemaal niks mee. Maar ja, hij wou wel vergoeding beuren en voldeed aan de eisen. Nou ja, en dan moest dat wat...minimale grenzen opzoeken om dan toch nog wat te krijgen. Maar ik zie hem nu wel veranderen. Ook omdat hij nu in dat Albert Heijn concept is gekomen en hij er punten mee kan scoren, dan heeft hij toch zoiets, dan moet ik er toch maar actiever mee aan de gang. Dus nu heeft hij een plasdras gemaakt voor de vogels. Dat zie je dan ook...hij verandert wel. Maar hij moest er eerst niks van hebben en alles wat hij weg kon halen, haalde hij weg. (R1-9)

In this section I zoom in on the management of landscape and nature by participation in AES. When analysing the presumed linkages between farming styles and participation of AES and the multitude of motives and barriers to participate in AES, AES in NFW's working area, seems too versatile to discover any linkages. However, a distinction should be made between AES related to closed landscape (Landscape Management) and AES related the open landscape (Nature Management) in which there is a clear difference in type of management package and freedom of choice (**table 4**).

Table 4 – Distinction in AES system between closed landscape and open landscape.

Closed landscape	Open landscape
Habitat type: dry network	Habitat type: wet network, open grassland, open arable land
Landscape Management: AES focus on landscape preservation	Nature Management: AES focus on agricultural nature management
Most management packages for management of wooded banks and alder tree belts	Most management packages for meadow bird protection

In the closed landscape farmers can only opt for Landscape Management. The management packages within Landscape Management focuses on the preservation of landscape amenities and can be regarded as management of off-field nature. Although the presence of the landscape amenities has an influence on crop yields, the management does not necessarily lead to lower yields. In addition, farmers in the closed landscape have a conservation duty to preserve the landscape amenities on their fields. That means that these farmers have no choice, they are obliged to preserve the landscape amenities. A frequently heard motive to choose for Landscape Management is that within AES the management costs are reimbursed, while otherwise a farmer would bear the costs him/herself for similar management, to fulfil the farmer's conservation duty.

Dus ik moet het precies zo onderhouden, alleen er zit geen vergoeding op. Maar ik mag het ook niet weghalen, dus uiteindelijk komt het op hetzelfde neer. Dus dan heb ik zoiets, doe mij maar die betaalde variant, want als je een vergoeding ergens voor krijgt, kan je ook kwalitatief een betere slag maken met het beheer. (R2-11)

By contrast, in the open landscape farmers can only opt for Nature Management. The management packages can be regarded as management of on-field nature, mostly focused on meadow bird protection. Nature Management leads in all cases to lower crop yields than under 'conventional' grassland use. In addition, farmers in the open landscape experience more freedom of choice. Although farmers officially have a duty to conserve breeding meadow birds on their land, they do not have conservation duty of the habitat. Thus by stopping the management package, they are allowed to convert the grassland towards conventional grass production deteriorating the habitat for breeding meadow birds.

Die bedrijven die in de open gebieden zitten, die hebben veel meer de keus. Want die kunnen dus kiezen voor een aangepaste bedrijfsvoering, met weidevogelbeheer bijvoorbeeld, mits daar een vergoeding voor staat. (R1-2)

In the following sections I first discuss the findings related to Landscape Management in the closed landscape and thereafter the findings related to Nature Management in the open landscape. Besides the

motives and barriers that specifically apply to Landscape Management in the closed landscape or Nature Management in the open landscape, criticism is levelled against the functioning of the current AES system in more general terms. In **Annex III** I elaborate on criticism on the AES system. These points of criticism could also be read as barriers to why farmers do not participate in AES that are not linked to farming styles. From this I can conclude that there are still plenty of opportunities for improvement.

7.4.1 Landscape Management in the closed landscape

I could not find clear linkages between the participation of Landscape Management and the four farming styles. Landscape Management seems to be taken up en masse by farmers in this region, both by Extensive and Intensive farmers, see quote below. There are indeed farmers who would rather get rid of the landscape amenities, but according to some key actors, that is only a small group (R1-4, R1-10). However, there still appears to be differences in motives to participate in Landscape Management in which style-specific differences are resonated. Broadly speaking, I discovered two narratives. The first narrative consists of a pragmatic line of reasoning: *The wooded banks and alder tree belts are protected, so I am obliged to maintain these landscape amenities. AES is a good system, because I get a reimbursement for the necessary maintenance.* Whereas, the second narrative is much more based on a positive and intrinsic motivation: *I farm in this typical landscape and we as farmers are responsible for preserving this unique National Landscape. A valuable landscape ultimately provides quality of life that benefits everyone in the region.* Although both lines of reasoning are often combined by respondents, I got the impression that in general Intensive farmers put more emphasis on the first narrative (see quote below), while Extensive farmers put more emphasis on the second.

Maar ook als je de strakke veefokkers hebt. Niet allemaal, maar er zijn genoeg jongens bij die puur economisch denken, maar die dan ook denken van nou, goed, die boomwallen zijn er toch, we moeten er wat mee. We mogen ze niet slopen. We zetten ze in beheer. En die nemen dat beheergeld mee. Als je bijvoorbeeld 8 km elzensingel hebt, dan brengt het altijd nog veel geld in het laadje. En dat werk wordt dan vaak wel uitbesteed, je hebt sociaal programma's hier in de gemeentes lopen die dat werk wel willen doen of loonwerkers. Netto brengt het niet veel op, maar je kunt het wel meenemen. Als het er toch is, dan moet je het meenemen. (R1-7)

Besides that, although no clear linkages are found between whether or not to participate in Landscape Management and farming styles, many key actors do see major differences in how Landscape Management is carried out. Some key actors observe a clear link with certain farming styles, in which the Intensive farmers manage the wooded banks and alder tree belts in such a way that the burdens are minimised.

De zijn de wat intensievere, wat grootschaliger en...nou, echt grote bedrijven over het algemeen. En dat zijn de intensievere bedrijven denk ik, gewoon die puur, wat ik zeg, biljartlakens van Engels raai. De singels strak, korthouden. Ze behouden ze wel en ze hebben er vaak ook nog wel beheer op, maar niet te veel overhangende takken. De bramen goed terugsnijden in de winter. Het onderhoud, regelmatig afzetten...het liefst een jaar eerder dan een jaar later bij wijze van. En er zitten gewoon...die zoeken het randje op en dat zijn misschien een 10 of 15 boeren (R1-10)

According to other key actors, the differences in how the Landscape Management is carried out is mainly due to personal differences. One farmer participates purely because of the management reimbursements, while another farmer really likes carrying out the management (R1-1, R1-2, R1-8).

Je kunt aan de wallen wel zien of ze moeten beheren of willen beheren. De één doet het met veel meer enthousiasme dan de ander. (R1-8)

One key actor explained that the differences in implementation of Landscape Management involves more than whether you accept the hindrances of the landscape amenities and whether you like carrying out

the management or not. It is also related to how much ecological knowledge you have of the landscape amenities, how skilled you are in carrying out the management and your view of what a wooded bank or alder tree belt should look like.

Kijk, het enige wat hij bijvoorbeeld wel heeft gedaan, hij haalt bijvoorbeeld iets meer die ondergroei eruit. Dus ja, daar zitten iets meer gaten in [...] tussen die bomen.[...] De bramenstruiken, die heb ik er zelf iets meer inzitten. Kijk die haalt hij er iets meer eruit. Ja, goed, ik ben een kenner, dus ik zie dat wat meer. (R1-1)

Another key actor indicated that he has recently noticed that more and more farmers no longer have time to carry out the intermediate felling, as part of the Landscape Management, because their farm have become too large. According to him the farm size is another factor that plays a role in the differences in implementation of Landscape Management.

Die tussenkap, daar zit wel eens een boompje in, maar daar zit eigenlijk geen hout in. En het kost wel een berg tijd. En dan schrik je ervan... ik denk, jullie hebben nu nog anderhalve winter, deze winter en volgend jaar nog twee maanden, en dan moeten eigenlijk die tussenkappen ook allemaal uitgevoerd en gemeld zijn. En dan komen wij bij mensen, en dan denken we van, hebben jullie in die 6 jaar al eens een tussenkap uitgevoerd wat jullie hebben aangevraagd? Oh, jongens dit gaat niet goed. Maar wat je dan ook ziet...dat komt meer doordat iedereen te groot wordt.[...] Er moet een tussenkap worden uitgevoerd, maar dan denk je, jullie zijn ook 5 meter land kwijt. Zover hangen ze het land over, waar je niet meer met een trekker langs kunt. (R1-5)

Other respondents also indicated that farmers now have less time to carry out the management than before. The so-called idle hours have disappeared.

Vroeger toen zeiden we, dat doen we in de dode uurtjes. Maar die zijn er niet meer bij een boer. Dat hadden we toen, 30 jaar geleden ook niet voorzien, dat die dode uurtjes er niet meer zijn. (R1-8)

Nevertheless, respondents made other linkages as to why farmers do or do not participate in Landscape Management. Participation in Landscape Management is linked to differences in generation, financial scarcity and number of landscape amenities per farm.

As I have discussed before, the generational difference between farmers is mentioned as an explanation (see **section 7.3**). Two key actors observe a difference between the old generation that pays little attention to management and the young generation that recognises the importance of well-maintained landscape amenities and want to actively contribute to it. Whereas two other respondents presume a possible linkage between financial scarcity and Landscape Management. According to them, a farmer who is short of money will give less priority to Landscape Management. However, that does not mean that these farmers do not participate in Landscape Management. Instead, both respondents indicate that therefore the cost reimbursements are a necessary incentive for farmers to preserve and manage the landscape amenities.

Dus eigenlijk in 40 jaar is die melkprijs onveranderd gebleven, maar de kosten zijn wel gestegen. Dat is wel lastig voor boeren, voor ondernemers... Als het uiteindelijk zo is dat die prijs niet meegaat, ook niet qua inflatie meegaat, ja dan kan de samenleving wel tegen die boer zeggen van ik wil dat jij die landschapselementen onderhoudt. Maar als die boer al moeite heeft om met z'n gewone bedrijfsvoering het bedrijf overeind te houden, dan gaat hij geen kosten steken in landschapsonderhoud. Dan moet hij daarvoor gefaciliteerd worden. Dat is een dienst aan de samenleving. Hij heeft niet om die bomen gevraagd, hij vindt het...hij wil ze wel in standhouden. (R1-2)

Another respondent made a linkage between financial scarcity and the farmer's attitude towards the landscape. He assumed that a farmer who is short of money may feel more hindered by the small-scale closed landscape than appreciating the landscape.

En bovendien zitten we ook niet bij de bank tot zover erin, zal ik maar zeggen. Dus dat is ook al een luxepositie.[...] En we hebben goeie afzet, dus ja. Het hoeft ook niet. En dan kan je het ook eerder mooi vinden. Als je het echt...stel je kan bijna niet rondkomen als boer, nou er zijn er een hele boel die toch moeilijker zitten. (R2-12)

Key actors indicated that there are large local differences in how many farmers participate in Landscape Management. It is less common to participate in Landscape Management on the edges of the closed landscape, in areas with relatively few wooded banks or alder tree belts. They explained that when a farmer has only a few hundred meters of wooded banks or alder tree belts, he/she is often less inclined to apply for an AES contract. The rules and level of control are the same for every farm, while the cost reimbursement is relatively low. In that case, the cost reimbursement does not outweigh all the rules and control.

Een boer die ruimte gewend is en die weinig bomen heeft, die zegt van, laat maar zo blijven, want dan heb je er ook geen last van. Je hebt dan iets meer bewegingsvrijheid. (R1-7)

Dat er verplichtingen aan zitten dat ze een bepaald onderhoud moeten doen. Je kunt je voorstellen...er moet een draad voor de boomwal worden getrokken.[...] En de vergoeding is niet echt dat je zegt, dat is nou zo interessant dat als je een paar honderd meter aan boomwallen hebt, dan zeggen die boeren, laat maar. Ik heb daar meer administratief werk van en het controleapparaat is groter dan dat ik er plezier van heb. (R1-7)

Ja, die zeggen, ik heb maar één kantje land, ik heb maar weinig meters. Ik wil het op m'n eigen manier doen. (R1-1)

According to another key actor, this is also related to local cultural differences that already played a role 30 years ago, when the first agri-environmental cooperatives were founded. Then he experienced that farmers on the edges of the closed landscape often attached more value to a large-scale landscape and were not interested in addressing landscape and environmental issues.

Die zitten er heel anders in als hoe we hier in dat kleinschalige zitten.[...] Ik denk dat die boeren minder gauw geneigd zijn om rekening te houden met milieu en landschap. Zo heb ik het altijd ervaren. Misschien is het nu wel anders.[...] Ik had het idee dat er veel meer waren die op de rem traptten dan hier destijds. (R1-8)

Lastly, several other arguments are mentioned as to why some farmers do not participate in Landscape Management:

- Landscape Management limits your autonomy. Several respondents indicated that the conditions of the AES contract can feel as limiting the farmers' autonomy to determine the management themselves. It is striking that in all given examples attention is paid to the management of landscape amenities, but these farmers simply do not want to enshrine this management contractually (see quote 1).
- Divergent beliefs on what is best to preserve landscape and promote biodiversity. By order of NFW, Altenburg & Wymenga, an independent ecological research and consultancy firm, has conducted a research into the biodiversity related to wooded banks and alder tree belts. This research shows that wooded banks and alder tree belts managed according to the AES management package have significant higher biodiversity values than wooded banks and alder tree belts that are not (R1-10). Several respondents mentioned this difference and are convinced that these management measures are necessary to create multiple vegetation layers

in the landscape amenity, which leads to a higher biodiversity value and better preservation of the landscape (see quote 2). However, some other respondents believe that the management measures within the management packages do not lead to the highest biodiversity, but are too rigorous, at the expense of old trees and the diversity in tree species. They argued that the measures can be improved leading to a more beautiful landscape (see quote 3).

- (1) *Hier een buurman achter, die is niet lid van de agrarische natuurvereniging, maar die voelt veel te veel beperkingen. Hij zei, als ik een stuk prikkeldraad aan de boom wil spijkeren, dan doe ik dat. En dan wil ik niet een schouwcommissie...die controleur achter me hebben, die zegt je mag geen spijker in de boom slaan. Nee, dat wil hij niet. Hij heeft prachtige boomwallen hoor. Echt niks mis mee. Ik zit al 30 jaar in natuurbeheer en hij heeft de boomwallen, die zijn mooier dan die van mij. En ook allemaal nog kleine perceeltjes. (R1-3)*
- (2) *Als je het niet onderhoudt, als we die bomen allemaal laten staan, die grote eiken...dan is de natuurwaarde niks, nul. Dat lijkt wel heel mooi, maar dat is een boomwal van niks. Er moet ondergroei, er moet licht komen.[...] Bij Tytsjerksteradiel mochten ze toen niks kappen. Alleen maar eiken, eiken, eiken... grote zware wallen bij Sumar en zo. Nou natuurwaarde nul hè, want je hebt geen ondergroei, je hebt geen bramen... er groeit niks op. Het is allemaal schaduw de hele dag. En hier is allemaal [ondergroei]...als je brandnetels en...dat is één grote bende soms, maar dat is voor de natuur natuurlijk prachtig...aan rupsen, aan vogels, die allemaal bescherming vinden. Dat is ongelofelijke best. Je moet ook wel eens een dikke eik hebben [maar niet alleen maar dikke eiken]. (R2-15)*
- (3) *Maar elzen die kunnen ook wel 60 jaar worden, die hoeft je niet...Kijk, en die grotere bomen, dat is soms ook weer een biotoop op zich. Eén zo'n boom, als je zo'n grote boom hebt, daar zitten weer vogels in en allerlei insecten ook. Dus, ik vind dat ze dat veel te rigoureus aanpakken.[...] Ik zou zeggen, laat wat meer grotere bomen staan, voor het landschap is het ook veel mooier. Dan zo'n hele wal...in één keer alles eraf, op een paar kleine scheutjes na, zal ik maar zeggen. (R2-12)*

7.4.2 Nature Management in the open landscape

When it comes to farmers in the open landscape, several key actors do observe linkages between farming styles and participation in AES. Two key actors presume that Intensive farmers are more likely to opt for the best financial choice. Nature Management implies a more extensive grassland use and thus negatively impacts annual grass yields. Therefore, AES are often less favourable, because the costs are higher than the revenues. In the quote below, nature-inclusive is synonymous with participation in AES.

Die kan natuurinclusief zijn, maar de kans is groot dat hij door z'n zakelijke instelling dat niet is. Maar het kan wel. Maar...als je alleen economie gedreven bent, dan denk ik dat de neiging er is dat je dus de andere componenten onder gaat waarderen. En dat je daardoor het natuurinclusief zijn niet als hoofdprioriteit hebt, maar economie als hoofdprioriteit. Dus het zou best zo kunnen zijn dat als je natuurinclusieve landbouw als hoofdprioriteit hebt dat je ook zakelijk gezien daar hele goede resultaten mee haalt. Maar als je economie als hoofdprioriteit hebt en je wil ook wel natuurinclusief boeren, dan is economie jouw beslismoment. Dus als het economisch geen toegevoegde waarde oplevert, dan zet je misschien natuurinclusieve landbouw op een lager plan. Dan regeert de euro in je besluitvorming. (R1-2)

In line with the above quote, another key actor presumed that the Intensive farmer cannot afford the loss of grass production due to Nature Management.

Je hebt gewoon strakke melkveehouders die zeggen van nee, ik heb elke vierkante meter grond nodig. Grond is al duur genoeg, dan ga ik niet nog eens een keer gekkigheden doen. Ik heb dit gewoon nodig om m'n productie te realiseren. (R1-7)

However, key actors gave several examples of typical *Zakelijke boeren* or *Fokkers* in the open landscape who prove the contrary and participate very actively in AES for meadow bird protection.

Dat was een natuurbeheerder van heb ik jou daar. Weidevogels, een stuk plasdras aangelegd, puur voor de vogels. Dat was een idealist. Die was dus heel bewust met die vogelstand bezig, dus die maaide de randen ook niet. En hij maaide om de nesten heen. En om die randen liet hij gewoon 10 meter staan, dat maaide hij later, want dan konden die jonge vogels daarin vluchten. Maar verder was het natuurlijk de topmelker van Nederland zo'n beetje. Hij melkte 12/13000 liter gemiddeld en de stier aan de KI en weet ik veel, dat was gewoon een topmelker. Dus die combinatie met een stukje weidevogelbeheer en topmelken dat kan goed. (R1-3)

The question arises to what extent the presumption of key actors corresponds with reality. Is there indeed a clear linkage between the *Zakelijke boer* and *Fokker* farming styles and participation in AES?

One key actor does not observe a clear linkage in participation of Nature Management, but rather in how Nature Management is integrated on the farm. He explained this by posing the question, when are you really a nature-inclusive farmer? In his answer, he shows that, according to him, the difference lies in how you have integrated Nature Management on your farm. Is Nature Management an integral part of your farming operations, interwoven by all fields, or is Nature Management a fairly isolated part with a clear spatial segregation between production and nature on your farm?

De vraag is, wanneer ben je nou natuurinclusief bezig? Als je voldoet aan die KPI's? Met een serieus deel natuurbeheer en met een ander deel, laten we zeggen, productieland. Ben je dan natuurinclusief bezig? Of ben je natuurinclusief bezig als door je hele bedrijfsvoering heen zichtbaar is, op percelen, dat je de natuur als hulpbron gebruikt? (R1-2)

In addition, several arguments are mentioned as to why farmers do or do not participate in AES that are difficult to link to farming styles. A farmer noted that it is more difficult to use contract workers when participating in Nature Management. As a farmer you have to communicate more with your contractor(s), and if the fieldwork is not carried out correctly by the contractor, you as a farmer are held liable. The same farmer indicated that it is like fighting a running battle when it comes to AES for meadow bird protection. He argued that the management packages do not have a positive impact on the breeding meadow bird populations because of the high predation pressure. Nevertheless, another farmer explained why AES for meadow bird protection is an attractive revenue model for a number of contiguous fields that are agriculturally 'unsuitable' for conventional grass production. In addition, he can make good use of the fibre-rich silage or hay that comes from these fields as a ration for dry cows and young stock.

De weidevogels zaten er al en het was een moeilijk gebied om daar traditioneel landbouw te plegen. En daar kwamen ook een aantal geldstromen voorbij voor het beheer en het anders beheren van die percelen. Dus een beetje opbrengst laten liggen enzovoort. Dus dat speelde ook bij mij mee. En ik voelde ook dat we daar iets aan moesten doen vanwege de acceptatiegraad natuurlijk van de landbouw. En langzaam kom ik er ook achter dat een gedeelte natuurbeheer prima in je rantsoen past voor een bepaalde groep vee. (R2-11)

7.5 Key findings

Based on these findings, my general impression is that the field of tension between the *Zakelijke Boer* and the small-scale closed landscape, as described by De Bruin & Van der Ploeg (1991), appears to be diminished in the last 30 years. I interviewed divergent farmers, but no farmer I interviewed experiences the wooded banks and alder tree belts as a major hindrance or expressly mentioned that he/she prefers or pursues a so-called *polder landscape*, an open, large-scale landscape with straight large parcels, instead of the current small-scale closed landscape. Several key actors highlighted the broad appreciation by farmers for the typical landscape and the awareness farmers have that they fulfil an important role in preserving that valuable landscape. According to them it is now another generation of farmers that better accepts the hindrances of the landscape. However, some key actors still perceive a field of tension between Intensive farmers who aim for intensive land use and are in a continuous process of scaling-up the farm. Determining the magnitude of the current field of tension compared to 30 years ago, requires new quantitative research.

Another important finding of De Bruin & Van der Ploeg (1991) was that the *Zakelijke boer* in particular (and to a lesser extent the *Fokker*) resisted an economic valuation of landscape and nature management. Now, 30 years later, there is a widely shared payment system for landscape and nature management, called AES. Key actors indicated a massive participation in AES nowadays, which is in sharp contrast with the few farmer agreements for landscape preservation 30 years ago. Based on the empirical material I could not discover clear linkages between farming styles and the participation in AES. Similar to the divergent views of the farmer-landscape relationships, here too divergent views exist that contradict each other. In short, AES as a whole are too versatile. Therefore, the motives and barriers for Landscape Management and Nature Management should be approached separately. In the closed landscape many examples are given of both Extensive farmers and Intensive farmers that participate in Landscape Management. Here, key actors do not perceive clear linkages between farming styles and participation in AES. Yet, I could roughly distinguish two different narratives in which style-specific differences between Extensive and Intensive farmers are resonated. Respectively, one narrative is pragmatic with an emphasis on the cost reimbursement, while the other narrative is based on a positive and intrinsic motivation to protect the landscape and associated nature values. Besides that, several key actors do perceive differences in how the Landscape Management is carried out in which again style-specific differences are resonated. Lastly, key actors presume other linkages, such as generation and location (the number of landscape amenities per farm), that play a role in the participation of Landscape Management. In the open landscape, some key actors presume a clear linkage between farming styles and participation in Nature Management in which Intensive farmers are less likely to participate in Nature Management. However, many examples are mentioned that form an exception to this presumption. According to one key actor, you should not only focus on participation in AES, but you should focus on how Nature Management is integrated in the farming operations. This could be an interesting entry point for future farming styles research. Finally, **annex III** illustrates that in addition to style-specific differences in motives and barriers, there are other barriers regarding the design of the current policy model that are not linked to farming styles but are recognised by farmers with divergent farming styles.

8 Farming styles, landscape and nature and the role of NFW

In this chapter I discuss the findings around the third research question:

What role has the evolution of the agri-environmental collective NFW played in the possible changes and shifts in farming styles related to nature and landscape over the past 30 years?

The findings are subdivided into four sections. In the first section I discuss the strategies NFW uses to promote participation in AES. In the second section I go into more detail on how NFW deals strategically with divergent farmers. In the third section I delve deeper into the role the evolution of NFW has played in the dynamics in farming styles in the last 30 years. In the fourth section I answer the sub question why NFW is seen as a frontrunner in realising a successful region-specific collective approach.

8.1 NFW's strategies to promoting participation in AES

In this section I discuss the strategies NFW uses today to promote participation in AES among farmers in the Noardlike Fryske Wâlden. The strategies I have found can be divided into three types. The first type of strategies is aimed at removing or lowering the barriers around AES as much as possible (see strategy 1 and 2). The second type of strategies is aimed at generating as many resources as possible to reward farmers for their management efforts (strategy 3). The third type of strategies is aimed at promoting the great values of the landscape and the importance of good management to preserve this valuable landscape (strategy 4 and 5).

1. Unburden farmers in administrative tasks around AES

NFW is actively engaged in unburdening participating farmers in administrative tasks around AES. Farmers are assisted by office employees in completing the contract application(s). Farmers are informed about possible changes in the management or are reminded when the management should be carried out. And lastly, farmers are assisted in correcting mistakes when farmers do not meet the contract requirements.

2. Reduce control burden for participating farmers

NFW takes up a clear position on how the control on AES is currently organised and how this control should be improved. According to NFW, the NVWA carries out an excessive number of controls per year. That leads to high costs and does not improve the management of nature and landscape. Conversely, it even has a demotivating effect on participating farmers. Furthermore, the approach of the controls itself are demotivating. And lastly, the fines are inordinately high compared to the mistakes made (see **section 7.4.3**).

En wij zijn bijvoorbeeld binnen de Noordelijke Friese Wouden in 2018 2300 keer gecontroleerd. Dus er zijn 2300 NVWA-bezoeken geweest in ons gebied. [...]. Wij hebben 10.000 landschapselementen onder beheer. Dus de NVWA zegt, ja van Brussel moeten wij een x percentage van de beheereenheden controleren, dus als dat 25% is en we hebben er 10.000, ja dan doen ze 2500 controles, zo simpel is dat. En wij zeggen van, ja dat is echt allemaal [geldverspilling], want dat levert helemaal niks op. (R1-2)

NFW advocates for more autonomy and to self-organise the control of AES, by reducing the control from the RVO to only monitor the agri-environmental collective on its performance and perform possible random field controls based on that, rather than a separate target-based control system of both the collective and individual landscape amenities (as described in the previous quote).

Geef het collectief de mate van zelfsturing, laat de RVO maar net zo vaak aan de voordeur bij het collectief komen als dat ze wil, dat maakt niks uit. Controleer het collectief administratief en doe steekproefsgewijs uit die administratieve controle maar controles in het veld. Neem de afgevaardigde van het collectief mee en bij wijze van spreken iemand van de schouwcommissie, dat maakt allemaal niks uit. En na een aantal goedgekeurde controles, dan moet je zeggen: het collectief voldoet, punt. Dit is het 5^{de} jaar van het agrarisch natuurbeheer, we zijn nu 3 keer door een externe partij geauditeerd als collectief en ze hebben nooit wat kunnen vinden. (R1-2)

Moreover, NFW emphasises that the NVWA controls are based on distrust of participating farmers. Two key actors made a dichotomy between a so-called cold approach versus a warm approach. The NVWA controls use a cold approach. In this approach, farmers are immediately fined for a mistake and there is no room to correct mistakes and learn from your mistakes. In this approach farmers feel not valued in their good efforts. All in all, this approach is destructive and demotivating. Whereas, the audits of the audit commission use a warm approach. In this approach, farmers are given room to correct their mistakes, auditors explain how to correct the mistakes and educate how to carry out proper management during the audit. In this approach participating farmers are more valued for their efforts. This approach is constructive and motivating (R1-2, R1-8, R1-9, R1-10).

Lastly, NFW implements an active policy to nullify the unfair fines that are set by the RVO, so that participating farmers suffer as little as possible from possible fines.

Wij voeren als vereniging daar ook een beleid in, wij voeren die kortingen niet meer door. Dat hebben we van begin af aan gezegd, dat doen we niet. Maar we zijn daartoe nu verplicht. Maar met één belangrijk voordeel, dat we zelf mogen bepalen welk percentage korting we doorberekenen. Dus we hebben nu gezegd van, als wij een randvoorwaardenkorting moeten doorberekenen van, dan berekenen we niet meer dan 1% door. Dus wij proberen wel oplossingen te vinden voor problemen. We kunnen niet alles oplossen, maar we proberen wel heel dicht bij die oplossingen te komen. (R1-2)

In short, NFW fulfils the role as a reliable intermediary between the government and participating farmers, attenuating the control burdens (see quote below). In addition, NFW tries to transform the control system towards a motivating constructive system that better suits farmers.

Ik denk dat ze bij sommige boeren een drempel weghalen om toch dingen te doen. Zij zijn echt wel wat een schakel geworden tussen de RVO, tussen het ministerie, tussen de NVWA en het natuurbeheer. Daar zit het collectief wel tussen als dempende factor. En dat haalt wel drempels weg om dingen te doen of te blijven doen.[...] In ieder geval om minder gedoe te krijgen als je beheer doet. Daar hikken heel veel tegenaan, dat ze dat gedoe wat ze ervan hebben als ze niet aan de regels voldoen... (R1-9)

3. Making money available for reimbursing participating farmers

One of the major tasks of NFW is to make money available, so that participating farmers receive an adequate reimbursement for their management efforts. Up to now, 40% of all wooded banks and alder tree belts are covered by an AES contract. NFW has the ambition to make more money available for AES, so that even more farmers can participate in AES.

One the one hand, NFW is engaged in convincing the municipal governments and especially the provincial government, who is responsible for distributing the provincial AES budget, that more public

money is needed to cover the whole working area. On the other hand, NFW has set up a campaign since 2018, where people are activated to become a donator of the association.

Besides that, NFW acts on a higher level, trying to increase its influence in the long term. All in all, so that NFW becomes more and more an indispensable regional partner that can make more money available for the preservation and improvement of the landscape. I elaborate on this in **section 8.3**.

4. Promoting the value of the landscape and the importance of landscape and nature management
NFW is actively engaged in demonstrating that the typical small-scale closed landscape of the Noardlike Fryske Wâlden is of great value in various aspects: ecological, cultural-historical, recreational and touristic (R2-13). This message is not only aimed at farmers, but is communicated much more widely, to ultimately create a sustainable and economic viable agricultural landscape (R1-2).

A large part of the working area of NFW is defined as a National Landscape. NFW uses this special status as regional brand, to demonstrate the great value of the landscape.

Nu hebben wij met de provincie een afspraak over het promoten van het Nationaal Landschap. Dus we krijgen daar wat geld voor. We doen een project jeugdeducatie en we hebben een cursus gastheer voor het landschap. Zo doen we van allerlei...we werken mee aan wandeltochten, het streekpad...zulk soort dingen. Het recreatieve en toerisme deel van het landschap, daar werken we aan mee. En daar krijgen we ook wat geld voor om dat in de praktijk ook uit te voeren. (R1-2)

In the quote below, one key actor explains the vision behind engaging in many more sectors than only the agricultural sector and collaborate with other regional partners to ultimately make more money available for the management of landscape and nature by farmers.

Dus wij zitten elke keer tegen die boeren te roepen, denk erom, we zitten in een Nationaal Landschap, dus wil je die status overeind houden, dan moet je wel helpen. En wij moeten dan helpen om die boeren een beheervergoeding te krijgen. Andersom kunnen we dan naar de recreatieve en de toerisme ondernemers in de gebied zeggen, van ja, je moet ons ook helpen. Want ja, jullie krijgen die klanten allemaal, maar dat komt omdat wij dat landschap onderhouden. En die wisselwerking, al die verschillende sectoren bij mekaar brengen, dat is...niet altijd volgens onze leden een rol van de vereniging, maar een belangrijk deel van de leden, die snapt dat. Een deel van de leden, die zegt van ja, we zijn een boerenclub en wat moeten we met dat toerisme? [...] Maar een belangrijk deel snapt dat als wij verdienmodellen hebben, ook voor andere sectoren. Dat het een geziene regio is. Dat dan overheden ook eerder bereid zijn om daarin te investeren. Er zijn overal tentakels waar je aan moet haken om je totale gebied op de kaart te hebben, waarmee je dus eigenlijk de overheid dwingt dat ze niet meer om je heen kunnen.[...] Het is een beetje koopman zijn voor je eigen regio. (R1-2)

In addition, NFW demonstrates that AES has a positive effect on the conservation of region-specific biodiversity. NFW collaborates with organisations, like *Altenburg&Wymenga* (an ecological research and consultancy firm in Feanwâlden), *Landschapsbeheer Friesland*, *RAVON*, the *Bond Friese Vogelwachten* (BFVW) to acquire ecological knowledge. NFW then uses this knowledge to demonstrate the ecological value of, for example, landscape amenities. That stimulates farmers to participate in AES, to make them aware of the importance of their efforts (R1-2, R2-12).

5. Educating farmers how to carry out Nature and Landscape Management
Lastly, NFW provides farmers with information on how to carry out the management according to the AES contract (R2-15). Moreover, activities are organised on practical examples and new insights.

8.2 NFW's approach to dealing with divergent farmers

The association is structured in such a way that different tasks of NFW have their own budget. The budget structure can be seen as a core surrounded by a number of so-called shells (**figure 16**). Subsequently, there are various memberships for members. For example, a basic membership consists of a monthly newsletter, you can come to the General Assembly and you are invited for a yearly excursion. Additional to the basic membership, a member can choose to make use of the shells: AES, PNM, projects or services. But because the different shells have their own budget, a farmer who, for example, only participates in AES does not pay for any projects. The projects are often funded with a specific research subsidy per project. In this way NFW does not exclude certain farmers, by showing that running projects is not at the expense of other tasks, e.g. AES and PNM.

Een van die schillen is het agrarisch natuurbeheer. En de opbrengsten van het agrarisch natuurbeheer en de kosten van het agrarisch natuurbeheer, dat is een aparte begroting. Dus wij tonen aan, aan onze deelnemers van het agrarisch natuurbeheer, dat de opbrengsten die we daarvoor krijgen of van hun afkomen, dat die niet benut worden of besteed worden aan andere onderdelen dan alleen aan agrarisch natuurbeheer of die kern, die noodzakelijk is om die schillen te kunnen bedienen. En dat doen we ook met de boeren die deelnemen aan particulier natuurbeheer. En dat doen we ook met de onderdeel projecten en het onderdeel diensten. (R1-2)

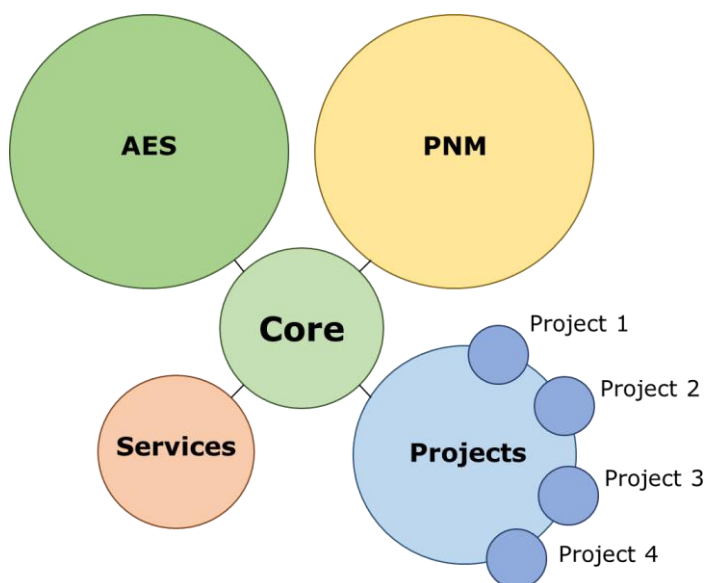


Figure 16 – Simplified visualisation of the budget structure of NFW.

The budget of the core consists of the general overhead costs, the personnel costs, costs of the building, etc, necessary to coordinate AES or PNM. To justify why NFW is also engaged in providing services and working on projects, NFW indicates that this is actually financially advantageous for all members. For example, the building is also used for projects and services, thus the building costs are shared. So due to projects and services the general overhead costs for AES or PNM are reduced.

We laten zien wat het voordeel is van het draaien van projecten in de overhead van ANLb. Dat betekent dat wij naar leden toe kunnen antwoorden van, ja, jij kan wel vinden dat het niet nodig is, maar financieel gezien is het een voordelige, ook voor jou. En als jij maar weet dat er geen ANLb-geld in projecten gestoken wordt, of in diensten gestoken wordt, wat is dan het probleem? Jij koopt misschien je voer bij Agrifirm, maar Agrifirm doet ook andere dingen dan alleen maar voer aan jou verkopen. Maak je daar ook een probleem van? Of zeg je van nee, voor dat deel wil ik van jou gebruikmaken, maar het moet wel goed zijn, het moet wel scherp zijn. (R1-2)

Within the organisational structure the voluntariness is put central, every farmer has the freedom of choice. NFW deals with divergent farmers by creating an array of choices in which every farmer can decide for him/herself which shells he/she wants to make use of or participate in. Several key actors perceived no field of tension between projects and AES because they are treated as separate components.

Ik heb niet het idee dat ze je in een keurslijf drukken. [...] Nee, je houdt daar wel een bepaalde vrijheid in om eruit te kunnen pikken wat jezelf handig vindt. (R2-11)

Er zal niemand gaan zeggen van, ja omdat de vereniging natuurinclusief wil, stop ik met mijn agrarisch natuurbeheer. (R1-1)

One key actor observed differences between one type of farmer that is only interested in AES, while another type of farmer is interested in the concepts of nature-inclusive and circular farming and therefore participates in projects and is a member of a theme group. Nevertheless, the projects are so diverse that they are not necessarily aimed at a select group of farmers with a certain farming style.

In addition, NFW always tries to find a consensus among members when decisions are made. In this way, the internal governance structure of the associations follows a *deliberative democracy model*.

Als je in de Algemene Ledenvergadering transparant bent, en je kan het uitleggen, je kan het toelichten. Dan...na ruim 10 jaar heb ik nog niet meegemaakt dat er gestemd wordt. Altijd wordt er naar een mate van consensus gezocht en als er een idee is achter de bestuurstafel, dat dit maar een beperkte of niet volledig draagvlak heeft, ja dan nemen we het terug. Of we komen met een beter voorstel of we doen het niet. En als je dat gedrag vertoont, dan krijg je ook draagvlak van je achterban. Het is een soort van vertrouwen, zo van, we drammen niet alleen maar door. Je wordt als lid serieus genomen. (R1-2)

Based on these findings, I can conclude that NFW is not disapproving certain farming styles and generally has a very open attitude towards all farming styles.

8.3 The evolution of NFW and its role in the dynamics of farming styles

The role of the association is based on a complex interaction between farmers and the association as a formal institution. Farmers with different farming styles are all member of the association and jointly determine in which direction the association should develop.

Het bureau bepaalt niet wat er gebeurt, onze leden bepalen wat er gebeurt. En wij [het bureau] kunnen hen attenderen, inspireren of bedienen maar zij [de boeren] bepalen wat er gebeurt. (R1-2)

On the other hand, the association responds to societal developments.

Maatschappelijke ontwikkelingen die er zijn en mogelijkheden die er zijn, die moet je gewoon proberen te coördineren. Dat je dat voor je leden mogelijk maakt. (R1-4)

As already discussed in **section 5.1**, NFW has a clear mission towards an agricultural sector that is interwoven with landscape, nature and the environment. A key actor indicated this by explaining the underlying objective of all projects within the *Fjildlab*.

Dus dat is ook een kans voor ons om dat weer meer te gaan aantonen. Welke boer nou in het algehele plaatje de beste boer is? [...] In de Noordelijke Friese Wouden hebben we een missie en visie opgeschreven in een document en daarin staat 'midden yn 'e mienskip' [...]. En dan ook streven naar een volhoudbaar systeem. Dus in balans met je leefomgeving. (R1-2)

By setting up various projects, NFW is continuously looking for new revenue models, other products and services farms can produce and deliver, that lead to more interweaving at farm level. Examples of this are the development of a Rural Energy Company (*Plattelands Energiebedrijf*, PEB) for a collective generation of sustainable energy, partnerships with primary schools and the workshop 'hospitality in the National Landscape'. In this respect, NFW is seen as a frontrunner, acting as a driver of innovation. Through the different think tanks of the association, referring to the theme groups and departments, the association functions as a creative incubator where new ideas are developed, projects and experiments are set up, and the acquired knowledge is disseminated among farmers in the region.

Several respondents emphasised the major influence NFW and the former agri-environmental cooperatives have had in improving the farmer-landscape relationship, as discussed in **section 7.3**. They spoke of the missionary work and the convincing power of NFW and former agri-environmental cooperatives in making farmers aware that they produce more than only food but also produce and preserve nature and landscape. Furthermore, they point to the broad support for the small-scale closed landscape and massive participation in Landscape Management today that can be largely attributed to the agency of NFW and former agri-environmental cooperatives.

By the founding of the first agri-environmental cooperatives farmers from the same region became united. These associations functioned as a platform for new policy. Firstly, it enabled farmers to collectively write a so-called administrative experiment plan on self-governance (*Voorbeeldplan*, see **figure 4**), submit research requests, represent interests, negotiate, and make agreements with governmental bodies. Secondly, the associations formed a formal body of social movement in which a growing group of farmers persuaded each other to participate in Landscape Management. Thirty years later NFW still fulfils and pursues similar roles and objectives. According to several respondents, NFW has almost achieved what it once set out to achieve (see quote below).

Dit is ons gebied, geef ons geld en wij verdelen het onder de boeren. Wij kunnen het zelf wel. Dat is het doel geweest van de milieucoöperatie, volgens mij. En dat heeft heel lang geduurd, want ze durfden het natuurlijk niet uit handen te geven. Maar nu, met die collectieven, is het zover dat het wel zo is. Maar we zitten nog wel heel erg met de NVWA, maar dan nog...ik bedoel, het is wel zo zoals we het in het hoofd hadden. (R2-15)

In summary, I can conclude that the evolution of NFW has played an important role in reducing the field of tension between certain farming styles and the preservation of the small-scale landscape as described by De Bruin & Van der Ploeg (1991). The first agri-environmental cooperatives developed a counter-narrative to the then prevailing discourse. A small group of farmers sought to demonstrate that farmers are able to farm and at the same time preserve landscape and nature. In their search to implement various forms of interweaving, these cooperatives can be considered as an expression of the style-specific opportunities embedded in the *Bedaarde boer* and *Utsjonger* of that time. By forming a self-governing group and self-organising nature and landscape management, the collaborating cooperatives and later the collective NFW have succeeded in also encouraging farmers of other farming styles, who initially opposed a valuation of nature and landscape management. All in all, the development of NFW has played an important role in the broader support for the small-scale landscape and Nature and Landscape management. Beyond nature and landscape management, NFW is continuously looking for other forms of interweaving. By responding to the style-specific opportunities and constraints of different farming styles, I suggest that NFW plays a role in slowly bending farming styles towards more nature-inclusive and circular ways of farming.

8.4 NFW as frontrunner

The agri-environmental collective NFW is seen as a frontrunner. The association is unique in several aspects. In this section I briefly sum up the aspects respondents mentioned about what makes NFW distinctive from the other 39 agri-environmental collectives. Virtually all of these aspects have already been covered in this or previous chapters.

- NFW is actively working on the basis of a self-governance model.
- NFW has a rich history in a collective approach whereby 6 agri-environmental cooperatives collaborated. This distinctive collective approach to AES has been the basis for the shaping of the new AES system in 2016.
- NFW has a rich history in the interweaving of agriculture, landscape, nature and environment. The percentage of farmers that are member of NFW and the number of farmers that participate in AES is exceptionally high. Besides that, as a result of the research by Wageningen University and related projects since the 1990s, many farmers have become familiar with circular agriculture and actively apply this concept to their own farm.
- There is a lot of knowledge available about the ecology related to the Landscape and Nature Management.
- NFW has its own office with paid staff since 2002.
- NFW covers all possible habitat types and can offer all types of management packages.
- NFW has a large network of stakeholders.
- Linked to the previous point, NFW has strong connections with local and regional politics.
- NFW makes use of theme groups in which all stakeholders are already engaged in the developmental phase of ideas and projects.
- There appears to be a cultural basis for a collective approach.

To elaborate on the last point, multiple key actors mentioned the great solidarity and commitment among farmers to stand up for their region as something exceptional for this region.

Ik ben echt geraakt als buitenstaander door de betrokkenheid van de mensen die ik ken hier met hun eigen gebied.[...] Hier heb je nog wel het voor je eigen omgeving staan en er ook aan willen werken, maar ook een mening en standpunt hebben van dat je niet alles over je heen laat komen.
(R1-2)

9 Discussion

Previous chapters showed the findings on the dynamics of the four farming styles, the linkages between farming styles, landscape and nature, and the role NFW has played in these changes and shifts. In this chapter I relate these findings to other research on farming styles, agrarian nature and landscape management, and agri-environmental associations in order to further clarify the findings and explore the research questions. The discussion is structured around the three research questions. In the last section I reflect on the theory of farming styles and methodology used, and give recommendations for future longitudinal research on farming styles.

9.1 Dynamics of farming styles

The farming style concept draws specific attention in how farming may evolve over time by following style-specific development pathways. Previous farming style studies concluded that farming styles do not change overnight (Van der Ploeg & Roep, 1990; De Bruin et al., 1991; Roep et al., 1992; De Bruin, 1993; Wiskerke, 1995). As already mentioned in **section 2.1**, the multiplicity of a farming style can be explained as a systematic and continuous attempt to create congruence between three intertwined levels or components: *cultural repertoire*, *position* and *practice*. The internal coherence of the farming practice and positioning of the farm are structured by the cultural repertoire. Simultaneously, both practice and positioning reconfirm and/or modify the cultural repertoire (Van der Ploeg et al., 2009). As Van der Ploeg (2012) and Oostindie (2015) stated, the social, material and natural resources are moulded and combined in specific ways that make abrupt changes difficult to achieve or even counterproductive. In this respect, farming styles are '*actively organised flows through time*' that imply both continuity and change.

Although the concept of farming styles implies a certain resilience of a farming style through time, the farming styles studies in the 1990s remained a snapshot of the farming diversity. These studies showed style-specific interests and opportunities on which tailor-made policies could be aligned on, but proved little about long term continuity prospects (Oostindie, 2020). Therefore, until now little is known about the continuity and change of farming styles through time. It is precisely this resilience of farming styles that is relevant to explore based on two grounds. Firstly, to explore the influence of policies on farming styles. Longitudinal research on farming styles could examine how changes in markets, policies, legal and regulatory frameworks and other societal changes have led to shifts in farming style at farm level or how farming styles in general have evolved over time. And vice versa, to explore how farming styles influence agrarian policies. Longitudinal research on farming styles could provide new insights into whether and how effective tailor-made and long-term policies could be designed.

This study can be seen as a first step towards more longitudinal research on farming styles. A study in which I examined whether the four farming styles from defined by De Bruin & Van der Ploeg (1991) still can be recognised in today's farming on the basis of a purely qualitative study. First, this study shows that after 30 years there is still a diversity in farming styles in which style-specific characteristics are resonated. Nevertheless, there are divergent views on the dynamics of farming styles in general and the development of the four specific farming styles. In part, these differences in views can be attributed to how respondents gave divergent meanings to the names of the four farming styles and thus interpret the concept of farming styles in different ways. In **section 9.4** I further discuss this methodological limitation of the study design. Taking this limitation into account, still a number of tentative conclusions can be drawn. On the one hand, respondents indicated shifts in farming style at farm level towards the

Zakelijke boer, at the expense of the *Bedaarde boer*, *Fokker* or *Utsjonger*. Some described gradual shifts from one farming style to another, while others gave examples of an abrupt break in farming style during farm succession. On the other hand, respondents point to farm development pathways in line with the farming style, which illustrate how farming styles have evolved over time. For example, organic farmers or farmers that produce for a new sustainable dairy label with a surcharge on the milk price are considered by respondents as the contemporary *Bedaarde boeren*. Besides that, the distinctive characteristic of the *Fokker*, whereby the sales of high-quality breeding stock form an important source of income, seems to be largely disappeared. However, the pursuit of high yielding cows can still be found among the current *topmelkers*, who can be regarded as the contemporary *Fokkers*.

In short, this study shows that farming styles is a complex concept in longitudinal approaches, because the dynamics of farming styles can be approached in two ways. Firstly, the concept can be used to examine the resilience of a farming style at farm level. For example, to what extent does a specific family farm continue to follow the *Bedaarde boer* farming style during the working life of the farmer(s) and to what extent is this style adopted and continued by the next generation? And to what extent are shifts towards other farming styles observed? Secondly, going beyond specific farms, the concept can be used to examine the robustness and durability of the identified farming styles *an sich* in a particular region. Questions which follow from this approach are, for example, to what extent are the identified farming styles fixed and rooted in the region? how have the identified styles evolved over time? have new styles emerged or have styles disappeared? and are there more or less fixed style-specific characteristics?

Continuing on the second approach, although different metaphors are used, other literature on farming styles shows that the strategical approaches that form the basis of the four farming styles of this study are found in other regions and at other times (Van der Ploeg, 2003). Firstly, the mode of ordering of the *Fokker* can be defined as fine-tuning. The *Fokker* farming strategy is achieving the highest possible yield per cow (and hectare). Another commonly used metaphor for the *Fokker* is a Cow farmer. Secondly, the mode of ordering of the *Zakelijke boer* can be defined as upscaling and mechanisation. The *Zakelijke boer* farming strategy is achieving the highest possible output per labour input. Other metaphors used are Machine man or Tractor farmer. Thirdly, the mode of ordering and farming strategy of the *Bedaarde boer* can be defined as keeping overall costs as low as possible, both in production process and farm development. Another commonly used metaphor for the *Bedaarde boer* is the Economical farmer (Van der Ploeg, 2003). It seems that these strategical approaches are universal principles.

Two farming styles studies took a closer look at the time dimension of farming styles which provide more insight into both approaches. Firstly, Van der Ploeg (2003) elaborated on the dimension of time of farming styles between roughly 1990 and 2000 and stated that the categorisation in farming styles of 1990, in a sense, is outdated. He pointed to several 'new' development opportunities that have emerged and unfolded since then. Examples are organic dairy farming, the production and direct sale of quality products and/or region-specific products, nature and landscape management, agri-tourism and the combination of farming and off-farm employment. This corresponds with the finding of this study that searching and producing for sustainable markets with a surcharge on the milk price is a 'new' character of the modern *Bedaarde boer*. Secondly, Oostindie et al. (2013) can be considered as one of the few longitudinal studies on farming styles is a purely quantitative research. This study consisted of a factor analysis for the period 2007-2010. Based on this analysis they showed that style-specific differences from 1990 had not reduced or disappeared, but were still visible. Nonetheless, they concluded that there is both continuity and shifts towards other styles, so-called shifts in emphasis. It concerns no radical changes in farming style, but almost always subtle adjustments in which a farm gradually shifts the emphasis towards another farming style.

It must be said that slightly different categorisations in farming styles are made in both studies. Van der Ploeg (2003) differentiated seven farming styles. What is striking here is that the *Fokker* and the Cow farmer are treated as two separate farming styles. In addition, a distinction is made between Intensive farmers, Large farmers and Tractor farmers that all somewhat correspond with the *Zakelijke boer*. Lastly,

a style of the Ordinary farmer is created, describing a style of farms that do not make clear decisions in a particular direction, but combine many aspects of different styles. In the same line Oostindie et al. (2013) identified four farming styles that have a main focus on farm size (upscaling), intensity (fine-tuning), costs (saving costs) and labour input (labour saving) that respectively correspond with the Tractor farmer, Cow farmer, Economical farmer and Large farmer farming styles from previous farming style studies.

From these later categorisations in farming styles it is striking that there is no specific farming style that clearly corresponds with the *Utsjonger*. In this study it is shown that a large group of respondents have difficulty with interpreting the *Utsjonger* as a separate farming style. They argued that having side-activities and alternative sources of income appears to be widespread and not linked to a particular farming style. This statement can be confirmed by other studies on farm multifunctionality (Bremmer et al., 2014; Oostindie, 2015). Bremmer et al. (2014) showed that when taking farm multifunctionality as starting point, a new categorisation in multifunctional farming styles can be made in which the underlying strategies, personal motivations of the entrepreneur(s) and visible outcome form a congruent entity. They identified five multifunctional farming styles: (1) Food producing farm with side activity; (2) Relauncher; (3) Dual purpose farm; (4) Multifunctional rural enterprise; (5) Ideal-typical multifunctional farm. In addition, Oostindie (2015) showed that differentiating multifunctional farm-development pathways can be recognised, based on complex interrelations between: (1) the variety of underlying driving forces of new farm activities; (2) the lifespan of the farm activity/activities; (3) the specificities of family-based farming, and (4) the interconnectedness of overall farm activities. While the portrait of the *Utsjonger* is closest to an ideal-typical multifunctional farm, the abovementioned studies show that in reality there is a wide range of multifunctional farms in which again different farming styles can be distinguished. In that sense, one could speak of two types of farming styles categorisations: the 'classic' categorisations which takes food producing agriculture as starting point (see Van der Ploeg, 2003) and the 'new' categorisation by Bremmer et al. (2014) which takes multifunctional agriculture as starting point. It would be interesting to examine whether both categorisations could be combined to get a better understanding of the overall diversity in farm enterprises.

Furthermore, this study shows that when comparing the respondents' classification schemes to grasp the current regional farming diversity with the farming styles from 1991, one clear pattern can be discerned along the spectrum of farming intensity. The extensive side of the spectrum comprises the composite group of the *Bedaarde boer* and *Utsjonger*, which I summarise as Extensive farmers. These farms are often typified as smaller, extensive farms that pursue to maintain a certain autonomy. They use their own resources as much as possible and try to keep inputs at low levels. They are farmers who, due to their small-scale and extensive character, are able to better integrate alternative activities, such as nature and landscape management, into their farming operations. By contrast, the intensive side of the spectrum comprises the composite group of the *Zakelijke boer* and *Fokker*, which I summarise as Intensive farmers. They are often typified as large, modern, high-tech farms. These farms are strongly integrated in input markets and make extensive use of debt capital. The grassland and cows are geared towards generating high yields. This distinction corresponds with the distinction made by De Bruin & Van der Ploeg (1991) that spoke of a low-dynamic low-input low-output agriculture of the *Bedaarde boer* en *Utsjongers*, and high-dynamic high-input high-output agriculture of the *Zakelijke boeren* and *Fokkers*.

In other literature the terms Peasant Agriculture versus Entrepreneurial Agriculture or Agroecology versus Agro-Industry are introduced to point out these differences (Van der Ploeg, 2017; Oostindie et al., 2013; Valenzuela, 2016). Whereas Peasant Agriculture is based on an owned and autonomous set of means of agricultural production, Entrepreneurial Agriculture is based on a continuous supply of resources from elsewhere (Van der Ploeg, 2017). When zooming in on the development of these two groups in agriculture, Van der Ploeg (2017) indicates that Peasant Agriculture and Entrepreneurial Agriculture have been increasingly profiled as opposite paradigms. In the same line, Oostindie (2015) focuses on multifunctionality and shows that the Dutch agriculture has been unfolding along two lines since the 1990s. Today's farming has a dual structure in which two poles can be distinguished that

correspond with Peasant Agriculture and Entrepreneurial Agriculture. The first pole groups together “multifunctional farms that produce classical commodities alongside a range of new products and services and which try to avoid a high dependency on external inputs and credits”. The second pole groups together “highly specialised farms that are strongly integrated into markets on the input side of the farm (including the capital market)” (Oostindie, 2015, p. 106). Furthermore, he showed that the two poles carry diverging dynamics that guide the farm development pathways. Whereas the first pole focuses on improvement of (food) quality, ongoing construction of synergies, and improvement of circuits that link consumers, summarised as economies of scope. The second pole focuses on scale-enlargement, ongoing industrialisation of the production process and integration into globalised chains, summarised as economies of scale.

Finally, although in theory Peasant Agriculture and Entrepreneurial Agriculture are defined in contrasting and mutually exclusive paradigms, Oostindie (2015) states that in practice there are considerable overlaps and nuances. This is one of the points that are also found in this study. A large group of farmer respondents combine elements of both worlds on their farm. In short, one can speak of an analytical dichotomy which does not fully explain the current diversity in farming.

9.2 Linkages between farming styles and landscape and nature

According to De Bruin & Van der Ploeg (1991) there was an undeniable field of tension between the farming style of the *Zakelijke boer* and the preservation of the small-scale landscape. The *Zakelijke boeren* preferred a landscape in which optimal production conditions are created and put much emphasis on the negative aspects of the small-scale landscape (yield losses and time losses), while the farmers following other farming styles were better able to farm in this landscape in a way in which the small-scale character is preserved. This study provides indications that this major field of tension has diminished in the past 30 years, but gives also indications that this field of tension still exists. Several key actors highlighted the broad appreciation for the typical landscape and the widespread awareness farmers have that they fulfil an important role in preserving this valuable landscape, that is much higher than 30 years ago. However, some key actors still perceive a field of tension of Intensive farmers who aim for intensive land use and are in a continuous process of scaling-up the farm that is at the expense of preserving the landscape values.

Another important finding of De Bruin & Van der Ploeg (1991) was that the *Zakelijke boer* in particular (and to a lesser extent the *Fokker*) resisted an economic valuation of landscape and nature management. Now, 30 years later, there is a widely shared payment system for landscape and nature management, called the AES system. This study shows that many farmers in this region participate in AES today in which no clear linkages between farming styles and participation in AES could be found. I suggest that AES as a whole are too versatile to discern clear linkages. Instead, a distinction should be made between the motives and barriers for Landscape Management (in the closed landscape) and Nature Management (mainly in the open landscape). Roughly speaking, Landscape Management can be regarded as management of off-field nature. Although the presence of the landscape amenities has an influence on crop yields, the management does not necessarily lead to lower yields. In addition, farmers must adhere to a conservation duty for the landscape amenities. Thus, farmers do not have the freedom to remove landscape amenities. By contrast, Nature Management can be regarded as management of on-field nature. Nature Management leads in all cases to lower crop yields than under ‘conventional’ grassland use. In addition, with regard to Nature Management, by stopping the management package farmers have the freedom to convert the field towards intensive grassland production, and thereby destructing the natural habitat for, for example, breeding meadow birds. This is a decisive difference between Landscape Management and Nature Management. Key actors indicated that in the closed landscape, both Extensive and Intensive farmers participate in Landscape Management. However, style-

specific differences can still be found in the different motives for participation in Landscape Management. I could roughly distinguish two narratives with regard to why farmers participate in Landscape Management. The first narrative is pragmatic with an emphasis on the cost reimbursement, in which the Intensive farmer is resonated. The second narrative is based on a positive and intrinsic motivation to protect the landscape and associated nature values, in which the Extensive farmer is resonated. Besides that, style-specific differences can be found in differences in how Landscape Management is carried out. Some key actors observe a clear pattern in which the Intensive farmers manage the wooded banks and alder tree belts in such a way that the burdens are minimised. In the open landscape, some key actors perceive a clear pattern in which the Intensive farmer is less inclined to participate in Nature Management. However, examples are given of striking exceptions. To get a better insight into the linkages between farming styles and AES, further farming styles research, in which both qualitative and quantitative methods are combined, should be done on differences in how Landscape and Nature Management is integrated in the farming operations.

Delving into existing literature it turns out that already much research has been done into what type of farmers participate in AES and the factors influencing farmers' decisions to participate in AES. Based on a qualitative meta-analysis on the participation in AES Lastra-Bravo et al. (2015) identified five key factors: (1) economic factors (e.g. income, land ownership, labour availability); (2) farm characteristics (e.g. farm size, location, intensity of farming operations); (3) farmer's characteristics (e.g. education, age and presence of a successor); (4) farmer's attitudes to AES and environment (previous experiences, level of AES rate, complexity of AES measures); (5) social capital (e.g. support and knowledge, trust in government, involvement in social networks and organisations, policy context). All this existing literature confirms that financial incentives are not the only factor or reason to participate, but that the farmers' rationale to participate in AES is based on a multitude of interrelated factors. Despite the great heterogeneity of the findings in all studies, there are also certain similarities. In general, several studies indicate that participating farmers are often the less intensive farmers, who have alternative sources of income and have a farm that is already more environmentally friendly (Bouma et al., 2019).

Similar conclusions are drawn from studies specifically focused on the Netherlands. De Haan et al. (1996) conclude that the more intensive a farm is, the more difficult it becomes to participate in Nature Management. In addition, Runhaar et al. (2020) indicate that farmers who consider that Nature Management could well be integrated in their farming operations are in general the larger and less intensive farms, compared to farmers that have difficulties with the integration of Nature Management. Lastly, Bouma et al. (2019) used a so-called *ordered probit*-model to show that the following variables are significant in explaining why dairy farmers invest in nature-inclusivity of their farming operations: (1) having a SKAL certification (in other words: being organic), (2) being a member of an agri-environmental collective for AES, (3) having a bachelor's degree or more, (4) having a farm successor, having the belief that agriculture should be less intensive and (5) that meadow birds and biodiversity should be better protected, (6) having a substantial source of income outside the farm, (7) receiving surcharge on the food production, (8) having a more extensive way of farming, (9) the willingness to experiment, and (10) the expectation that consumers are willing to pay a higher price.

Cross-connections could be made between the above findings and farming styles research. Many characteristics and explanatory factors correspond with the characteristics of the Extensive farmers, in other words the Peasant Agriculture. These findings suggest that Extensive farmers are better in integrating in Nature Management in their farming operations. While the Intensive farmers only opt for relatively simple measures or create clear boundaries between nature and production at farm level. In this sense, Landscape Management should be considered as a relatively simple measure that can be combined with intensive farming operations.

9.3 Farming styles, landscape and nature and the role of NFW

In the past, farming styles research led to recommendations of policies with a region-specific tailor-made approach and self-governance structures. Now, 30 years later, we can look back at how self-governance has played a role in the dynamics of farming styles. In this sense, this study can be considered as a first step to get a better insight in the policy-farming styles link, exploring the role a self-governing body has played in the possible changes and shifts in farming styles in relation to nature and landscape.

This study shows that through the different strategies to promote participation in AES, NFW respond to the different narratives and managed to convince farmers of different farming styles for AES, especially for Landscape Management. In addition, NFW has an open and inclusive attitude towards all farmers and deals with divergent farmers by creating an array of choices in which farmers can decide for themselves which shells of NFW they want to make use of or participate in. Several key actors perceived no field of tension between projects and AES, because they are treated as separate components. Zooming in on the interaction between self-governance and farming styles, several respondents indicated that NFW and the former agri-environmental cooperatives have had a major influence in improving the farmer-landscape relationships. NFW is seen as a frontrunner in nature-inclusive and circular farming, acting as a driver of innovation. NFW forms a formal body of a social movement in which a growing group of farmers persuades each other to participate in Landscape and Nature Management. In addition, through the different think tanks of the association, referring to the theme groups and departments, the association functions as a creative incubator where new ideas are developed, projects and experiments are set up and the acquired knowledge is disseminated among farmers in the region.

Existing literature on agri-environmental collectives in the Netherlands confirms the role agri-environmental collectives could potentially play in bending cultural norms and enabling collective action towards nature-inclusive agriculture. Westerink et al. (2019) show that cultural norms of what a 'good farmer' and 'good landscape' should be are possible barriers in a transition towards nature-inclusive agriculture. Agri-environmental collectives are an example of a subculture in which nature-inclusive agriculture is seen as a 'good' farming and in which craftsmanship is developed that is necessary to put nature-inclusive farming into practice and to generate appreciation for these new farming methods. Furthermore, De Vries et al. (2019) uncover the importance of trust in the participation in AES. They show that the new AES system since 2016 has led to more self-governance and created more interaction among farmers and between farmers and other stakeholders, creating opportunities to share experiences, uncertainties and opportunities which foster mutual trust that, in turn, enables collective action.

In summary, I can conclude that the evolution of NFW has played an important role in reducing the field of tension between, in particular, the *Zakelijke boer* and the preservation of the small-scale landscape as described by De Bruin & Van der Ploeg (1991). The broad support for the small-scale closed landscape and massive participation in Landscape Management today can be largely attributed to the agency of NFW and former agri-environmental cooperatives. Besides the tasks concerning AES and PNM, NFW is looking for and experimenting with new revenue models in which agriculture, landscape, nature, and the environment are better interwoven. When comparing the objectives of NFW with the division into Peasant Agriculture and Entrepreneurial Agriculture, NFW is pre-eminently an association that pursues Peasant Agriculture, in which interweaving is paramount. In that respect, the objectives of NFW are in line with the style-specific possibilities embedded in the *Bedaarde boer* and *Utsjonger* farming styles as identified in 1991. However, by also responding to the style-specific opportunities and constraints of other farming styles, I suggest that NFW plays a larger role in slowly bending all farming styles towards more nature-inclusive and circular ways of farming.

9.4 Reflection on conceptual framework and methodology

As indicated in **chapter 3**, a 'classic' farming styles research is a mixed methods approach of both qualitative and quantitative methods: in-depth interviews, a statistical factor analysis and a survey. The strength of this farming styles research lies in the combination of the three methodological steps that leads to a categorisation in farming styles linked to societal concerns, as was done in several regions in the Netherlands in the late 1980s and early 1990s. This study consists of only one part of the farming styles research, namely in-depth interviews. This study has been a purely qualitative analysis to get a first impression of the resilience of the four farming styles and possible shifts in the relationship with landscape and nature. Because this study consists of one methodological component, the findings are limited. This study leads to new insights on the three research questions, but at the same time the findings raise many new questions. As discussed in this chapter, based on the gained empirical material I have not been able to fully answer the research questions. The findings give indications and plenty of inputs to answer the three research questions, but also show that contrasting views exist when it comes to the dynamics of the four farming styles, farmer-landscape relationships, linkages between farming styles and participation in AES. To further substantiate and deepen all initial insights of this study and come to thorough answers to the three research questions, more research steps based on quantitative research methods, such as a statistical factor analysis and an extensive survey, are needed.

When reflecting on the used conceptual framework and used methodology I experienced one major methodological limitation. During the interviews I noticed that the names of the four farming styles from 1991 lead to small semantic disputes on what the name entails that often distracts from the diversifying content of farming styles. In addition, the divergent perceptions respondents had of the names of the four farming styles from 1991 led to rather different interpretations of the concept of farming styles (see **Annex I** for an overview of how respondents interpreted the four farming styles as identified in 1991). Firstly, this may be partly because the names and terms of the farming styles from 1991 have become outdated, evoke different meanings and connotations, and do not resonate or resonate less in the current everyday language and self-classification schemes. Secondly, I presume that the personification of the labels of the four farming styles may be the cause of confusion. The four farming styles have been given farmer names that suggest a person. Because of that, the categorisation in farming styles were often interpreted as something that is specifically linked to an individual person, equivalent to a farmer typology. Instead, farming styles are less about personalities and personal interests, but entail beliefs, ideas, strategies and practices in which farmers are able to identify themselves with to a greater or lesser extent. The portraits of the four farming styles are described as ideal types but without clear boundaries. For example, there are farms who clearly follow one specific farming style, while other farmers recognise themselves in two or more farming styles. In other words, farming styles are no strictly defined groups of farmers, but are socio-technical networks in which farmers and farms operate and flow, rooted in a particular region.

The names of the farming styles from 1991 were created to follow the everyday language of farmers and were based on classification schemes used by farmers themselves (Van der Ploeg, 2012; Van der Ploeg, 2009). For example, the *Fokker* is a metaphor for the strategy of fine-tuning. In this way, the folk farmer names for each farming style are a metaphor for the strategy of this farmer ideal type (Van der Ploeg, 2003). Van der Ploeg (2012) already described that the translation and application of the outcomes of farming styles research into policies also led to a misinterpretation of the concept: *"Institutions operating at the national level (especially the Ministry of Agriculture, the national farmers' union and the corporate Landbouwschap) tended to consider farming styles as a classification scheme that would (potentially) yield a clear and unequivocal delineation of specific groups, each of which could (potentially) be assigned a specific role and place."* (Van der Ploeg, 2012, p. 434). This misinterpretation that farming styles scholars experienced with policy makers is comparable to the confusion I experienced with a large group of respondents in this study.

Because of the differences in perceptions of the farming style names and confusion around the concept of farming styles I experienced, I would recommend to put less emphasis on the 'old' names of the farming styles in future longitudinal research on farming styles. Instead, I would recommend to put more emphasis on the portraits in which the divergent strategies are resonated. Or make labels that are based on verbs that relate to the act of farming, rather than nouns that suggest a person. This latter is also mentioned by Van der Ploeg (2012) as point of improvement in his reflection on farming styles research.

10 Conclusion

Firstly, this study shows that there is still diversity in farming in the Noardlike Fryske Wâlden in which certain style-specific characteristics of the four farming styles from 1991 are recognized and acknowledged by respondents. Nevertheless, there are divergent views on the dynamics of farming styles in general and the development of the four farming styles from 1991. In part, these differences in views can be attributed to divergent, more or less complete, interpretations of the concept of farming styles by respondents. Taking into account this methodological limitation of the chosen study design, still a number of tentative conclusions can be drawn. On the one hand, respondents indicated shifts in farming style at farm level. Some described gradual shifts from one farming style to another, while others gave examples of an abrupt break in farming style during farm succession. On the other hand, respondents point to farm development pathways in line with the farming style, which illustrate how farming styles have evolved over time. The classification schemes of respondents again confirm both continuity and change of farming styles. Comparing these classifications with the four farming styles from 1991, one clear pattern could be found along the scale of farming intensity in which two composite style-groups can be identified: Extensive farmers and Intensive farmers. This pattern corresponds to the analytical dichotomy between Peasant Agriculture versus Entrepreneurial Agriculture. In summary, I can conclude that the farming styles of 30 years ago show both continuity and change, whereby new metaphors or labels may be needed to indicate the regional diversity in farming styles.

Secondly, this study provides indications that the major field of tension between the *Zakelijke boer* and the typical small-scale landscape around the 1990s has diminished over the past 30 years. Today, there seems to be a broader, more style-independent appreciation for the typical landscape, including a widespread awareness that farmers fulfil a key role in preserving this valuable landscape. On the other hand, this study shows that a field of tension is still present. Zooming in on the management of landscape and nature, no clear and unequivocal linkages between farming styles and participation in AES could be found. I suggest that AES as a whole are too versatile to discern clear linkages. Instead, a distinction should be made between the motives and barriers for Landscape Management (in the closed landscape) and Nature Management (in the open landscape). Landscape Management seems to be taken up en masse by both by Extensive and Intensive farmers in this region. Style-specific differences can still be found in the different motives for participation and how the Landscape Management is carried out. In the case of Nature Management it is less clear, but indications are given that there is a linkage between farming styles and the integration of AES in the farming operations.

Thirdly, this study shows that the evolution of NFW has played an important role in reducing the aforementioned tension. The broad support for the small-scale closed landscape and massive participation in Landscape Management today can be largely attributed to the agency of NFW and former agri-environmental cooperatives. NFW offers guidance and tools to the style-specific possibilities embedded in the *Bedaarde boer* and *Utsjonger* farming styles from 1991. However, by also responding to the possibilities and constraints of other regional farming styles, NFW manages to get a large diversified group of farmers on board.

All in all, this study has led to interesting insights into the continuity and change of farming styles in the Noardlike Fryske Wâlden in the period 1990-2020, the significance of farming styles in relation to landscape and nature, and the role of the agri-environmental collective NFW. However, more longitudinal farming styles research, by using quantitative methods, is needed to further substantiate and deepen these initial insights.

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Appendix

Annex I - Farming styles and used terminology

One major methodological implication of the chosen study design is that respondents gave different meanings to the names and terms of the four farming styles from 1991 that led to divergent, often less complete interpretations of the farming styles concept. In this annex I first discuss the different perceptions respondents have of the farming styles from 1991. Subsequently, I illustrate how this often led to a discrepancy between the name and content of the specific farming style.

1. Perceptions of the *Bedaarde boer*

The interviews revealed that respondents have divergent perceptions of the term *bedaard*. In addition, the term can have multiple meanings for the same respondent in different contexts. *Bedaard* means not only calm and quiet, but also steady, frugal, relaxed, laid-back, economical, respectful and extensive. In total I could distinguish 11 meanings that are used in the interviews.

1. *Bedaard* means being economical, not taking financial risks and making large investments.
2. *Bedaard* means a farmer with little debts.
3. *Bedaard* means a steady or gradual growth and development of the farm.
4. *Bedaard* means a relatively small farm size.
5. *Bedaard* means not taking the lead in new developments, such as new technological innovations.
6. *Bedaard* means being economical in the use of inputs, such as feed, concentrates and artificial fertilizers.
7. *Bedaard* means farming extensively.
8. *Bedaard* means farming relaxed, the farmer values free time, time to do other activities or to spend time with his/her family.
9. *Bedaard* means being relaxed, not striving for the highest milk production per cow.
10. *Bedaard* means less mercenary. The farmer negotiates less and is quicker satisfied with the agreed price.
11. *Bedaard* means respectful towards other farmers (that farm differently).

Although all 11 meanings match the portrait of the *Bedaarde boer*, the interviews showed that when respondents talked about the *Bedaarde boer*, they often only refer to one or a few meanings from the above list. This results in major differences in interpretation of the farming style. Where one respondent talked about the *Bedaarde boer*, he meant a farmer who has slowly scaled up his farm in the last 30 years and is relatively small now, but is 'traditional' in the use of artificial fertilizers, in the sense that he uses relatively much artificial fertilizers. Whereas another respondent meant a farmer who has an extensive in stocking rate and fertilizer use and accepts less uniform grasslands when referring to a *Bedaarde boer*.

2. Perceptions of the *Zakelijke boer*

Similar to the term *bedaard*, respondents have divergent perceptions of the term *zakelijk*, and the term has different meanings in different contexts. *Zakelijk* means not only commercial and business-minded, but also good with money (or cost effective), professional, entrepreneurial and striving for efficiency or optimisation (e.g. in labour, time or input use). In the quotes below I show that the same key actor used different meanings of the term *zakelijk* in different contexts.

- (1) *We zijn wel zakelijk. Ik heb ook gewoon een lening waar ik rente en aflossing over moet betalen en de andere kosten, en ik wil zelfs nog eens een keer op vakantie. (R1-1)*
- (2) *We hebben de laatste jaren een stap gezet om het wat zakelijker te doen. We waren heel extensief en toen hadden ze al eens gezegd van waarom ga je niet biologisch? Dus ik heb nu de stap gezet biologisch te worden. Dus nu heb ik een iets hogere melkprijs. De kosten zijn ook iets toegenomen. Maar in een jaar tijd heb ik wel extra omzet met een klein beetje extra kosten. (R1-1)*
- (3) *Voor de weidegangpremie doet hij 120 dagen 4 uur per dag de koeien naar buiten, voor de rest zoveel mogelijk de loonwerker, en dit uitbesteden en dat uitbesteden.[...] Die melkt wel 100 koeien en een goeie productie. Maar die zegt, ja ik wil ook vaak wel even binnen zijn, dus dat is een hele zakelijke boer. (R1-1)*

In the first quote he used the term to refer to 'earning a good living' should be the priority of the farm. To achieve that, he tries to be cost effective and economical. In the second quote he used the term to emphasise entrepreneurship, by giving the example of looking for labels with a surcharge per litre milk that suit his farming strategy, so that he can earn more. In the third quote he used the term to refer to another farmer who strives for a certain efficiency, to earn money with little own labour involved. Besides that, this quote contains another underlying meaning, namely: a *Zakelijke boer* does less physical work, but makes use of new technologies, such as modern machines and robots to save general physical labour, and makes use of contract workers or staff members to reduce their own physical labour. In this way, the business farmer is less practical, but steers his farm from behind the desk, monitoring and analysing the farm.

I suppose that there has been a development in the connotation of the term. 30 years ago, *zakelijk* (probably) stood for large-scale, efficient and modernised or industrial ways of farming. Farmers with a large farm, who were at the forefront of the use of large machinery and were particularly economically driven, were generally viewed as *Zakelijke boeren* by others. The name *Zakelijke boer* was therefore a good metaphor for this farming style. However, the term *zakelijk* seem to have a much broader meaning and other connotation now. Virtually every farmer I interviewed considered him/herself as *zakelijk*, independent of the farming style. A farmer calls himself *zakelijk* to give himself the right to exist. In other words, to indicate that he has an economically viable farm. This is illustrated by the following quote.

Dat zakelijke moet vooropstaan, anders komt 'it net klear'. (R1-5)

In addition, the supposed shift in meanings and connotation becomes clear by a very short quote from another key actor when he talked about all the farmers in his village:

Ik vind het allemaal wel bedaard, zakelijke boeren. (R1-3)

This key actor meant with *bedaard* that the farmers are all relatively extensive and are respectful to other farmers, and meant with *zakelijk* that the farmers all aim for making a good living.

3. Perceptions of the *Utsjonger*

Virtually all respondents referred to a farmer that is phasing out the farm in a process of farm cessation in a certain time frame when using the term *Utsjonger*. In the quote below, one key actor made clear that according to him the name *Utsjonger* has a pejorative connotation and does not match the characteristics of this farming style.

Ik kijk even naar mezelf, ik vind uitzingen een beetje, ja hoe moet ik het zeggen, een beetje negatief.[...] Iemand die z'n bedrijf verbreedt, dat is geen uitzinger. Die kan nog wel een beperkte

bedrijfsomvang hebben, maar dat is geen uitzinger. Want die kan nog wel op andere terreinen voldoende ondernemer zijn, maar dan z'n verdienmodel uit andere ontwikkelingen halen. En als uitzinger betekent van, ja, ik doe niks meer, want ik ga toch stoppen over x jaren [...]. (R1-2)

Other respondents gave answers in line with this meaning. Several respondents showed that phasing out the farm and stop farming, because as a farmer you have no successor, requires a completely different farming strategy compared to a farm that is developing towards the new generation.

Als je geen opvolger hebt en je een beetje zakelijk bent, dan zou ik denken, je moet juist niet uitsjongen. Het is nu nog een berg geld waard, dus dan moet je het nu verkopen. Maar als je geen hobby's hebt en je weet niet wat je moet, dan kun je beter uitsjongen. (R1-5)

Mijn vrouw en ik hebben 10 jaar in een uitsjongersmodus gezeten. Het is niet zo dramatisch als dat ik zeg, maar wij hebben een plan gemaakt van als we het zo doen, dan kunnen we er netjes en goed uitstappen. Als we het niet zo doen en we gaan door in de ontwikkelmodus, dan is het maar de vraag wie dat gaat overnemen. En als dat betekent dat dat niemand is, dan hebben we echt een probleem. Dan moet je door.[...] Of kop eraf. We hebben gezegd, dat gaan we niet doen. Dus we kiezen voor een modus naar bedrijfsbeëindiging. (R1-2)

Respondents indicated that a farmer makes different choices when he/she is in a process of ceasing the farm. In this line of thought, a stopping farmer gradually becomes a *Bedaarde boer*, in the sense that he/she has a more relaxed farming strategy. Furthermore, one key actor observed that stopping farmers are more likely to participate in AES for meadow bird protection (1). Another key actor described their choice for a side activity on their own farm, because it became clear that he had no successor (2). Yet another respondent indicated that a couple of stopping farmers in the past converted to organic agriculture, because of the conversion subsidy (3).

- (1) *De Uitsjongers dat zijn de bedrijven die niet meer levensvatbaar waren of waar geen overname voor was. Die zijn er nog steeds. Er zijn nog steeds bedrijven waar geen opvolgers zijn en bedrijven die het wel uitsjongen. Maar dat zijn vaak bedrijven die misschien iets makkelijker kunnen boeren, want ja het wordt straks verzilverd. Dat geeft wel een stukje rust. Dus die doen misschien wel heel veel aan beheersvormen die worden aangeboden. Dat zie je vaak wel. (R1-7)*
- (2) *Daar vielen wij ook wat onder, want wij hadden geen opvolger. Toen bleek dat er niet een opvolger was, zijn we niet meer verder uitgebreid. Toen hebben we een camping erbij genomen. (R1-8)*
- (3) *Kijk, in het begin van biologisch... we hadden er hier ook een paar zitten, die werden biologisch vanwege de omschakelpremie en toen de omschakelpremie op was of over was, toen stopten ze met melken. (R1-5)*

As mentioned in **section 2.1.2** De Bruin & Van der Ploeg (1991) recognised the duality of the term *Utsjonger*. This farming style is often seen as not viable in the future by farmers with other farming styles while real *Utsjongers* believe that there are alternative development pathways to make a good living and keep the farm viable without a large need for upscaling and modernisation. When focusing on how the term *Utsjonger* is used by respondents, it seems like this duality has disappeared over time. All respondents, independent of their farming style, interpret the term *Utsjonger* as the stopping farmer. It is not necessarily a stopping farmer because his farming style is not viable anymore, but just because he has no successor.

4. Discrepancy between name and content

The interviews revealed that there is often a discrepancy between the meaning given to the name of the farming style and what the farming style entails. One respondent expressed this very clearly. He made a distinction between the *Bedaarde boer* and the *Zakelijke boer* that is based on the whole set of farming operations, whereas the *Fokker* and *Utsjonger* (defined as the farmer that is looking for other side activities) is only one part of the farming operations.

Maar die typeringen van zakelijk, dus dat is meer het intensieve en waarbij het economisch resultaat vooropstaat, zie ik als een type bedrijfsvoering. En de bedaarde boer valt meer onder het type bedrijfsvoering. En dan heb je de fokker en de utsjonger, dat zijn wat meer onderdeel van de bedrijfsvoering. De fokker, fokkerij is maar één onderdeel van de bedrijfsvoering. Zo heb je ook wel lui die helemaal gek zijn van de hele dag op die trekker zitten, weet je wel. Die laten de vrouw melken. Dat vind ik geen bedrijfsstijl. Een fokker zijn, is een onderdeel van een bedrijfsvoering. (R1-2)

This reasoning is supported by many other respondents who explained that there is much overlap in the four farming styles and respondents that had difficulties understanding the difference between the farming style of the *Zakelijke boer* and the *Fokker*. In their eyes, a *topmelker* can be seen as the ultimate *Zakelijke boer*.

Nee. Maar een bedaarde boer kan natuurlijk ook een fokker zijn.[...] Er is gewoon overlap. (R1-4)

In summary, the names of the farming styles from 1991 lead to divergent perceptions that sometimes not or only partly corresponds with what the farming style entails. Because of the strongly personalised labels, the categorisation in farming styles is often interpreted as a typology in farmer types, focused on person-related characteristics. Several respondents indicated that this is just one way of categorising farmers, but there are many more categorisations possible.

Dit is natuurlijk een gekozen indeling, die 4. Maar je hebt ook trekkerboeren, je hebt koeienboeren, je hebt landboeren...of vogeltjeboeren en je hebt boomwalboertjes zeg maar even. Je kan op heel veel manieren boeren indelen. Het is maar gewoon, waar ga je vanuit. (R1-4)

Because of this confusion, I question whether the names of the four farming styles from 1991 are still adequate for the farming styles of today. I elaborate on this in the Discussion (**section 9.4**).

Annex II - Classification perspectives

Table 3 – Used perspectives in classification schemes and connected farmer names and key words.

Classification perspectives	Explanation, factors involved and used farmer names or key words
General co-shaping conditions	The starting position of a farm. For example, farm location, soil type(s), landscape type(s), parcellation, current farm buildings and machines, etc. - Asphalt farmer (<i>Asfaltboer</i>)
Family circumstances and dynamics	How many people are running the farm? Life stage and age, children, presence of successor(s)
Farmer-related characteristics	Personal preferences, expertise, priorities and labour division within the whole set of the farming operations. What type of entrepreneur are you? Where are you passionate about as a farmer? - Cow farmer (<i>Koeienboer</i>), Tractor farmer (<i>Trekkerboer</i>), Machine farmer (<i>Mechanisatieboer</i>), Beamwalboer, <i>Fúgeltsjeboer/ Weidevogelboer</i> - Craftsman, Relaxed farmer, <i>saldoboer</i>
Feeding systems	Pasture grazing or zero grazing system (also known as permanent indoor housing, indoor feeding, barn feeding or cut-and-carry)
Labels and dairy chains	Which dairy factory and to which dairy chain and by which label is the milk delivered? Or do you sell (part of) the produced milk directly to consumers or do you process it yourself into other dairy products? The dairy chains and labels include certain terms and conditions the farm must adhere to. - Organic, Biodynamic, and other dairy chains that fall under conventional agriculture, such as: VLOG-milk, AH sustainable dairy chain (green label from Royal A-ware), Planet Proof (green label from FrieslandCampina)
Fieldwork	How much fieldwork is done by the farmer(s) and how much is outsourced by a contractor? (see also farmer-related characteristics) - Lazy farmer (<i>Luie boer</i>), Autonomous farmer
Farming intensity or land use intensity	Expressed in: number of cows per hectare, number of cows per labourer, milk production per cow. - Intensive farmer, Extensive farmer, Tight farmer (<i>strakke melkveehouder</i>), Cow farmer, <i>topmelker</i>
Farm size	- Gigantic/mega farmer, Large farmer, Average farmer, Small farmer
Management and technology	How much you make use of new technology and management programs. - Frontrunner, Technical farmer, Manager
Mineral cycle	How is the mineral balance shaped on the farm? And to what extent are you working on utilising the mineral cycles as optimally as possible? - Circular farmer (<i>Kringloopboer</i>), Economical farmer (<i>Zuinige boer</i>), Regenerative farmer, <i>Grondgebonden boer</i>
Education and generation	Part of farmer-related characteristics. How do you shape the farming profession? How should farming be done? - Traditional/conservative, Future-oriented/progressive
Farm development pattern	- No growth, gradual or step-by-step growth, jumpwise growth, stopping farmer
Landscape and Nature management	Does the farmer participate in AES? How is AES integrated in the farming operations? - Nature-inclusive farmer, Landscape farmer, Meadow bird farmer, Nature farmer
Multifunctionality	Does the farmer have alternative on-farm or off-farm activities? Or is the farmer open to other revenue models? - Entrepreneurial farmer, Hobby farmer, Pioneer, Care farmer, Part-time farmer

Annex III - Criticism on AES

Specific field or landscape amenity not covered by a habitat type

One respondent explained that part of his alder tree belt does not fall under the habitat type dry network, which means that he cannot apply for an AES contract.

AES contracts is too bureaucratic

In line with the argument 'AES limits your autonomy', one respondent argued that the multitude of rules and requirements under the AES contracts can be seen as a barrier.

Dan kon je aan een regeling van de overheid meedoen voor slootkantbeheer. Maar ja, dan worden weer zoveel eisen gesteld. Nou als je daar niet helemaal of niet goed aan voldoet dan krijg je daar weer hele discussies over. Nee, dat beviel ons ook niet.[...] Ik begrijp wel, organisatorisch dan moet je natuurlijk ook wel bepaalde regels stellen. Als iedereen zijn eigen invulling eraan geeft dan werkt het misschien ook niet. Dat is natuurlijk de andere kant. (R2-14)

Negative experiences from past AES

Two respondents gave examples of negative experiences with AES from the past that are demotivating. Both examples have to do with the feeling that sudden changes in the AES system are being made, without coordination with participating farmers.

Maar toen 1 of 2 jaar later zeiden ze van nee, maar dat moet nu 6 meter zijn. Dus dan mocht je 6 meter om het perceel heen niet meer bemest worden. Ik heb wel hele discussies... maar dat gaat dan even zonder dat je daar zelf inspraak over hebt, wordt dat even weer beslist. (R2-14)

Other examples of negative experiences with AES have to do with random controls from the NVWA, see subsection below.

The control by NVWA is demotivating and excessive

The most frequently mentioned barrier to participate in AES, is the control by the NVWA. The control by the NVWA is in many aspects demotivating:

- Several key actors stated that the random NVWA controls are focused on a single performance, rather than to all performances (all management packages) of one farm at once. As a result, it can happen that an individual farmer receives many auditors after another in short order.
- Key actors stated that visiting NVWA auditors do not only check the single performance, but also look at other aspects of the farm. Farmers can be fined for very small mistakes that have nothing to do with the performance of the management package(s). An example is given in the quote below.
- The NVWA controls are seen as unreasonably strict which defeat their purpose. Farmers are fined for very small mistakes.
- All in all, the approach of NVWA controls is demotivating. Farmers are not given room to correct their mistakes, but are immediately fined.
- The fine is often inordinately high compared to the made mistake. Farmers are fined by a so-called cross compliance reduction (*randvoorwaardenkorting*). That means that a percentage of the total CAP subsidies that a farmer receives is withheld.

En we hebben meegemaakt en we maken nog steeds mee dat de NVWA controles zijn, waar ook vervelende neveneffecten uit voortkomen.[...] Hun bezoek is om te kijken of er kruidenrijkheid is of dat er uitgestelde maaidatum is of wat dan ook maar en dan zien ze toevallig een koe die geen flap

in heeft. En dan krijgt die boer een afkeuring omdat er geen oorflap in die...weet je wel? Dat noemen ze randvoorwaardenkortingen. En die randvoorwaardenkortingen worden doorberekend, niet alleen op de betaling voor de pijler 1 gelden, maar ook voor de pijler 2 gelden. Dus waar het agrarisch natuurbeheer uit betaald wordt. (R1-2)

The following quote summarises the feeling of several respondents:

Want dat merk ik wel sterk, er is best wel een grote groep boeren die zeggen van...dat geldt iets minder voor het landschapsbeheer, maar wel voor het weidevogelbeheer... die regels daar ben ik helemaal klaar mee, en met name de controle daarop door de NVWA, daar ben ik helemaal klaar mee. Dus ik wil wel op die manier werken, maar ik wil er eigenlijk niet meer in een label of in een systeem mee te maken hebben. (R1-2)

AES rates do not cover the costs

Many respondents argued that the rates of the AES cost reimbursements are generally too low to cover all costs. Again a distinction can be made here between Landscape Management versus Nature Management.

1. Landscape Management

The level of the rate for the management of wooded banks and alder tree belts is based on a standardised cost price on labour per hectare or running metre. These rates are considered too low by many. Especially if one decides to outsource the management, the costs are higher than the rates. Furthermore, the rates do not take into account the reduced grass yield (negative) or carbon sequestration (positive) by the wooded banks or alder tree belts.

Er zijn ook veel die besteden het uit. Die zeggen gewoon, nou die vergoedingen, daar kan ik het net wel net niet voor doen. Eigenlijk is dat natuurlijk bijzonder dat het niet eens kostendekkend wordt vergoed. Want het is wel arbeid, het is beheer...de beheervergoeding is een...voor de arbeid die men ervoor moet leveren. Als dat al niet kostendekkend is, dat is natuurlijk eigenlijk wel te triest voor woorden. (R1-10)

Nou, misschien kost het dan nog wel meer dan het oplevert [als je het laat uitbesteden]. Want is eigenlijk een vergoeding voor het werk. In theorie zou het 1 op 1 moeten zijn, maar of dat in de praktijk is, dat durf ik niet helemaal te zeggen. Maar dan ben je het kwijt van je eigen inkomen, want dan worden het kosten. Daar zitten de meesten op het moment niet om te springen.[...] Ze willen dat geld wel graag houden. (R1-5)

Ik zou nog wel willen zeggen, de vergoeding is niet hoog genoeg. Eigenlijk, je betaalt nu iets...het werk, maar de schaduw en eventueel CO₂, dat wordt wel vaker geopperd... daar wordt geen rekening mee gehouden. (R1-5)

2. Nature Management

For some AES contracts, such as herb-rich grasslands and delayed mowing date, the level of the rate is (mainly) based on loss of income due to reduced grass yield. Several respondents indicated that the AES rate is lower than the costs of the grass yield losses and adjusted fieldwork. So it is financially unattractive to participate in AES, especially for farmers that are struggling financially because of the low milk prices and rising land prices. According to a key actor that leads to a think-do gap.

De passie gaat tot zover, als het echt veel geld gaat kosten, dan kun je dat tegenover de financierder niet waar maken. Kijk, groen denken en groen doen, daar zitten hele grote verschillen tussen. Iedereen wil graag groen denken, maar als het op de uitbetaling of op de financiering aankomt dan ligt daar echt wel een gat. (R1-7)

Fluctuating policies and short-term contracts

AES are based on 6-year contracts. Several respondents indicated that this leads to uncertainty among farmers. Farmers do not know whether they will receive a new contract after 6 years and it is therefore difficult to fully integrate AES within your farming operations. A key actor explained that it is difficult to include the cost reimbursements when determining your investment size.

Ik heb een gesprek gehad met de bank, ik zeg, hou je mijn vergoeding voor mijn agrarisch natuurbeheer in de gaten? Ja, zegt hij, maar het zijn maar contracten voor 6 jaar. (R1-1)

Another key actor explained that due to the many policy changes within AES over the past years, farmers are hesitant about AES.

Kijk, dat is het nadeel van agrarisch natuurbeheer hoor. Dat verandert om de 6 jaar. Neem dat van mij aan. (R1-5)

After the contract has expired, the policy related to AES may change, whereby the requirements of the management package may change, so that you are no longer able to meet the requirements. Management packages can be totally removed, so that you cannot apply for a new AES contract. Or there may be less available budget for issuing contracts by NFW, so that you can no longer participate in AES.

Several respondents gave examples of management packages that no longer exist, with the result that farmers stop carrying out the particular management. Consequently, there is no long-term positive effect on the particular landscape and nature targets and the old AES contracts are seen as a waste of money.

In de vorige periode konden we ook knotwilgen in dit gebied aanplanten. Het zijn een aantal gebiedjes hier, die zijn iets meer open, daar konden knotwilgen staan. Nou goed, die zijn in het eerste jaar geplant met contracten van 6 jaar. Toen zijn ze nog een keer verlengd. Nu zijn die knotwilgen 12 jaar oud geworden, maar nu hebben we gezegd van ja, omdat we wel meer geld kwijt kunnen, halen we de knotwilgen uit beheer. Dus nu zie je weer dat die knotwilgen zijn weggehaald [...]. want een knotwilg moet je wel goed onderhouden, iedere keer moet je al die takken eraf zagen. Dus ja, dan zie je ook wel...die staat in mijn weg, dan zagen we hem er weg (R1-1)

Similar to the above quote, one respondent gave an example of a farmer with a large amount of hectares managed for meadow birds who recently passed away. After his death his land has been sold to another farmer who does not continue participating in AES, so that all the effort of the predecessor has been nullified and the meadow birds have disappeared.

AES Budget

1. Inadequate AES budget

Several respondents noted that the provincial budget for AES is inadequate. Within the current budget only 40% of all wooded banks and alder tree belts is managed under an AES contract (see **section 5.2**). So there are currently many farmers who are not able to apply for an AES contract.

2. Money wasted on control and bureaucracy

Several respondents argued that the national budget for AES can be spent more effectively by organising the control of the NVWA differently.

Ja, en dan denk ik, doe even efficiënt. Zorg dat dat in één hand komt en één verantwoordelijkheid. En laten we niet met de controleur op controle gaan bij de vorige controleur. Want dat gebeurt vaak. We hebben hier vaak... zo vaak RVO-controle. En de een die komt te controleren of de andere wel goed gecontroleerd heeft. En je bent er alleen maar heel druk mee en dan denk ik ook, waar zijn we nou mee bezig.[...] En als je dan gaat nadenken wat zo'n ambtenaar kost per dag. Dan denk

je, ja...kunnen we met dat geld niet veel beter nog 2/3 hectare beheren? Want dan maak je nog een veel grotere slag dan dat we elkaar gaan controleren en dat daar het geld aan de strijkstok blijft hangen. Want uiteindelijk kan het geld van RVO of wat uit Brussel komt maar 1 keer worden uitgegeven aan controle en aan beheer. (R2-11)

AES and tailor-made approach

Key actors explained that the tailor-made approach of the new style AES, based on collective applications and a spatial division into habitat types, leads to a more effective AES. Nonetheless, some respondents considered the requirements of an AES contract as still not tailor-made. One respondent explained that the strict date (the rest period until June 15) feels oppressive. He believes that with more flexibility he can realise a better habitat for meadow birds.

Nu mag je allemaal maaien van een bepaalde datum. Maar het kan best zijn dat mijn land pas twee weken later is qua weidevogels dat ze vertrokken zijn en soms veel eerder. Ja, laten we dan daar wat flexibiliteit in houden en dan dien je alle heren in plaats van dat je verstrikt gaat zitten op 15 juni als maaidatum. (R2-11)

Nu maaien we alles maar af op 15 juni, omdat dan de datum verstreken is, maar nog mooier zou zijn als er 3 percelen van...met 20 hectare of 40 hectare van dat perceel zeg maar, of dat gebied, als ik dat ook in mozaïek kan maaien, omdat dan de weidevogels al weg zijn. Dus dan maai ik een paar stukken 7 juni...of de kuikens zijn al uit en een paar stukken zou ik later dan 15 juni kunnen maaien. Dan heb je een veel mooier mozaïekbeheer, alleen de regelgeving maakt het beklemmender, waardoor je als 15 juni de beheerdatums verstreken zijn, dat je dan alles maar maait. (R2-11)

Problem related to AES on meadow bird protection

Lastly, the same respondent noted a growing problem with AES on meadow bird protection. This type of Nature Management largely depends on the help of volunteering birdwatchers. He explained that it gets harder and harder to get enough volunteers to find and mark the nests.

Van tevoren proberen we de nesten te markeren met vrijwilligers. Maar vrijwilligers worden natuurlijk steeds schaarser, want dat is een soort...er komt weinig jeugd bij als nieuwe opvolgers van de garde die al bejaard raakt. Dus dat is wel moeilijk. (R2-11)